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University-Community Partnerships for Transformative Education

Sowing Seeds of Resistance and Renewal

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Marjorie Elaine · John Cano

University-Community Partnerships
for Transformative Education

Mara Welsh Mahmood
Marjorie Elaine • John Cano
Editors

University-Community Partnerships for Transformative Education

Sowing Seeds of Resistance and Renewal

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Cover image courtesy of Diana J. Arya. About the cover: We celebrate the work that we do together; every move, every effort matters. So make visible the joy, the hardship, and the growth toward new possibilities.

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*For all of the community and university partners and participants
of the UC Links network around the globe—those that are
growing and flourishing around the world, those that have nourished
the soil, and those that may take root in the years to come.*

ACKNOWLEDGEMENTS

This volume began as an idea introduced at a University-Community Links (UC Links) Virtual Office Hours meeting in February 2021—while the world was still sheltering in place during the COVID-19 pandemic and we were looking for opportunities to connect with each other. When we met for our first writing workshop (described in Chap. 1), we weren't at all sure what was going to unfold in the world, in our lives, or in our work. More than two years later, we look back on a process that provided joy, inspiration, and connection during a very challenging time in the world, and we are grateful to all who contributed to bringing this volume into fruition.

It's difficult to make visible all of the ways that we learned, played, and grew together in order to realize this volume. We are deeply appreciative of the time and energy that chapter authors invested, not just in developing their own writing, but in reading and commenting on other chapters-in-development with insight and care. This process strengthened our already strong connections. We (Mara, Marjorie, and John) are also grateful to each other! As co-editors we pooled our skills, time, experiences, and expertise to step up as needed and take on the myriad tasks involved in preparing this volume: from the conceptual down to the minute editorial details.

This was a deeply process every step of the way. What do we mean by collaboration? Sometimes it meant a Zoom discussion among university and community partners at a UC Links Virtual Office Hours, envisioning what a UC Links edited volume might look like, or a brainstorming session via Padlet.
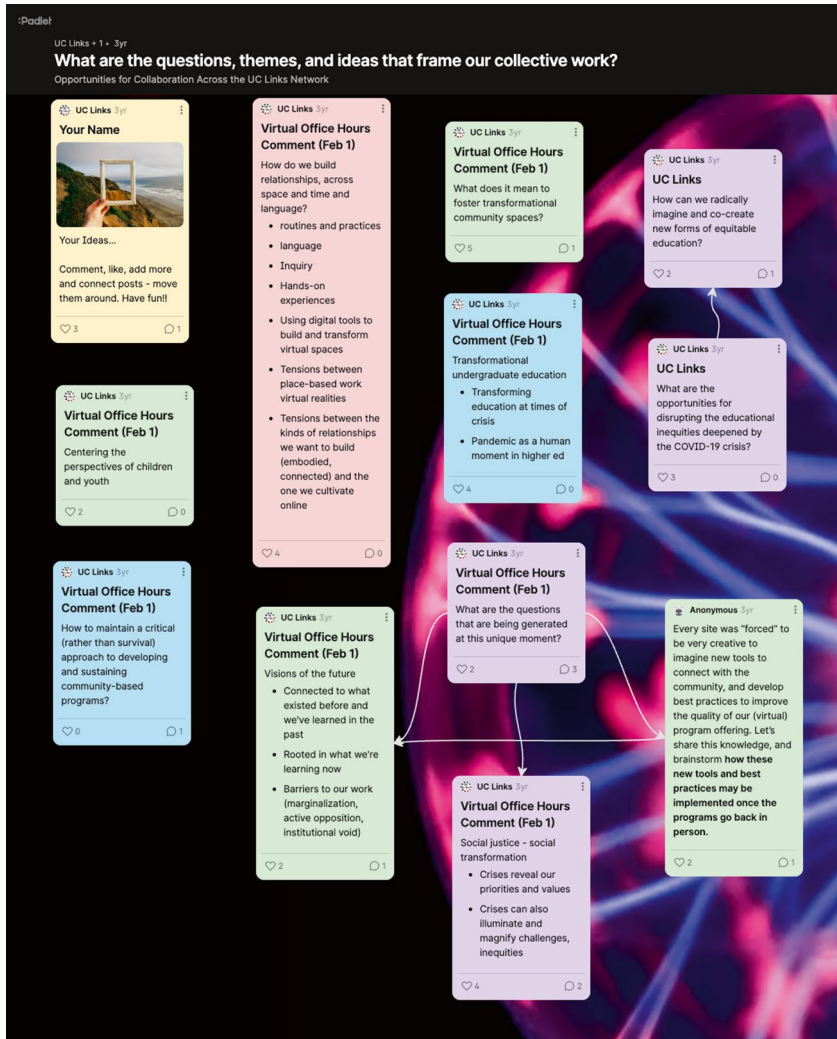
Fig. 1 Padlet brainstorm February 2021

Sometimes collaboration meant the three of us, as co-editors, sitting around a table, or in a Zoom room, discussing key ideas. Sometimes the authors of the chapters were in the Zoom room with us at one of the monthly writing workshops dedicated to chapter development. In the last few months of the project, the table expanded to include Jackson Gzehoviak and Micaela Bronstein (authors of Chap. 20). Our work began to manifest in tangible artifacts and processes to help us physically grapple with the volume and extended to the walls around the room, as we thought and re-thought the organization of the book and the order of the chapters.

Fig. 2   Tools of collaboration

In the writing workshops for authors that we describe in the opening vignette in Chap. 1, the chapter authors shared their insights and offered feedback to each other. The margins of our "collaborative doc" (a Google doc that stretched to 222 pages) were filled with uplifting commentary, insightful queries, and helpful advice, as we read and commented on each other's draft chapters, in ways that surely enriched those chapters *and* improved the volume as a whole, as well as our ongoing work. We identified overlaps and differences in our approaches, integrating these ideas into the chapters in ways that make for greater cohesion than is often

found in edited volumes when chapter authors write in isolation from each other.

Other times, collaboration meant "tending to different areas of the farm" (a phrase that we preferred over the more common "divide and conquer" metaphor). Jackson and Micaela created an elaborate checklist and we divided responsibilities—adapting and adjusting as the work moved into new phases. In the final stages, as we sat around those tables at UCLA, we punctuated our work on separate tasks with laughter, conversation, and new ideas, some of which got incorporated at the eleventh hour. The collaboration extended to our larger network, as we often dashed off emails to authors as questions came up.

In this volume we discuss the ways in which UC Links programs and activities were transformative: of pedagogies, learning ecologies, and lives. The collaborative writing process was also transformative of the network itself, and of our own ways of engaging in scholarship. Thank you to all who participated in the writing workshops and who read drafts of chapters in between those sessions. Thanks also to Cathy Angelillo, Pablo Chavajay, Stephanie Carmona, Amanda Giuliano, Katherine Lazo, Cindy Pease-Alvarez, Lyz Schulte, and Katie Watkins, for their participation at different stages of the work. Thanks to Cindy Pease-Alvarez and Charles Underwood and the anonymous reviewers, enlisted by the publisher, for their helpful reading of the whole manuscript. Special thanks to Micaela and Jackson for their reading of the volume with fresh eyes and thoughtful new perspectives as well as their help wrangling pesky details in the final stages of production.

Our gratitude extends to the lands across California that we worked on and the peoples who inhabited it before us: in Los Angeles, we worked on the unceded lands of the Tongvan and Gabrielino peoples, at the "land grant" institute of UCLA. In Berkeley, we gathered at UC Berkeley, which sits on the xučyun (Huichin) territory and the unceded lands of the Ohlone peoples. Mara and Marjorie also spent two days in Corralitos working together on the unceded lands of the Ohlone people, surrounded by redwoods in the welcoming home of Mara's childhood friend Nathalie Manning and her husband, Ryan.

Thanks as well to our family members for their understanding of the ways this work sometimes consumed us. Mara especially appreciates Max,

Fig. 3   Marjorie, Micaela, Mara, Jackson, and John

CONTENTS

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Diana J. Arya is Associate Professor in Education and faculty director at the McEnroe Reading and Language Arts Clinic at the University of California, Santa Barbara. Her research interests focus on identifying and addressing overlooked abilities and hidden inequities in K-20 learning spaces. Within the overarching framework of Community Based Literacies (CBL), Arya's scholarship highlights the needed transformations in assessments and instructional practices surrounding reading.

Peninah Beinomugisha is a Senior Lecturer at Victoria University. She is an educator who assesses and advances university curricula for education-related programs in order to harness students' coping mechanisms in the workplace through participatory research methodologies. Beinomugisha holds a PhD in Education Administration and Management from Kampala International University in Kampala, Uganda. Beinomugisha is the Dean

of the Institute of Education (IOE), where she oversees 350 undergraduate and graduate students and manages a staff of more than 30 faculty members. She also serves on several non-governmental organizations' and schools' boards of governors.

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Micaela Bronstein is a PhD student in Urban Schooling at the UCLA School of Education and Information Studies. Prior to entering the doctoral program, Micaela was working as a project manager and curriculum developer for College and Career Lab, a college access and career readiness program in New York City. Micaela has also worked as an English as a Second Language (ESL) teacher and an Early Childhood educator. Her research focuses on understanding the political consciousness and ideologies of Newcomer youth.

Lisa Bugno was awarded a PhD in Pedagogical, Educational, and Instructional Sciences in 2018 at the University of Padova (IT); her dissertation was based on an action-research project on teachers' beliefs about cultural diversity. Today, she holds a fixed-term researcher tenure track position at the Department of Philosophy, Sociology, Pedagogy and Applied Psychology (FISPPA) of the University of Padova. Her field of research is related to the scientific disciplinary field of General and Social Pedagogy, and she is particularly interested in issues of plurality, participatory educational processes, and the heterogeneous articulations of educational social dimensions.

Shirl Buss has over 30 years of experience engaging young people in architecture and urban planning projects. She holds an M.Arch and PhD from UCLA Graduate School of Architecture and Urban Planning. She has authored numerous articles about the power of architecture and planning in K-12 education. She has been awarded the American Institute of Architects Excellence in Education Achievement Award, several AIA Presidential Awards and numerous awards and fellowships for her work in

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John Cano is Associate Director of University-Community Links (UC Links) at the University of California, Berkeley. He is an educational technology scholar (PhD, University of California, Santa Barbara) interested in how technology-mediated learning environments can enhance the experience of K-12 and higher education students in both formal and informal learning environments. Cano also studies student engagement, online education, digital citizenship, intercultural education, and informal learning in after-school settings. He is co-editor of *Ambientes de Aprendizaje Enriquecidos con TIC en Educación Infantil: Una Mirada Internacional* & *Educación Intercultural y las Mediaciones TIC: Un Abordaje desde la Interdisciplinariedad* (which include insights from his activities and research in the UC Santa Barbara UC Links programs).

Wendy Wei Cheung is a PhD student in the Department of Education Studies at UC San Diego and a pre-doctoral fellow at the Center on Gender Equity and Health. A proud daughter of rural Chinese immigrants, her research focuses on education and community-centered interventions to address public health disparities and gender inequalities. Cheung has fought for gender equity with women's rights organizations and domestic violence shelters in Senegal, Nigeria, Niger, Thailand, and the United States. Prior to coming to UC San Diego, she taught high school English, French and Interventional Reading in New Orleans and Atlanta public schools.

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Mónica Da Silva is a full-time professor at the Faculty of Psychology of the Universidad de la República. She holds a PhD in Education and Information and Communication Technologies (ICT) from the Universitat Oberta de Catalunya, Spain; Master in Children's Rights and Public Policies from the Universidad de la República. Member of the National System of Research and Innovation in Uruguay. She works in qualitative research on migrant children and educational inclusion.

Amrita Deo holds her MA in Child and Adolescent Development from San José State University (2022). As the inaugural Y-PLAN San José fellow, Amrita was instrumental in developing materials and building infrastructure within the SJSU hub for continuing work. Now working in the community she grew up in, she serves as a Program Manager for Foundation for a College Education, a nonprofit that supports in providing access to secondary education for historically marginalized youth.

Marjorie Elaine is Professor of Education in the School of Education and Information Studies at UCLA, where she also serves as Associate Vice Provost of the International Institute. She was a bilingual classroom teacher in Los Angeles for ten years, and directed the UC Links work at UCLA and B-Club from 2009–2020. Among other publications, she is the author of *Immigrant Children in Transcultural Spaces: Language, Learning and Love* (a book about B-Club) and *Mindful Ethnography: Mind, Heart and Activity for Transformative Social Research* (which draws insights from her teaching in the UC Links program).

Janelle Franco teaches in the School of Education at the University of Washington, Tacoma. Her research and teaching interests include early childhood literacy and math, translanguaging, learning through play, children's books as resources for learning, and teacher preparation with a focus on culturally and linguistically diverse contexts. A former elementary school teacher, she has taught in multilingual communities throughout her career. She holds a PhD in Urban Schooling from UCLA, with a dissertation based on her observations at B-Club.

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Jackson Gzehoviak is a PhD student in Urban Schooling at the UCLA School of Education and Information Studies. Prior to entering the doctoral program, Jackson was a high school teacher of social studies and English as a Second Language (ESL) in a specialized program for refugee and asylum seeker youth. They are also the Education Director of an NGO dedicated to English language education in the Palestinian refugee camps of South Lebanon. Jackson is interested in understanding the languaging

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J. C. Leapman is a PhD student of the Learning and Mind Sciences in the School of Education at the University of California, Davis. As a neurodivergent, queer, non-binary person of the Jewish diaspora, Leapman is invested in designing and researching for equitable, playful, hands-on, creative learning environments that encourage agency in an ever-changing world.

Rebecca S. Levine is a PhD student in Education Studies at the University of California, San Diego. Prior to starting her PhD, Levine worked as a clinical social worker with youth and adults who have experienced trauma. She examines how schools can support the social-emotional well-being of students and teachers, with specific interests in trauma-informed practices and community-engaged methods.

Leslie López holds a PhD in Social Anthropology and is Continuing Lecturer at the University of California, Santa Cruz, where she founded the Community-based Action Research and Advocacy Program with two primary strands of community engagement courses: transformative literacies and critical geographies. Her work is based in Mexico as well as the US, and she has focused on building inclusive, participatory practices of analysis, community-building, and governance to build regenerative cultures and systems. In Santa Cruz, much of her work has partnered with immigrant justice advocates, and with students belonging to immigrant communities.

Beatriz Macías-Gómez-Estern researches in the impact of "alterity" or "otherness" and cultural diversity in identity construction processes, mainly through discourse and narrative. This analysis has been applied to different multicultural settings such as migration, schools and service learning in higher education working with disenfranchised communities in Spain and the USA. She has been a visiting scholar at the University of California, San Diego, King's College London and Florida International University. Macías-Gómez-Estern has recently developed the idea of the "hybrid psychology agent," inspired by Critical and Historical-Cultural Psychology and her own hands-on community-engaged research.

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Norah Nalutaaya is a Ugandan secondary teacher of religious education and history. She is passionate about working with youth and supports them in reaching their full potential. She has consistently worked with local and refugee youth in Uganda residing in urban and rural communities. These include children who have faced difficulties in life because of wars and conflict and children who have been born under extreme poverty. Norah is a well-being trainer in Uganda and board member of Africa ELI. She is also a mother and believes in a world where all children are loved, taken good care of and supported.

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Jasmine McBeath Nation is Assistant Professor of Liberal Studies working with future K-8 teachers at California Polytechnic State University, San Luis Obispo, USA. She has over ten years of experience working with informal science programs and university-community partnerships. Programs she has directed focus on the creative, expressive, and collaborative side of STEM. Jasmine is interested in programs that broaden the definition of science and is passionate about getting more students from underrepresented backgrounds to participate in and contribute to STEM fields.

Dogukan Ozgen is a PhD student at the University of California, Santa Barbara, working with Dr. Diana Arya and Dr. Karen Lunsford. His research focuses on uncovering literacies at the intersection of technology and economics. His master thesis examines how digital platforms establish writer agency and ownership.

Alessandra Pantano is Professor of Teaching in the Mathematics Department at the University of California, Irvine. Pantano's training is in Unitary Representation Theory, but her research interests have recently shifted towards Mathematical Education, in particular, active learning and culturally responsive pedagogy, both in the classroom and in after-school settings. She is very passionate about educational outreach activities. Over the years, she has initiated and led three successful mathematics enrichment programs for youths in the community (UCI Math CEO, the UCI Math Circle, and UCI Math ExpLR).

Ann Rainey-Ruiz was the lead mentor for the Beta Lab during her undergrad at UC Davis. While at UC Davis, she got her BS in Mathematics and her teaching credential. Rainey-Ruiz is currently a high school math teacher. She enjoys exploring new ways to connect with students and help them develop a love for learning.

Yasmeen Ramos holds her MA in Child and Adolescent Development from San José State University (2023). As the second Y-PLAN San José fellow, Yasmeen led middle and high school students in the action research on street design and safety that served as the foundation for the chapter in this volume. She has previously served as an early childhood educator and family resource provider for low-income families.

Matthew J. Shackley is a PhD candidate in STEM Education at the University of California, Santa Barbara, working with Dr. Julie Bianchini. His research focuses on science teacher education, specifically how prospective and preservice science teachers' epistemic beliefs develop throughout teacher education and practicum teaching. His dissertation looks at how explicit reflection on the relationships between these beliefs and enacted teaching practices affects prospective teachers' implementation of reform efforts that center humanistic or civic issues in science instruction.

N. Karla G. Trujillo is a PhD student in the Learning Sciences and Human Development program at the University of Colorado, Boulder. Her research interests include capturing energy in movement and by using various media that includes photos, video and sound recordings. She integrates Indigenous Knowledge systems and holistic practices to guide co-learners, on the road to balancing their energy, with opportunities to use their own realities as the foundation for literacy practices. Trujillo's research explores how to keep the transformative power at the heart of interaction to achieve lifelong wellness via dialogue, storytelling and movement.

Devanshi Unadkat is Assistant Professor of Emergent Literacy in the School of Teacher Education at San Diego State University's College of Education. Unadkat's research interests lie at the intersection of sociocultural approaches to literacy, development theories, and digital media to understand human development and education. Unadkat received her PhD at the University of California, Berkeley, where she worked with Dr. Glynda Hull's team on collaborations with UC Links partners.

Charles Underwood is an anthropologist who has conducted field research in Brazil, India, Scotland, and the United States. He directed University-Community Links (UC Links) from its beginnings in 1996 until his retirement in 2020. During that time also coordinated relief efforts for children and families displaced by Hurricane Katrina, and worked with educational programs for street children in Brazil. Also a classical scholar, he recently translated *The Odyssey* and authored *Mythos and Voice*, a study of the Greek epic from a cultural historical perspective. In retirement, he continues to engage with university and community leaders worldwide on inter-institutional collaborations supporting young people's learning and agency in the face of social and educational inequities.

Tom Caldwell Vogt is a Dozent and Projektleiter (Lecturer & Project Leader) at the University of Augsburg in southern Germany. He received his MA in Philosophy from the University of California in Santa Barbara where he served as a site coordinator for 'Club Proteo', the original UC Links project at UCSB. His research interests include: participatory action research, American studies, John Dewey and American pragmatism, rejuvenating democracy, local and international learning communities, engaged scholarship, teamwork as sociogenesis, jazz aesthetics, international experience and exchange programs, and language learning through film, music, and music video production.

Mara Welsh Mahmood has been involved with UC Links since its inception in 1996. She has taught the UC Links undergraduate practicum courses, acted as an after-school site coordinator, and worked in the UC Links Office at the Berkeley School of Education (UC Berkeley) as the Director of Site Development and Evaluation, Associate Director, and currently as Executive Director. She has studied and written about learning within and across multiple contexts including K-12, higher education, after-school, as well as out-of-school learning in São Paulo, Brazil. Mara is the co-author of another book about the UC Links network: *A Cultural Historical Approach to Social Displacement and University-Community Engagement: Emerging Research and Opportunities.*

Alejandra Yep is an associate professor at California Polytechnic State University, San Luis Obispo, USA, where she teaches microbiology and studies bacteria that cause urinary tract infections. She is passionate about dispelling microbiology misconceptions and thinks everybody can engage in scientific inquiry from the moment they can ask questions. At Nuestra Ciencia, together with Jasmine Nation and teams of undergraduate students, she develops microbiology lessons for K-6 students and teaches them in Spanish to bilingual kids. She also carries out education research on the impact of Nuestra Ciencia on undergraduate and elementary students.

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Transformative Histories

Introductions: University-Community Links & Core Commitments for Transformative Education

Marjorie Elaine ⓘ *and Mara Welsh Mahmood* ⓘ

December, 2021. Twenty-one faces appeared in little boxes on Zoom, as we gathered for the first of a series of writing workshops that would lead to the book you now hold in your hands (or read on your screen). Greetings began flowing into the Zoom chat: "¡Buenos días!" "Morning!" "Good evening!" Most of us were just waking up, at 8 am in California, with coffee cups in hand, while Lisa and Luca (in Italy) and Tom (in Germany) were wrapping up their workdays. We had managed to find a time that worked for most of us, despite being spread across international time zones.

Mara (in Berkeley) and Marjorie (in Los Angeles) began the workshop with some thoughts about the experiment we were about to embark on and its purpose: to develop an edited volume in a fully collaborative style, true to our

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theoretical commitments and the work we do in our collaborative in -school and out-of-school programs, and in our network as a community: in a way that felt supportive, collegial, intellectually stimulating, and FUN. We agreed to video-record our sessions, to keep notes about the process, and to share our work as it developed, evolved, and changed—as we knew it would. Embracing the process of change, and trusting in that process, is central to our work.

We launched the workshop with a discussion of the purpose, style and nature of opening vignettes like the one you are reading now. These openings would introduce each of the university-community partnerships represented in this book and give consistency to the volume, much like the ones Mara had developed (along with Charles Underwood and Olga Vásquez) for another book about the network, and like the vignettes Marjorie used in a book about one of the sites that is represented in this book (Chap. 6). This new volume would build on those prior works and merge the insights we have gained from our different positions in the network across the last 30+ years. At the same time, we would expand our vision by including more voices set in different contexts, and together imagine even more possibilities for the future of education and community-university collaborations.

Workshop participants raised questions that highlighted the complexities of developing these seemingly simple still-life portraits. "How do I craft a vignette that represents our program fairly while contributing to the overarching narrative that brings this book together?" "What risks are there in 'fossilizing' a few moments from our work, which is so varied and wide-ranging?" "Our programs change every year, in response to changing circumstances. Might we introduce our program in a moment of time, which might not be the current time?" We discussed these and questions about narrative choices. Together we reflected on how to bring our audiences into our work through these starting-point descriptions, in our hope of helping the dynamism of our programs come alive on the page for readers. "Pintando una imagen con palabras" Karla (now in Colorado; see her first-person testimonial in Chap. 12) offered in the Zoom chat. "Painting with words" Dogukan—(in Santa Barbara)—echoed in English.

Next, Marjorie led the group in a short guided meditation, the kind of contemplative practice that both Marjorie and Mara have tried to bring into our scholarly lives in meaningful ways. This is a practice that we would continue in different ways in our workshops over the years to come. On this first day, we used the meditation to ground ourselves on the different geographical lands we were Zooming in from and where our program sites are located, in

order to connect us with the histories of those lands by acknowledging the original caretakers, as well as our own histories of connection to our program sites, our universities, and each other. We acknowledged the Tongvan and Gabrielino people who lived in the land now called Los Angeles long before UCLA was established as a "land-grant" institution. We invoked the name of the Ohlone people who were the original caretakers of what is now Berkeley, California. Our colleagues in Italy and Germany thought about the history that led to the formation of Europe's current nation-states, long before those states began the work of colonizing lands, peoples, and minds—work that we are now trying to unsettle, as we decolonize our ways of thinking about education in this volume. We tried to take in the complexity of the cultural and sociohistorical forces that have shaped the world as we now know it, that are so important for the Cultural-Historical Activity Theory (CHAT) that informs our intellectual work.

In the course of this meditation, we invited participants to "let our minds wander over to our program sites" in order to see what words, images, sounds and smells were evoked. "See what bubbles up for you as you think about your site, and how you can convey that to others. How would you describe your school and community partnerships? How are the undergraduates from your university courses engaged with the young people in your in-school or after-school programs? *What do the informal literacy-based activities in your program look like?" These multi-sensorial memories would serve as raw material for the vignettes we would begin to sketch that day, and inspiration for the challenges of analyzing and writing about spaces where we have lived, moved, breathed, and experienced so many things: joy, frustration, wonder, delight. We then moved into breakout rooms to share and vet our ideas in cross-site conversations, before each local site team began the hard work of writing in their own breakout rooms.*

When we reconvened at the end of the 90-minute session, people were hungry to share their work, read others', and learn from each other about the writing-discovery process. Kathy, in Whittier, California, suggested we develop a Google Doc where everyone could copy and paste their draft vignettes, or their outlines, ideas, musings. This would be one of the ways in which we would use technological tools to think together, and to ease and enhance our collective work. Everyone took some time to upload their work and also to read and comment on the drafts that were shared by colleagues around the globe. Smiles radiated across the Zoom room as participants shared their reactions to this experimental approach to developing the chapters that you are about to read.

This vignette describes the first day of the on-line writing process that led to this edited volume. By bringing our collective voices, knowledge, and experiences together, we **craft stories of what is possible for transformative models of education and offer strategies for co-creating learning environments that are innovative, collaborative, democratic, equity-oriented—and fun.** Our goal is to draw lessons from our collective and local histories—and to make visible what we *know* is possible—even as we help to reimagine educational practices, policies and programs for the future.

The chapters in this volume, authored by the people who appeared in those little boxes on our computer screens, who are living and working with communities around the world, describe transformative models of learning in both formal and informal contexts. We offer them as models of innovative learning spaces, as we imagine new possibilities for educational practice in the aftermath of the COVID-19 pandemic. Many of the programs we describe are in California, where this vision of university–community partnerships was originally birthed in the 1980s as the 5th Dimension and later as *La Clase Mágica,* before it became what we refer to here as UC Links https://uclinks.berkeley.edu/). Others are in Germany, Italy, Spain, Uganda, and Uruguay where new university-community partnerships have taken root from seeds that took to the winds from California.

In each of these partnerships, communities of learners have been established in innovative in-school and out-of-school programs that link university faculty and students with young people and their families and communities. These programs are anchored in and responsive to specific, local histories. At the same time, they are connected in a "sociotechnical activity system" (Underwood et al., 2021; Trist, 1981) that includes individual program sites, the larger network, and broader social conditions. In Chap. 2, we describe the network's organizing system as it has operated within a macrosocial historical context. In the remaining chapters you will find descriptions of how the UC Links model has been adapted in various programs set in diverse communities. In this introduction we describe a set of values and structures that are common across the geographically distributed group of programs; then in the chapters themselves you can see variations in forms that they take.

University-Community Partnerships for Transformative Education

UC Links programs, including those represented in this volume, all involve long-term university–community partnerships that are used to co-create learning environments for college students in university courses and young people in school and community settings. Core components of the UC Links model of university–community partnership include: Engaged university and community partners, a university-based course, and a program with informal learning activities designed to engage university undergraduate and graduate students with young people (from primary through secondary school) from historically marginalized communities. University faculty teach undergraduate coursework across a range of disciplines. As part of that coursework, undergraduate and graduate students participate with K-12 students in programs that have been developed collaboratively by university faculty and local school and community partners. These programs also become sites for collaborative research.

This kind of long-term, reciprocal, and substantive relationship between university and community partners is rare, despite persistent calls to break the barriers between "town and gown," to increase "service learning" opportunities for students, and to do research that has practical value in the world. The structures and logics of academia make it hard to sustain relationships and to bring all participants to the table in equitable ways that acknowledge and respond to our different needs and interests, as well as the different demands on us as students, researchers, teachers and community members. Across this book, we share some of the things that have contributed to the success of this model, even as we acknowledge its challenges.

The university courses that anchor these community–university partnerships engage undergraduates from different disciplines and programs, including education, psychology, communications, math, engineering, microbiology, sociology, anthropology, linguistics, ethnic studies, and the health sciences. We hope university instructors who are reading will be inspired to consider how you could connect *your* expertise with the needs and interests of the students in your courses, and in turn with the needs and interests of community members. We hope community members will be inspired to reach out to local universities to suggest possibilities as well.

The informal learning programs that are featured in this volume also vary in many ways. They involve diverse groups of young people, varying

by age, race/ethnicity, national origin, and other forms of identity. They are located in a variety of spaces: a few are set in schools during the school day; others are after-school programs and clubs set in schools, public libraries, community centers, and more. All of the programs center the experiences of historically excluded, minoritized or marginalized communities, in situations of precarity and displacement; the nature of that marginalization differs based on local and national histories. Some of the partnerships have been in place for many years (e.g. Corre la Voz in Santa Cruz, California, Chap. 3; Y-PLAN in Berkeley, California, Chap. 15; and la Casa de Shere Rom and la Clase Mágica in Spain, Chap. 13) while some are just in formation (e.g. La Mia Scuola è Differente in Italy, Chap. 16). Others have been expanded, reimagined, and redesigned (e.g. Y-PLAN in San José, California, Chap. 14; and the UC Links program in Uruguay, Chaps. 17 in English and 18 in Spanish).

There is also tremendous variability in the specific pedagogies, practices, and activities that take place across the UC Links network. In this volume, you will read about authentic, dynamic, multimodal programs (Chaps. 3, 4, 5, and 10) that resist traditional approaches to the teaching of reading and writing. Chapters 6, 7, 8, 9, and 10 detail programs that are transforming STEM subjects (math, science, and engineering). Chapter 19 details a program dedicated to restorative practices, health, and wellbeing.

These varieties of activities reflect the interests that faculty members brought to the partnerships as well as ones that evolved from our relationships with community members, as partners co-constructed the visions for each club. The researchers in our network also vary in where they put their research attention, and that is reflected in these chapters as well. Some look at the pedagogical arrangements of the activities we design and implement; some focus on children's development; some concentrate on undergraduate learning. There is room for many areas of focus in these complex, multidimensional activity settings! One of the reasons for the success of the network activities, as we will illustrate, is that we see the whole as more than the sum of its parts, and we create room for participants to contribute according to their interests, capacities, needs, and desires; the model is collaborative, but also *distributed*, as we "tend to different areas of the farm" a metaphor that we prefer over the more common "divide and conquer." (See the section on "A Word About Wording," below.)

Origin Stories

This edited volume builds on a large body of scholarship about UC Links programs and the research that takes place within them. These publications have laid out the origin stories of the various programs in more detail than we can offer here. See especially Cole, 1996; Cole & Distributed Literacy Consortium, 2006; Vásquez, 2003; and Underwood et al., 2021. We take as an important launch point Mara's recent book (written with Charles Underwood, who was the founding and only Director of this network for 24 years before Mara took over in 2020, and Olga Vásquez, who, along with community partners, developed La Clase Mágica in San Diego). That book, *A Cultural Historical Approach to Social Displacement and University-Community Engagement: Emerging Research and Opportunities* (Underwood et al., 2021), describes the UC Links approach to university–community engagement as a strategy to respond to the urgent challenges of our time. Mara, Charles, and Olga lay out the origin story for UC Links and this "network" approach to social transformation as well as the theory that undergirds it. They present a comparative study of collaborative engagement in multiple programs, some that you will also read about in this book (Underwood et al., 2021). What makes this new volume different is that we hear directly from program research teams about their objectives, purposes, goals, activities, struggles, and successes, as they tell their own stories about their programs. We also hear reflections from UC Links participants who themselves are differently positioned within programs. Together, we conjoin our voices to tell a more comprehensive story than any of us could tell alone.

This is a story of vitality, life, and growth, as the seeds of an idea planted decades ago have taken root and grown in different forms. Sometimes, seeds fell in fertile soil where they quickly took root: for example in places where people understood the value of play for learning; where children's voices were already centered and valued; and where the material and practical resources to support teaching and learning were abundant. More often, the conditions were much more harsh: in places where public education was undervalued and often under attack, where resources were limited, and where the kinds of educational practices we advocate for in this book are little understood. We show what can happen when the seeds of an idea take root in fertile soil, but also how they can flourish even in the cracks and in-between spaces, and then generate new seeds that scatter and find root in other parts. We begin with a brief history of that

dissemination and germination process, before we introduce you to the overarching UC Links network, and fourteen of the programs that are growing and flourishing today.

<div align="center">SEEDLINGS</div>

The UC Links network is a complex activity system (Engeström, 1987; Engeström & Sannino, 2020), one that has evolved and changed over time. It's not easy to narrate its history, but some sense of this evolution may help readers who are curious about the original sources of inspiration for the chapters in this volume. Our goal in this overview is to situate the current work in a broader, cultural historical context: to show how the current programs were shaped by those histories, in order to contemplate how they may continue to evolve in the face of ongoing sociocultural change. We also use this brief history to show the common intellectual, conceptual, and theoretical roots as well as the commitments that shape the programs we detail in this book, and the practices engaged in them. These commitments are ontological, that is, they are based on our beliefs about the nature of being, or how we want to be in the world. They are also epistemological: shaped by our beliefs about how we know things about the world. And they are ethical: forged by our values about how to act in the world.

The models of university–community partnerships and original seeds that helped germinate many of the programs that we describe in this volume were planted in the 1980s in Solana Beach, California. Michael Cole (Mike) and his colleagues at the Laboratory for Comparative Human Cognition (LCHC) and Olga Vásquez (Olga) at the University of California, San Diego (UCSD) formed partnerships with local schools and with members of a local Spanish-speaking Mexican community to search for a way to engage children who had been labeled as "learning disabled" in literacy-building activities. These initial programs were called the 5th Dimension (5th D) and La Clase Mágica (The Magical Class): names that invited participants to enter a new and magical dimension, with norms and activities that didn't replicate those of school. Recognizing that many of the participating children had not been deemed successful in typical literacy tasks during the school day, the university and community partners began to explore after-school as a site for rich, expansive learning, even as they redefined the meanings of "success."

These early programs also explored university classrooms and the associated after-school programs as learning environments for university, school, and community partners themselves. UC Links courses were designed with an explicit objective: to provide undergraduate and graduate students with real-world experiences directly connected to the concepts they are learning about in UC Links coursework. This was a response to calls in academia to link theory and practice, and to offer much-needed models for how to do this in substantive and meaningful ways. Too often, theory is relegated to the university, and practice to field sites, while students are left largely on their own to connect the two. By entwining theory-rich classes with activity in programs in the community, and reflecting on it, UC Links created ways for students, and all participants, to *use* theory, not just understand it. Understanding *how* this works for students has become one angle of inquiry (Ángeles et al., 2023; Macías-Gómez-Estern et al., 2014, 2021). We show some of those ways of connecting theory and practice through the writing of field notes and ethnographic observations in this book (Chaps. 6 and 13).

In order to better understand the connections between the original program models and the first UC Links programs that modeled themselves on this early work, and the present-day programs that you'll read about in this volume (some of which are continuations of the early programs, and some of which have emerged much more recently), we next describe the intellectual and conceptual soil that nourished these original seedlings and allowed those and many others like them to take root: our core commitments.

Rooted in Play, Informal Learning, and Creative Activity Using Diverse Tools

The 5th D and La Clase Mágica were designed as after-school programs, which children participated in voluntarily. And so from the beginning, Mike and Olga knew that these programs needed to provide activities that were **fun:** not more "drill and kill" like the practices that were producing failure in school. A theoretical commitment to the value and importance of *play*, and a deep respect for the learning that happens in *informal learning spaces*, was part of the nutrient-rich soil that fed these early programs, and of the rhizomatic network that connects much of the work you will read in this volume. Lev Vygotsky, the Soviet psychologist whose ideas were translated into English by and also inspired Michael Cole, saw play as

a primary driver for learning and development. It is in play that children engage in "leading activities"—activities that lead their development forward, allowing them to try on skills and competencies that are outside their current developmental zone. Vygotsky (1978) wrote, "In play, a child is always above his average age, above his daily behavior; in play it is as though he were a head taller than himself (p. 102)." Charles, Mara and Olga have referred to this as "deep play" and underscored its "serious" nature (Stetsenko & Ho, 2015; Underwood et al., 2021) in order to push against dominant cultural tropes that view play as frivolous and distinct from learning activities. At the same time, many of our contemporary programs are picking up on a cultural shift to call for more spaces of joy and lightheartedness, not just "serious work" (McKoy et al., 2021). See, for example, Chap. 15 detailing the work of the Berkeley Y-PLAN, and Chap. 6 about play at UCLA's B-Club.

Cultural historical activity theory emphasizes the use of tools in making possible our activity as humans on the planet. By tools, we don't just mean technological ones, but it's important to note that the early UC Links programs were forged just as computers were entering schools. Mike and his colleagues saw the potential to use this new medium to create innovative and transformative learning environments (Cole et al., 2014). Technology served as a mediator and focus of joint activity that supported users in becoming producers, not consumers, of these cultural innovations. In the early years, both 5th D and La Clase Mágica activities included off-the-shelf computer games such as SimCity, an open-ended game that required reading, critical thinking and collaboration to successfully build sustainable cities. Importantly, children didn't work alone on computers but instead worked collaboratively with peers as well as near-peer undergraduates in groups of two or three to navigate computer games and to create with these new tools. In many programs this practice has continued and even expanded. For example, the Learning to Transform Video Gaming Lab (LiTT Lab) engages young people, educators, undergraduates, community members, and researchers in the co-creation of video game platforms and ecologies to explore possible and equitable futures (Cortez et al., 2022).

Programs have also remained true to the original commitment of providing equitable access to technologies that youth in historically marginalized communities may not have at home. During the COVID-19 pandemic, when programs were forced to explore how to move in-person activities online, this became even more critical. (See a discussion of

pandemic responses across the UC Links network in Chap. 2; in Uruguay in Chaps. 17 in English and 18 in Spanish; in Davis, California in Chap. 9; and Santa Barbara, California in Chap. 10.) At the same time, we have expanded both the kinds of technological tools we utilize in our programs (e.g. multimedia activities in Augsburg in Chap. 4 and the San Francisco Bay Area in Chap. 5, and the Beta Lab maker activities described in Chap. 9) and our ways of using them to emphasize creation and production over the consumptive practices that have proliferated in youth culture over the years.

Many UC Links programs have also reinvigorated older technologies like paper, paint, crayons, and paper, as caregivers look to us to help get their children OFF screens. In this volume, you will learn about programs that use a variety of cultural and technological tools, in a wide variety of ways. The focus is less on the tools themselves per se, but on how we use them together, and what we use them to do.

Rooted in Collaboration and Intergenerational Learning

Organizing the initial 5th D and La Clase Mágica after-school activities in groups that included both undergraduate students and young people was purposeful. It was driven by convictions about the profoundly social nature of learning, another key piece of DNA contained in the seeds of the original UC Links models. A continued shared commitment among UC Links programs is to *collaboration* and *intergenerational learning*. Working collaboratively provides opportunities for creating zones of proximal development (Vygotsky, 1978)—or settings where new levels of learning, understanding, and development are possible by participating in joint activity. UC Links informal learning activities are designed to create room for participants to move from more "peripheral" to more "central" positions in those activities, and for both shifting and shared expertise. Importantly, undergraduates do not "teach" young people how to play computer games or solve any given challenge; they work and play and learn together, and build relationships in and through those activities.

Across UC Links activities, the roles of expert and novice are treated as flexible and shaped by activity, rather than based on age, status, or other hierarchical attributes (Cole & Distributed Literacy Consortium, 2006). Often, young program participants have been attending the programs far longer than the undergraduates, because new undergraduates join each quarter or semester. Thus, kids provide continuity at the programs, and

they are in the position of helping the undergraduates to learn about the program and program activities. This is one of many ways in which children are viewed and valued as experts, and one of the ways that we have turned a structural *constraint* (i.e. that undergraduates are partly tethered to the university calendar and its curricular demands) into a *possibility*: a way of creating more space for youth to exercise their expertise.

As an example, Mara likes to say, "Everything I learned about Microsoft Word I learned from sixth graders." Mara was learning to use MS Word in 1996 when she was participating as a graduate student in an early UC Links program. At the Riverside Trolley after-school program she would sit with groups of sixth grade students and together they would play with Word Art, learn how to format letters, explore fonts and other tools that she now takes for granted. Intergenerational and mixed-age learning environments such as these also create room for participants to shift roles, as "novices" become "experts" and "experts" become guides to others. This is another important conceptual foundation for our work, and one that stands in contrast with the age-graded approach to Western schooling that was established with the rise of modernity (Rogoff, 2003).

Intergenerational spaces also allow room for participants to take on new roles over time. This accords with Barbara Rogoff's (2003) notion of development as transformation in forms of participation. In addition to undergraduates and young people transforming from novices to experts in program activities, we create space for participants to take on different roles in the larger sociotechnical activity system. Thus, some youth participants from UC Links programs show up years later in the university classes (Chap. 12). Some community members, like Sayra Martinez, take on leadership roles within university–community partnerships (Chap. 12). Karla Trujillo started her journey with UC Links as a community partner, participated as an undergraduate in La Clase Mágica, worked as a student assistant in the UC Links Office at UC Berkeley, and is now pursuing her doctorate (Chap. 12). Some undergraduates go on to graduate school in partner universities. Mara started as a site-coordinator for the Riverside Trolley after-school program (a collaboration between faculty members at the University of California, Riverside and teachers and administrators at a local elementary school) when she was a graduate student and went on to become the Executive Director for UC Links. Other graduate students took their experiences into the world to forge new programs when they joined the professoriate themselves; for example, Tom Vogt and Jasmine Nation were both graduate students at the University of California, Santa

Barbara and have gone on to develop innovative UC Links programs at the University of Augsburg in Germany (Chap. 4) and the California Polytechnic University, San Luis Obispo (Chap. 7). While doing her post-graduate studies, Mónica Da Silva encountered the Shere Rom project directed by José Luis Lalueza at the Autonomous University of Barcelona (Chap. 13), and later took the model to Uruguay (Chaps. 17 in English and 18 in Spanish). Similarly, Beatriz Macías-Gómez-Estern visited La Clase Mágica in California originally as a PhD student, then as a postdoc, and later developed La Clase Mágica in Seville, Spain (Chap. 13). See Chaps. 11 and 12 for testimonials from other people who have transformed their participation in the UC Links network over time.

This commitment to collaboration and to co-creating non-hierarchical democratic environments with room for fluid and shifting forms of expertise is also embodied in the university–community partnerships that are at the center of our work. These partnerships recognize the varied forms of resources and expertise that both the university and community bring to the partnership and create transformative spaces for learning with community members. University and community partners engage in the process of co-defining program focus, activities and research topics of mutual interest and importance. This is not easy, especially given the different logics, logistics, and languages that shape the work of universities, public schools, and other community partners, and some of the authors in this volume discuss these challenges (e.g. Chap. 14 focused on the San José Y-PLAN).

Importantly, these programs do not function in isolation. They are connected through the root system of our network in ways that nurture and foster our mutual growth—much as has been shown to be true of forests. As Robin Wall Kimmerer describes in *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teaching of Plants* (2013), forests are interconnected through mycorrhizae that form underground bridges connecting the trees. These networks help to distribute nutrients from tree to tree and "weave a web of reciprocity, giving and taking" (p. 20). (See also Wollehben, 2016.) This practice of grouping programs together into a network to learn with and from each other began with the place-based programs in San Diego and continued as the original seedlings began to scatter to other colleges and universities in California, throughout the United States and beyond, including to Europe and the Soviet Union. An early network of like-minded programs took root in 1991 with support from the Mellon Foundation. This group, which formally called

itself the Distributed Literacy Consortium, and informally the Mellon Patch, worked together to explore the various ecologies that sustain 5th D activities. It included partners represented in this volume (Santa Barbara) as well as others from California, Illinois, Louisiana, Michigan, and North Carolina. During the years that the Mellon Foundation was funding this work, many of the programs developed deep roots in local communities and institutions. For example, at Appalachian State University in Boone North Carolina, the 5th D programs became an instrumental component in the teacher preparation program with the practicum course becoming part of the required teacher education curriculum (Cole & Distributed Literacy Consortium, 2006). While the California programs were able to leverage additional funding to sustain their work, other programs did not secure ongoing funding, or weren't able to navigate changes in leadership or departures of key university and/or community partners and activities eventually concluded imparting important lessons, for the Mellon Patch and beyond, related to the conditions necessary for growth.

Seeds from the Mellon Patch flew across California, the United States, and to almost every continent across the globe to seed the rich and biodiverse garden of UC Links. The UC Links network that exists today was forged in 1996 in response to institutional racism, as we detail below in our discussion of our approach to equity and diversity and in Chap. 2. It represents a collaborative and diverse group of university–community partnerships geographically distributed around the globe. (See "UC Links World Map" here: https://uclinks.berkeley.edu/chapter1.) There is a UC Links office in the Berkeley School of Education at the University of California, Berkeley, which has connected, supported, and advocated for these diverse programs for almost 30 years. University undergraduates, young people of all ages, school and community partners, and faculty members from across the UC Links network come together in a variety of ways to learn with and from each other in a range of joint activities. For example, the UC Links Office hosts monthly virtual office hours where members of the UC Links network gather to problem solve, celebrate programmatic successes, and leverage the UC Links network's body of knowledge, resources and best-practices. People who have just discovered UC Links programs might attend to learn more about these programs and the network. Others who have been part of the network for 20 years might share a new digital tool they've developed such as the Y-PLAN Digital Toolkit (https://y-plan.berkeley.edu/toolkit/). The international and intergenerational   collaborations   among   university–community

partnerships has resulted in joint activity including cross-program collaborations (Chap. 19); presentations at the annual international UC Links conference and other conferences; an international, cross-program UC Links Youth Summit (https://uclinksyouthsummit.carrd.co/), and the development of this edited volume. These and other collaborative practices and joint activity, like the mycorrhizae in the forest, form the underground bridges connecting programs throughout the UC Links network and continually weave the web of reciprocity.

Rooted in Social Justice and a Commitment to Diversity and Educational Equity

From the beginning, the 5th D and La Clase Mágica focused on responding to *social exclusion, precarity and displacement* in local communities, working with young people and families whose lives have been disrupted by larger forces of colonization and its ongoing effects in terms of institutionalized racism, migration, gentrification, ecological change, and cultural disruptions. Many times, such marginalized communities are right next door to universities. UC Links programs bring university resources (people, funding, and expertise) into collaborative work that leverages community strengths and knowledge to address structural inequities.

This commitment to social justice was key to the origins of the vision. Mike Cole and Olga Vásquez recognized the deep inequities that existed in the communities just outside of the affluent area of La Jolla, California where the University of California, San Diego is located. Mike and Olga also understood the importance of partnering *with* the local community to define and address existing educational and other inequities rather than, as is so much more common in social science research, trying to fix entrenched social issues from the outside. This model of community-based design research (Bang et al., 2010; Bang & Vossoughi, 2016; Booker, 2023; see also social design-based experimentation Gutiérrez & Jurow, 2016; Gutiérrez et al., 2020) acknowledges the many ways in which academic scholarship as well as the learning of university undergraduate and graduate students can be enhanced by co-developing activities that leverage community Funds of Knowledge (Moll et al., 1992) as well as university and community resources and expertise. In this way, visions of social justice, equity and diversity are not predetermined; instead they emerge from our work with/in communities and are locally defined.

Even as we center issues of diversity in relation to the pursuit of equity and social justice, we also think about diversity in relation to learning and the design of our pedagogical practices. We start from the notion that the diversity of the human experience is a rich resource for learning and development, and that we all benefit from expanding our ways of thinking, learning, talking, doing, and being through this integrated and expansive learning process (Engeström, 2016). We recognize historical inequities in access to dominant cultural forms, and we know that nondominant ways have been stigmatized and often internalized as less valuable, proper, or correct than "dominant" cultural practices. We continuously push against the ways colonization has shaped our own ways of thinking, and help each other and our participants to imagine new possibilities and possible futures (Gutiérrez et al., 2019) as we all stretch outside our comfort zones.

With this commitment to social justice in its DNA, and with an approach to defining justice in locally specific ways, UC Links programs have also responded to changing sociohistorical conditions. In 1995, the sociocultural context in California demanded immediate and coordinated action to oppose statewide institutional racism. The University of California Board of Regents voted to eliminate affirmative action (i.e. taking race, ethnicity and sex into consideration to address historical underrepresentation) in university admissions. UC faculty, including Mike and Olga, recognized the importance of maintaining and increasing diversity and representation at the University and saw university–community partnerships, like those created through 5th D, La Clase Mágica, and others as an effective strategy for addressing deep and ongoing educational equities that could be implemented throughout the UC system and as an institutional commitment to equity. By early 1996, University–Community Links (UC Links) as a California network took root with seed funding and institutional support from the University of California Office of the President and UC Berkeley School of Education, the leadership and advocacy of longtime UC Links Executive Director Charles Underwood, and widespread commitment from university and community partners. In its first year, UC Links implemented 15 programs that engaged 25 faculty from nine University of California and two California State University campuses, over 700 young people from minoritized communities across the state, 125 undergraduates, and 25 graduate students throughout California. As of this writing, UC Links programs typically engage an annual average of 3000 young people and 700 undergraduate and graduate students in California alone.

This way of conceptualizing diversity is important for current-day struggles to create "culturally sustaining" (Paris & Alim, 2017) pedagogies and to address ongoing struggles for social justice in the many forms it takes. We recognize, for example, that the work of anti-racism looks different in different contexts, especially when we look across the world stage. Just who is seen in "deficit" terms within dominant discourse in different localities? Whose ways of thinking, knowing, doing and being are centered, and whose are marginalized, dismissed, ignored, or not seen? Who is constructed as "the other?" Understanding this helps us to plan our collaborative work with local partners. For example, our colleagues in Barcelona and Sevilla work closely with the Roma community, a historically marginalized and racialized group in Spain (Chap. 13). Many of the programs in California work with Spanish-speaking communities: both new immigrants and heritage language speakers on land that once belonged to Mexico (e.g. Corre la Voz in Chap. 3, and Nuestra Ciencia in Chap. 7). In Italy (Chap. 16), the focus is on new immigrants who are not accorded birthright citizenship status in that country. Our colleagues in Uruguay (Chaps. 17 in English and 18 in Spanish) also work with immigrants within the global south, including Venezuela, Peru, Cuba, and the Dominican Republic.

Looking across UC Links programs helps us to understand larger patterns of oppression around the world, and to see common ways in which humans have created systems of privilege and power, albeit ones that take different forms. This, in turn, may help us to imagine new ways of being in which we *all* expand our ways of knowing, and to model ways of organizing that resist creating new hierarchies of privilege and power. Our collective goal is to contribute to reimagining a world that is not defined by such hierarchies at all. Key to this is expanding the reach of our programs so that more people can *experience* this form of community-building, be inspired by it (as so many already have), and then bring these ways of being and doing into more places around the globe. Also important for this work is our ongoing reflection on how we can work from positions of relative privilege (e.g. in the university), mobilizing the resources made available to us in order to resist and actively disrupt that very privilege.

With this brief overview of the histories and core commitments that shape the present-day UC Links network, we turn our attention to the current moment and show how we are working within it to imagine a different future.

New Buds of Development

This book was envisioned as the world entered the second year of the COVID-19 pandemic: a global event that impacted our programs—and all of us—in huge, consequential and varied ways. It constrained many of our activities, especially at local levels. We could no longer meet face-to-face with undergraduates or work alongside youth in person. We had to rethink our approach to the use of tools and materials. Relationships shifted as well. All of these things pressed against our core values and ways of thinking about learning as collaborative, embodied, relational, and very much grounded in particular places and spaces in the world.

At the same time, the pandemic also opened up new possibilities, or made those possibilities more visible. True to a cultural historical perspective, we came to see how sociocultural changes introduced modifications to our own uses of tools. Many UC Links programs used digital technologies to build and transform our clubs into virtual spaces. Technology became a tool to sustain our network relationships—and also, sometimes, to *enhance* them, as suggested in the opening vignette. We became more skilled and practiced in developing engaging virtual activities and ways of building on-line communities (Chap. 2). We realized that time and space were more malleable than we had appreciated, and that we could connect over long distances without the cost of time and travel. We came to see the value in connecting even briefly for virtual "coffee hours" or roundtable sessions to share what was happening in our locales, discuss challenges we were facing, collectively problem solve—leveraging knowledge from around our international network of programs—and, importantly, to connect and uplift each other. The idea for this edited volume was born in one of these coffee hours.

Our Writing Process: Slow Scholarship

Edited volumes typically recruit authors to prepare drafts of chapters on their own time, in isolation from each other. Coherence is achieved through whatever guidelines are offered, and in the editing of chapter drafts. But we wondered: why not put our core commitments into practice and collaborate all along the way? This was what sparked the initial Zoom session that we described in our opening vignette. Our intention was not just to ensure that we would complete the chapters for this volume. Instead, we embraced the writing process as an opportunity to engage in

joint activity and learn about each other's programs in more in-depth and substantive ways than we had been able to, to date. This sustained conversation would help our ongoing work of connecting theory and practice locally and at the same time provide more coherence to the volume, helping to make theoretical and programmatic connections across programs. Finally, we hoped it would make the writing itself more fun, far less painful than slogging away on our own. We would reflect on our process as we engaged in it, and draw some "meta" lessons about the writing and thinking process that could further enhance our work.

We wanted to be as inclusive as possible of all who would want to contribute to this vision. We shared an email on the UC Links listserv inviting participants from all UC Links programs as well as others around the world that were either inspired by UC Links or that have sought us out as kindred spirits. Not all programs were able to respond to this call at this time. The timing may not have been ideal for partners to come together to tell their stories. Some stories may be too fragile or tentative to tell as of yet. Some programs were in the midst of navigating ongoing transitions, still reimagining programs and partnerships after years of pandemic impacts. However, their influences are here in spirit, in the impacts they have had on other programs, and sometimes in the footnotes. In addition to the programs represented in this volume, many UC Links programs are represented in previously published books, edited volumes, and articles as well on the UC Links website (https://uclinks.berkeley.edu/).

In the first meeting that we described in the opening vignette, we presented the idea of "slow scholarship" (Hartman & Darab, 2012): an approach to scholarly work that allows time for ideas to percolate rather than succumbing to the academic pressure to "publish or perish." This seemed especially important given that all of the authors of this volume were very busy transforming and continually reinventing local programs to respond to dynamic pandemic conditions and managing myriad other responsibilities, including other writing projects. We likened this "slow" approach to cooking on a stove top, with multiple pots on different burners. This volume began simmering on a back burner, with an agreement to give this pot a stir at least every month, in the workshop space that we established on Zoom. In between, we would let the ideas simmer, or stir them on our own. Together, we would slowly bring the chapters in this volume to a boil—or a gentle simmer (Fig. 1.1).

After managing to find a time that worked for people spread across multiple continents and a range of time zones, we established the practices
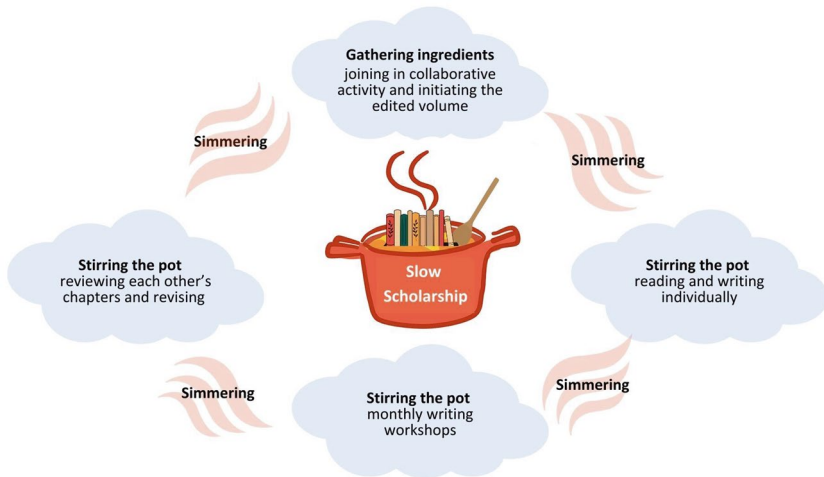
Fig. 1.1   Slow scholarship

described in the opening vignette, creating a space for joint activity that built conversation both within and across program teams. We began with a general outline of what each chapter would look like, and began slowly to develop them, from opening vignettes to program descriptions to the key ideas that we wanted to develop. As in all our work, our goal was to integrate theory and practice, to experiment with different ways of organizing for joint activity, and to play with possibilities for expanding our ways of seeing, understanding, thinking, doing and creating together. We worked with both new and ancient tools and technologies (Zoom meetings, Google docs, and guided meditation/centering activities), trying out different ways of drawing inspiration, vetting our ideas, sharing our work, and fine-tuning. We created shared Google Drive folders for the artifacts of each session—agendas, Zoom recordings, transcripts, chat narratives so anyone who missed a workshop could always follow along. These became material for us to reference between sessions—and for those who were not able to make our meetings—as well as data to document our process. We also met in person during our annual meeting, sitting around a table with good food…and with a few participants joining us by Zoom.

In other words, we tried to make the process of writing this volume as fully collaborative as possible—and also *enjoyable*, or fun. The same was

true for our editorial team. We had countless online meetings as well as in-person ones, first with just Mara and Marjorie, and later with John, who joined our editorial team in 2023, and finally with the assistance of two UCLA graduate students (Micaela Bronstein and Jackson Gzehoviak) for the preparation of the final manuscript. In Chap. 20, Jackson and Micaela share their experiences and the inspiration that they will take into their own futures as educational researchers.

A Word About Wording

All language is fraught with contradiction; there are no perfect words or labels that will escape our sociocultural histories or of the inequities that shaped them. But as much as possible, we tried to write with clarity and intention, paying attention to the words we chose and the histories that they may encode. In our writing workshops, chapter authors discussed our choices of labels for program participants (in terms of their gendered, generational, aged, national, regional and racial/ethnic identities, among other things.) We recognize that labels matter, insofar as they help us to *see* how we think about categories of people: sometimes reinforcing stereotypes and making assumptions invisible, and sometimes opening up new understandings. Yet participants in UC Links programs, and others who work with them, may have different preferences for the terms they choose to label themselves or other groups. For example, chapters use various acronyms to represent gender and/or sexual identities (e.g. LGBTQIA+, LGBTQIA2S+), ethnic backgrounds (e.g. Latino, Latine, Latinx, Chicanx). As much as possible, we tried to honor the labels that the people who are represented in these chapters would choose for themselves. At the same time, we use labels that reflect contemporary thinking about the most inclusive, culturally appropriate, and respectful labels that may help open up new understandings about histories and relations of power, and promote new ways of thinking. It is likely impossible to find words that will satisfy all readers and that will hold across the international contexts of our work as well as stand the test of time. Sometimes we offer several terms rather than single ones, in order to remind readers to hold the meanings of all of these labels lightly and to see more fully their socially constructed nature.

We discussed other language choices as well. For example, we sought to avoid using language that indexes violence, such as "target," "aim," "seize," or even "impact." In our written language as well as in our thinking about our work, we checked our use of common metaphors like

"divide and conquer" and "killing two birds with one stone." We substituted "buts" with "ands" wherever possible, to suggest possibility and abundance over limitation. We tried to avoid using "our" programs or "our" participants so we didn't convey appropriation or ownership (though we recognize that collective pronouns like we/our can also signal affiliation). We used caregivers and families, rather than parents, to represent inclusive relationships and familial constellations. We also present some chapters and excerpts of chapters as they were written—originally in Spanish. We consciously included some phrases in Spanish and also in German without explicit translation, trusting that the reader has enough context for understanding. We introduce new terms and concepts in italics upon their first use and for emphasis. We do not italicize non-English words throughout the volume in an effort to normalize translingual practices. The UC Links network is a multilingual community and we appreciate being able to have some of that richness represented in this volume, especially the two contributions originally authored in Spanish (Chaps. 12 and 18.)

Audience

We wrote these chapters with multiple audiences in mind. First, we encouraged authors of each of the chapters to think about this edited volume as a way to explain their work to current partners or potential university or community partners, the undergraduate and graduate students who enroll in the university courses connected to these programs, and colleagues and peers at their own institutions. We hope these chapters will allow the authors in their local contexts to make more visible the complexity of the work they do designing and running these programs, while also teaching courses that are linked to them, and researching their effects.

Other readers may be other university educators, a bit more removed from the local programs: people who seek models of "service-learning" or community-engaged undergraduate education. This volume offers *many* possible models, and helps to ground them in specific processes and practices. You may have questions that are not answered directly in each chapter, but we point to many other resources for learning as well. We would be thrilled if these chapters inspire you to start programs of your own. We offer examples of programs at different stages of development that may help you get started.

We hope that community members and those running or planning to develop local in-school or after-school programs will read about these

programs as well. We have included testimonials from participants with a wide range of experiences in order to bring in more voices and perspectives, to inform and inspire. We are pleased that we can offer the book at no cost via Open Access, and we urge readers to share it in whole or in part with others.

With these diverse audiences in mind, we encouraged authors to write in clear, detailed, and accessible ways, trying to make visible many things that they may take for granted but that outside audiences may not know. All of the work that is represented in these pages is strongly grounded in theories of learning, but we didn't want the chapters to get weighed down by too much theory, so we have "off-loaded" some of that conceptual work into this introduction. We encourage you to keep the theories that are presented upfront in mind as you read through and see different instantiations of theory-into-practice.

You may choose to read selectively, starting with chapters that are focused on subject matter that is most of interest to you. Or perhaps you'll choose to start with the "testimonials" that are presented in Chaps. 11 and 12, to hear more directly from diverse participants in the programs. The chapters could have been ordered in many different ways, because there are many overlaps in the themes they address. And, together they make up more than the sum of their parts. We offer this collection of chapters as examples of "university-community partnerships in the wild:" illustrating how people work, play, struggle, dance, succeed (and sometimes fail) across a wide range of contexts and with varied histories. We do not pretend to prescribe one "right way" to engage in the work of university–community partnerships or to design programs. We hope you will draw many ideas by reading across the chapters, and putting them together in your own way.

Resistance, Renewal, and Transformative Education

The theme of *transformation*, through *resistance* and *renewal*, runs through all the chapters in the volume. The programs we describe are planting and nurturing seeds of resistance to entrenched challenges, to the status quo, to dominant paradigms of teaching and learning, and to forces of marginalization, stultification, oppression, inequality, and injustice. They resist school structures that divide people (by age, language, presumed abilities, and more) and subject matter, and that separate minds and bodies, heads and hearts, work and play, learning and fun. They resist

the pressures of the academy to privilege scholarship over teaching and service, and to separate the three. Simultaneously, they nurture seeds of renewal: of imagination, creativity, wellbeing, connection, belonging, hope, justice, equity, and possibility. Together the chapters illuminate paths toward *transformation:* of pedagogies, learning ecologies, communities, schools, and lives.

There are many overlaps among the chapters, but we have opted to group them into five sections. In the first section **(Transformative Histories)**, we present this overview of the UC Links network: its history, core commitments, and variations in the forms it has taken. In the next chapter we dig deeper into that history and show how the network has responded to sociocultural circumstances, changing technologies, and the needs and interests of local communities as well as university partners. We consider both affordances and constraints that were engendered during the COVID-19 pandemic and how they have transformed and created possibilities for the ways we work, play, and learn together.

The second section **(Transforming Pedagogies)** gives us a view into eight of the network's current programs: relatively new ones, like Nuestra Ciencia in San Luis Obispo, California, and well-established ones, such as Santa Barbara, California. They illustrate innovative approaches to the teaching and learning of literacies and language (Chaps. 3–7), microbiology (Chap. 7), ecology (Chap. 10), engineering (Chap. 9), and math (Chap. 8). These programs model forms of resistance to traditional pedagogies and offer a range of transformative possibilities.

In the third section **(Transforming Learning & Transforming Lives),** we hear directly from some of the thousands of people who have participated in UC Links programs over the years. These first-person narrative accounts include voices of young people from UC Links programs, some of whom have gone on to participate as college student mentors to the next generation of young people; as well as other undergraduates, graduate students, faculty and community members. In the first of the two chapters that we cluster in this section (Chap. 11), we hear how these experiences transformed participants' ways of thinking about teaching and learning, engaging with local communities, connecting theory and practice, and conducting research. In the second chapter of this section (Chap. 12), we hear how UC Links has transformed *lives:* by creating opportunities for changing forms of participation by members who have taken on different roles and identities in the network over time and by both inspiring aspirations and opening pathways to college, careers and life.

The fourth section **(Transforming Learning Ecologies)** illuminates the network's connections to communities around the world, and ways of transforming learning ecologies by bringing together differently positioned people to work on local issues in new ways. This includes projects with long histories, rooted in particular places (Spain, in Chap. 13, San José in Chap. 14, San Rafael in Chap. 15); ecologies that are being forged in the context of new immigration (Italy in Chap. 16, Uruguay in Chaps. 17 in English and 18 in Spanish); and transnational connections (Uganda in Chap. 19). Together these chapters show how individual wellbeing, joy, and self-care can be integrated with care of community, and collaborative efforts to transform those communities.

The final section **(Transforming Futures)** consists of just one chapter. We hear from two new educational scholars who worked with us on the final leg of the two-year journey that led to this volume. Jackson Gzehoviak and Micaela Bronstein offer a fresh perspective on the work described in this volume, including as it relates to their own educational journeys as well as engaged scholarship more broadly. We hope their closing commentary will inspire other emerging scholars and educators to keep imagining transformative educational futures.

Our purpose in sharing these stories is to motivate others who might want to forge new partnerships and programs, bring some of these ideas into other learning contexts, and imagine new educational possibilities. We hope we will inspire young people, researchers, community members, practitioners and policy makers. We hope these seeds of both resistance and renewal will germinate widely in the world.

Resistance is important. Without resistance, we may find ourselves tugged by forces much larger than ourselves. The seeds we plant may be carried off by powerful winds. We need to be strong enough to withstand those winds, digging our collective roots deep into the soil, creating scaffolds of support, similar to how corn, pole beans, and squash form the Three Sisters of companion planting (Marsh, n.d.), banding together to help seedlings grow, thrive, and survive.

At the same time, there is a danger in only resisting, without offering possibilities for renewal as well. Our goal in this book is not just to critique the existing structures of schooling, or just to name the inequities that abound in the world. Instead, we offer seeds of possibility. We show how things could be done differently, and how we could collectively inspire each other to imagine things we might never have dreamed were possible on our own.

We write this volume during a time of increasing precarity, uncertainty, polarization, inequity, and social upheaval both in the United States and around the world. As many schools focus on "returning to normal" in the new endemic period, and "catching students up" on the learning that was "lost" during the period of school closures, we suggest a different way for educational futures. Sharing how programs innovated during this time, we consider how constraints can sometimes be turned into affordances. We suggest ways of sustaining some of the new things that came into view during this time: the possibilities that emerged, and the learning that happened not just despite the pandemic, but because of it. We also offer models of educational transformation that have adapted in other ways during the last three decades, that have survived, thrived, and seeded new possibilities. We hope readers will be inspired by these models of transformative education and that you will plant some seeds of your own.

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Transforming Systems of Activity through Expansive Learning: A Journey of Renewal

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In December 1996, the UC Links network had only been in existence for about six months. Charles Underwood (then UC Links Executive Director) and Lora Taub (then Assistant Director) had just returned from the first-round of visits to UC Links programs across California. Charles sent a field note via *email to the newly developed UC Links listserv that connected these programs. Describing what they had seen, Charles wrote:*

> *UC Links is a living, growing web of activity. We want to share with all of you our sense, here at the year's end, of the bigger statewide picture—both the variety and the similarities emerging across the statewide UC Links network.*

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The variety was evident in the range of activities undertaken by programs Charles and Lora visited. In Santa Cruz, a computer virus had temporarily disabled all of the computers so the kids and university undergraduates were busy playing board games. In San Francisco, high school students had developed their own computer-based activities and initiated a student-run publication that would be turned into a website. Charles noted that in Riverside, "the computers are assembled in 'pods,' facing each other, which really seemed to encourage interaction among small groups of children and undergraduates." The Berkeley program focused on engaging young children and undergraduates in math games and activities which they would progress through developmentally. At the Fresno program, the children had skillfully put together a PowerPoint presentation, "taking photos of children, parents, teachers, and others… and then demonstrating how to convert them almost instantly to video display."

Charles and Lora also communicated key similarities across programs in their email to the UC Links network. Programs were adapting the UC Links model to suit the needs of each community and young people were producing their own artifacts, using both digital and hands-on tools, including "newsletters, stories, journals, web pages, things to take home to share with their families." Charles noted that as he and Lora observed the children and undergraduates interacting together, and the local community, school, and university partners meeting and planning together, they could "see first hand the kinds of relationship and spirit of cooperation on which sustainable, mutually beneficial collaborations are built."

Looking ahead to the future for UC Links and opportunities for further connection and learning, Charles wrote:

> Everywhere teams are talking about field notes. This seems like a great subject for collective discussion—there's a variety of approaches throughout the system that might be usefully shared, including readings, templates, focused assignments, and so on. We'll be contacting you in the next couple of days about the statewide UC Links mini-conference… We hope to have open discussion of a variety of issues, plus perhaps some small group sessions where folks from different sites can focus on issues of special relevance to themselves. (Underwood, email communication, December 17, 1996)

Introduction

The University-Community Links (UC Links) network is an example of university-community engagement that has taken root, grown, thrived, and adapted to ever changing conditions for almost 30 years (For more information visit https://uclinks.berkeley.edu/). In recent work, co-authors Charles Underwood and Mara Welsh Mahmood, working with UC Links co-founder Olga Vásquez, have drawn on ethnographic and historical data to document and compare university-community engagement across a globally distributed network of programs dedicated to the social and educational development of young people (Underwood et al., 2021). In this work, we applied a cultural historical lens to exploring the UC Links network and its programs and offer the framework of a *sociotechnical activity system* (primary work systems or UC Links program sites, whole organization systems or the UC Links network, and macrosocial systems or the broader social context) to situate and provide deeper context for and understanding of its work.

This chapter builds on the work of Underwood et al. (2021) and applies the framework of the sociotechnical activity system to further examine the UC Links network and how it has both responded to and been transformed by two definitive historical moments: the elimination of affirmative action at the University of California and across the state, and the COVID-19 pandemic. We begin by describing the conceptual framework for collaborative activity on which UC Links as a sociotechnical activity system is based. (See Underwood et al., 2021 for a comprehensive description.) We then apply that framework to understand the establishment of the UC Links network as the tools and practices that evolved over more than 25 years. We next use the sociotechnical activity system framework to understand how the UC Links network transformed as a result of the COVID-19 pandemic and continues to adapt and transform itself in response to ongoing challenges.

As the vignette at the beginning of the chapter illustrates, since its beginnings a major objective of UC Links has been to extend access to digital technologies in ways that encourage and improve the academic preparation of young people in historically marginalized communities. Another explicit goal of UC Links, also highlighted in the opening vignette, has been to establish an extensive community of learners—a virtual network of scholars and practitioners focused on the productive educational uses of digital technologies. This chapter examines the emergence

of this learning community and the local programs it operates, especially in its varied response over the years to such macrosocial issues as the rapid evolution of Information and Communication Technologies (ICT) and the recent worldwide COVID-19 pandemic.

UC Links Conceptual Framework

We view University-Community Links (UC Links) from a Vygotskian perspective, as an example of distributed cognition in cultural historical context. Vygotsky (1978) suggested that human cognition and action are shaped in sociocultural activity, within the historical circumstances in which that activity takes place. This view posits that human thought and work take place in the context of coordinated systems of related tasks and activities. An after-school program represents a coordinated system of related tasks and activities. However, this activity is not locally independent, operating solely on its own; instead, sociocultural activity takes place within a broader context of historically developed structures that carry implications and have consequences for its immediate local work.

In their extensive studies of the primary (localized) activity system of the Fifth Dimension program, Cole and his colleagues (Cole, 1996; Cole & Distributed Literacy Consortium, 2006; Vásquez, 2003) examined after-school youth programs as activity systems in which the site-based development of activities using mediational tools—for example, computer games, new digital media, and a variety of other hands-on materials—came to represent cultural systems that framed the collaborative engagement of older and younger peers. These activity systems created multiple opportunities for them to enact the zone of proximal development (ZPD), in which individuals together accomplished tasks collaboratively that they could not have completed individually (Vygotsky, 1978; Cole, 1996; Cole & Distributed Literacy Consortium, 2006; Vásquez, 2003). This co-construction of the cultural framework for cumulative zones of proximal development, linking novice and expert peers in constellations of informal collaborative tasks, constitutes what Cole has called a "fifth dimension" of human cognitive experience: the dimension in which individual and small-group learning, in the context of activity systems, becomes culturally mediated and institutionally sustained over time.

UC Links eventually grew out of this theoretical and practical work as a means to institutionalize this kind of activity not merely as a program or a set of individual programs but as a long-term strategy for engaging universities and communities in the collaborative development of sustainable

after-school programming for historically marginalized young people. UC Links was established in response to the 1996 elimination of affirmative action in California institutions, including the University of California, as one strategy for promoting student diversity at the University by improving the academic preparedness for higher learning among California's minoritized students. The university and community people involved in running local programs also constitute a virtual network of communicating partners working to maintain local and cross-site collaboration and coherence both within and among the programs. The emergence of UC Links is, in this sense, a study in distributed cognition. Viewing UC Links from this perspective enables us to expand our understanding of its ongoing development as a sociocultural process of collaborative learning among culturally and institutionally diverse and geographically dispersed communities of practice. Because the use of newly emerging technologies has been a key element in the development both of UC Links site activities and of the collaborative work of its partners across sites, we have come to view UC Links as a sociotechnical activity system.

UC Links as a Sociotechnical Activity System

A sociotechnical system is an organizational system whose interrelated activities constitute a functional whole integrating the social and technical systems of activity—that is, the interplay among the people engaged in the collective work system and among the technical resources on which those people potentially draw (Trist & Bamforth, 1951; Trist & Murray, 1993) are intricately linked for their joint optimization (Trist, 1981; Fox, 1995). While first envisioned as a theoretical tool for analyzing and optimizing work systems, the concept of the sociotechnical system has broader implications for the organization of activity, as well as for program impact and sustainability, in educational domains (Underwood et al., 2021).

Sociotechnical systems function at three interconnected levels: primary work systems, whole organization systems, and macrosocial systems (Trist, 1981). Primary work systems are relatively small localized face-to-face work units in which people collaboratively develop and implement activities for specific purposes. Whole organizational systems are broader collectivities of people who work collaboratively across interconnected individual primary work systems, coordinating their own localized efforts with others outside their immediate range of activity, in pursuit of complementary goals and objectives that are shared across the whole

organization. Macrosocial systems encompass even broader sociopolitical domains, including social agencies and institutions across multiple sectors of productive activity that shape, direct, and constrain or enhance the work of both the whole organization and its primary work systems (Trist, 1981). For the UC Links network, each local program site constitutes a primary work system; the UC Links network of program sites in geographically dispersed locations represents the whole organization system; and the broader communities, school districts, state, and national sociopolitical contexts together represent the macrosocial system in which both localized site activity and distributed network activity take place.

While UC Links may be understood as a sociotechnical system, it is at its heart an activity system—that is, an organized set of activities in which participants engage. The link between sociotechnical systems theory and activity theory is a close fit, although it is not always recognized or accepted as such. Sociotechnical systems theory sees human experience as the functional organization of the human use of tools (Trist, 1981). Activity theory approaches human experience as socially and culturally shaped or mediated by the human use of tools and sign systems (Cole, 1996; Nardi, 1996). These approaches are compellingly complementary in that they integrate our understanding of social structures and cognitive processes. By bringing them together theoretically in the conceptual framework of the sociotechnical activity system, we can view how individual human development and cognition take place not simply as an internal psychological process, but in a broader, multidimensional social context—that is, in the context of sociocultural activities in which human beings, using the tools at hand, negotiate and pursue shared goals (Vygotsky, 1978).

The chapters that follow focus on the primary work system (the local sites or settings where program activities take place) as a plane of activity. In this chapter, however, we attempt to understand the multidimensional character of UC Links activity, by focusing our lens more broadly on the whole organizational system (the network of program sites and the interaction of persons across sites) and the macrosocial system (individuals' and groups' interactions and encounters with large societal circumstances and arrangements that have a constraining or supportive impact on their individual or group activity, both locally and as a network). This chapter, then, examines the UC Links network as an organizational system and the larger macrosocial context as the units of analysis to understand how the network operates to support primary systems (individual programs/local program sites), how it has responded through expansive learning (Engeström,

2008, 2016) to the evolving macrosocial context and transformed over time, and how these transformations have in turn made an impact on persistent macrosocial issues facing the organization (e.g., creating a new alternative process for ensuring representation, especially access to higher education). To understand both the beginnings of the UC Links network and how it has evolved and transformed in response to the evolving macrosocial context, we examine the macrosocial context and the organizational system in two definitive historical moments: we briefly note the elimination of affirmative action at the University of California and across the state as a defining moment in UC Links' beginnings, and then we discuss more thoroughly the historical moment of the COVID-19 pandemic and UC Links' response to it. The collective response through the UC Links network "brought to life Vygotsky's concept of learning through 'lived experience,' or *perezhivanie*" (Underwood et al., 2021, p. 252). Examining this "world perezhivanie," as described by longtime UC Links partner and contributing author José Luis Lalueza and his colleagues (Iglesias Vidal et al., 2020; also see Chap. 13 in this volume), thus provides an opportunity for expansive global learning (Engeström, 2016; Engeström & Sannino, 2020).

Program Context: The UC Links Network

In order to understand the UC Links network as a whole organizational system as well as how it has responded to and been transformed by definitive historical moments, we must first understand the macrosocial context in which the emergence of UC Links was situated.

Macrosocial Context

As noted in the introduction, UC Links emerged first in California as a networked, systemwide response to institutionalized racism. In 1996, the University of California Board of Regents eliminated affirmative action, ending the consideration of race in UC admissions. California voters soon followed by passing Proposition 209, which eliminated affirmative action practices in any state public institution. Two years later, in 1998, California voters passed Proposition 227, which effectively banned bilingual education across the state.

At the same time, the mid-late 1990s saw the rise of "Edutainment," educational software designed to both educate and entertain (e.g., Carmen

San Diego, Math Blasters, The Magic School Bus), the Internet, rapid technology growth, as well as recognition of the deepening "digital divide." During the late twentieth and early twenty-first centuries, the evolution and transformation of information and communication technologies were in a rapid state of flux, transforming the way we all communicate and interact through them. This evolution has brought not only new opportunities to the education field (e.g., innovative ways of teaching and learning, expanding possibilities to design learning activities) but also new challenges, especially related to educational equity, differential technology access, and the digital divide (Cole, 1996; Cole & Distributed Literacy Consortium, 2006; Parker, 2008; Underwood & Parker, 2011; Underwood et al., 2000; Underwood et al., 2003; Underwood et al., 2021; Vásquez, 2003).

Importantly, UC Links programs built on the recommendations of the University of California Office of the President (UCOP) Black Student Eligibility and Latino Student Eligibility Task Forces (Duster et al., 1992; Latino Eligibility Task Force, 1993) to support the social and academic development of students at the early stages of schooling (Kindergarten through eighth grade) so that students would be prepared for higher learning, university eligibility, and ultimately higher education. For UC Links, this also meant providing young people from historically marginalized communities access to the important tools and resources that are necessary to be engaged and successful in school and prepared for a pathway to higher education. Addressing root issues that lead to differential acceptance into higher education and expanding access to digital technologies for historically marginalized youth was from the beginning one of the goals of the network. The software created during this time was mostly text-based and the use of multimedia content (images, sounds, and videos), while existent, was not widely available. Additionally, software availability and access were not as widespread as they have become: usually, software was acquired via Floppy Disks or CD-ROMS and was installed in a single device (e.g., desktop computer), and the cross-platform capability was a limitation since every Operative System (mostly Mac or PC/Windows) required purchase of a specific copy of the Software—for example, Microsoft Office for word processing, spreadsheets, and digital presentations (Underwood et al., 2021).

Given that most of the UC Links sites were (and still are) in community-based organizations and/or schools located in historically marginalized communities, the lack of access and lack of funds to acquire technology

hardware and services were endemic, due to institutional racism, including the fact that property taxes in California support local schools, with the result that impoverished and otherwise marginalized communities are disproportionately impacted by limited funding for schools. For example, in 1996 when UC Links programs were developing across California, it was typical at this time for a UC Links partner school to have at most a handful of computers (if any) located in the school library and maybe one computer per classroom (often solely for the teacher's use). Community-based organizations often did not have computers at all. Most of the technological devices and hardware that programs had access to were the result of donations by private contributors—which often donated outdated equipment as they renewed their technological infrastructures—or the result of purchases provided by high-placed administrative staff who prioritized affordability over quality, with the result that after-school programs faced severe limitations in their efforts to fully explore the affordances and possibilities that new technologies could provide to enhance participants' learning experience and engagement. Annual funding from UCOP was critical to providing the technological and educational infrastructure that would enable UC Links partnerships with local community organizations and schools to be successful in securing access to computers, software, program activities, and hands-on materials that made after-school activities possible (Underwood et al., 2021).

UC Links community and university partners focused their attention on providing minoritized young people access to these resources and on developing learning activities that made innovative use of these emerging digital resources by drawing on the experience of the Fifth Dimension and La Clase Mágica program models, as well as those of the Distributed Literacy Consortium, which brought together similar programs around the world (Cole & Distributed Literacy Consortium, 2006). The Distributed Literacy Consortium (described in the Introduction to this volume and in more detail in Underwood et al., 2021) provided an important model for how similar programs engaging university and community partners could work and learn with and from each other. This networked approach was critical in the early years of UC Links as programs were working to develop connections with community partners, co-design activities that drew on community resources and knowledge, and institutionalize these programs across UC campuses. Through this emergent and collective struggle, the UC Links network grew beyond localized programs working in isolation; they became a community of learners working

together across geographical boundaries toward a shared future. This collective initial success led UC President Atkinson to make UC Links a permanent item in the University's budget in 1998, guaranteeing sustained institutional support such that it came to be recognized as an exemplary model among the University's Student Academic Preparation and Educational Partnerships (SAPEP) programs.

The Organizational System

Local UC Links programs, such as those described in the many chapters of this volume, constitute the primary work system of a sociotechnical activity system. This primary work system includes all of the diverse, local, on the ground settings where undergraduates and young people engage in informal learning activities focused on literacy, digital literacy, and critical thinking (Cronmiller, 2011; Gutiérrez, 2008; Gutiérrez, 2016; Hull, 2003; Hull & Katz, 2006; Orellana, 2015; Stone & Gutiérrez, 2007; Underwood et al., 2021). As an organizational system, the UC Links network connects and coordinates all of these primary work systems, including the university and community partners that work collaboratively to co-design, develop, implement, and sustain the local programs. Partners include staff and leaders from schools and community-based and nongovernmental organizations and university faculty, staff, and leaders. UC Links as an organizational system helps to connect local programs to a broader community of similar programs and thereby strengthen and sustain programs locally, while institutionalizing university-community engagement more broadly as a strategy for addressing structural racism and promoting increased diversity in higher education.

As of this writing in 2024, UC Links has programs throughout California and the United States in North America and in Africa, Asia, Europe, and South America (Fig. 2.1).

In 2022–2023 in California UC Links programs alone, 21 faculty at six University of California and four California State University campuses partnered with 143 schools and five community-based organizations to engage more than 4075 young people and approximately 813 undergraduate and graduate students. For more details on UC Links programs and locations, please visit the Programs page on the UC Links website: https://uclinks.berkeley.edu/programs.

An important structure that helps to sustain the organizational system of the UC Links network is the UC Links Office, located at the UC
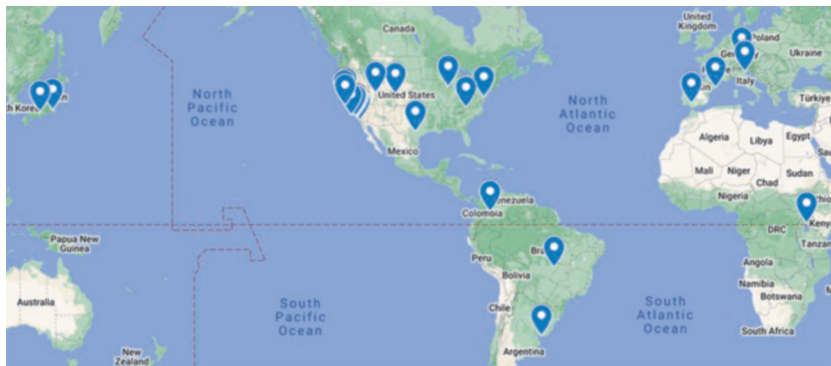
Fig. 2.1 The UC Links global network

Berkeley School of Education. Since the inception of UC Links in 1996, UC faculty have recognized the importance of having a central office to coordinate and advocate for programs as well as oversee important administrative duties and annual reporting to UCOP. Also established in 1996, the UC Links Office has supported and connected the primary work systems of local programs using a range of available digital and analog, face-to-face tools.

In its beginnings, communications between the UC Links Office and the UC Links community depended on quite limited and relatively slow capabilities (Underwood et al., 2021), including phone, email, and also visits to the programs throughout California. The UC Links Office created an email listserv that included key players from participating programs throughout the UC Links network and posted written field notes, like the one at the opening of the chapter, describing programs and program context in great detail as a way to lend support to newly developing programs and share localized knowledge, experience, and program advances across the distributed network. UC Links partners also used the UC Links listserv to share ideas about pedagogical activities and to discuss challenges that various sites faced both locally and across sites. Additionally, the UC Links Office held phone conferences, small face-to-face regional conferences focused on key topical issues, and an annual in-person UC Links conference.

Interestingly, during the early years of the network, UC Links did not initially find successive innovations in distance communication and

collaboration—for example, blogs and videoconferencing tools such as Skype—to be broadly useful across the network, in part because key participants at various sites at that time had unequal access to and familiarity with those emerging tools. In the late 1990s, computers in UC Links programs were rarely even connected to the Internet and videoconferencing required the use of specially equipped media studios on university campuses. Glynda Hull's UC Links program (UC Berkeley, Chap. 5) has always worked at the cutting edge of emergent digital technologies and in 2000 coordinated with Michael Cole's UC Links program (UC San Diego) to connect the two undergraduate courses through shared readings and live discussions via videoconferencing. In practice, this required the course instructors to ensure the courses met at the same time and that there was access to the one media room on each University campus that had video conferencing capabilities (which often meant a dimly lit room with one stationary camera and microphone and a sometimes laggy Internet connection). On the days the UC Berkeley and UC San Diego classes were videoconferencing, all of the undergraduates had to go to their respective campuses' basement media studio where, despite numerous technical glitches and interruptions, they nonetheless found themselves transported into a transformative space where they engaged in dialogue with peers who were having comparable experiences connecting theory and practice at their sites, 500 miles away. Clearly, videoconferencing capabilities have evolved dramatically since 2000, but even technologies like Skype had limited use given inadequate access to or familiarity with the tools, and because so few people could be easily involved within the Skype focal range (cf. Underwood et al., 2021, and Underwood & Parker, 2011, for more detailed accounts of UC Links' early digital history). For cross-site meetings with larger numbers of participants, either face-to-face meetings or older technologies like telephone conferencing simply worked better—that is, until the onset of the pandemic.

Key Ideas: Pandemic as a Portal to Transformation

Viewing UC Links as a sociotechnical activity system enables us to observe critically both the opportunities and the constraints that programs (primary work systems) face in responding and adapting to the evolving macrosocial context. The rapid development of new digital technologies as well as the COVID-19 pandemic and the resulting amplified engagement with emergent digital technologies informed and continues to inform and

transform the UC Links network broader ecology of university-community collaborations. In practice, throughout its earlier stages of development, UC Links' use of new digital media developed most intensely within the primary work system of the local program site. There, university faculty and graduate and undergraduate students, key community representatives, and, in some cases, teachers, collaboratively developed learning activities using these digital technologies. For example, various sites incorporated the activity of digital storytelling, using scanned photographs and other images along with music and voice recordings in distinctive ways to tell stories. Glynda Hull (UC Berkeley) was an early adopter of this activity and incorporated digital storytelling within both the UC Links undergraduate course, allowing undergraduates to explore this medium, and the after-school program, where young people also told their stories digitally as purposeful acts of self-placement in the larger world around them (Hull, 2003; Hull & Katz, 2006). Gradually, other programs around the UC Links network also began adopting and adapting digital storytelling, focusing the activity on individual and family narratives, while other programs have focused on creating community narratives or oral histories, including the creation of formal presentations, such as community mapping projects that communicated either among themselves or to local public officials questions of pressing concern to the community in which the program operated (Underwood et al., 2021). Over the years, Glynda Hull's program remained at the cutting edge of exploring emerging digital technologies, creating activities that incorporated Virtual Reality, Robotics and others (Hull et al., 2021; see Chap. 5). Similarly, other UC Links programs around the network today incorporate maker activities (Chap. 9), 3D printing, and the creation of virtual worlds by appropriating and reimagining video games (Cortez et al., 2022; Rivero & Gutiérrez, 2019).

These emergent technologies have enabled UC Links partners both to carry out local program activities and to share ideas and experiences with colleagues using similar digital activities at other sites around the world. Across the network, the technologies have also helped to facilitate a shared understanding of effective learning activities for young people from diverse backgrounds and communities and to the sense of belonging to an ongoing distributed community of learning and practice or organizational system. It is often assumed that educational programs make quick and productive use of new technologies. However, the achievement of a distributed learning community using cutting-edge technologies across

programs has consistently proven to be a challenging task. For the organizational system of UC Links activity, the opportunities and challenges presented by the emergence of new technologies became especially heightened in our awareness while addressing a key macro social issue: the COVID-19 pandemic.

The shock of the COVID-19 pandemic represented both a potentially devastating challenge and an extraordinary opportunity. During this time, when around the globe we were forced to stay home and shelter in place and schools, after-school programs, and university courses moved online, the use of new digital media and the envisioning of new uses of both emerging and existing technologies became part and parcel of UC Links activity, both in and across programs. Arundhati Roy (2020) wrote about the pandemic as a portal—as a gateway from one world to the next. UC Links programs and the network as an organizational system took up this challenge of reimagining as a response to the macrosocial context thrust upon us by the effects of COVID-19. Similarly, longtime UC Links faculty Kris Gutiérrez (2008) wrote about the co-creation of a "third space"—a space that disrupts traditional hierarchies and allows for reimagining, and the pandemic provided the opportunity to rethink and reimagine activities and practices to better engage schools, communities, young people, and university partners throughout the state and the world. The encounter between the "third space" represented by UC Links program activity and the worldwide crisis represented by the COVID-19 pandemic transformed the collective work of UC Links as digital media quickly became not simply a preferred but more conclusively an indispensable set of tools for collaborative learning, both within and across UC Links sites.

In the process, above and beyond the primary work systems of local UC Links sites, the organizational system of UC Links became increasingly visible as a crucial plane of collective activity. The isolation created by the pandemic necessitated the development of innovative new structures and supports to ensure ongoing collaboration within and across the UC Links network and the effective and rapid dissemination of knowledge and best practices to university and community partners. While in the year prior to the COVID-19 pandemic (March 2019–March 2020), the UC Links Office connected with university and community partners from individual UC Links programs, we did not host a single virtual event or network-wide meeting via Zoom. Between April 2020 and April 2021, there were 24 network-wide virtual events, including the only completely virtual UC

Links International Conference, an inaugural virtual Youth Summit, and the number of virtual events has continued to grow exponentially.

In June of 2020, the UC Links Office (which then consisted of co-authors Charles Underwood and Mara Welsh Mahmood) convened its first UC Links network-wide virtual event. The Virtual Roundtable was attended by community, school, and university partners across four countries and focused on three goals:

1. Discussing emerging strategies for jointly responding to the COVID-19 pandemic and to ongoing endemic racism and educational inequities.
2. Sharing tools and resources to support the students, children, families, and communities with whom we work.
3. Initiating a future-oriented discussion based on shared learnings and strategies.

This initial event generated 13 pages of notes, almost half of which were resources that UC Links partners shared with each other ranging from early research from UC San Diego documenting that face coverings were effective in reducing COVID-19 infections (Zhang et al., 2020) to a Spanish language tutorial for how to use Zoom on an iPad created by the Community Education Program Initiative (CEPI) program: ¿Cómo Usar Zoom en su iPad? (Watch the video here: https://uclinks.berkeley.edu/chapter2). Anonymous survey feedback from the Virtual Roundtable event confirmed its usefulness. For example, one participant wrote: "This was such a positive experience. It helped me see that we are not alone and that we can all learn from each other as we navigate these unusual circumstances". Feedback also provided direction for how future events might be structured to be even more effective, for example, "I think separating into different rooms to have discussions would be helpful and would allow everyone to share… Not sure if any folks would like to see a bilingual breakout discussion—maybe worth asking?"

When the school year started in Fall 2020, it was clear that school and after-school programs were not going to return to in-person meetings; the pandemic was raging and vaccines were not yet available. Upon Charles Underwood's retirement in July 2020, Mara Welsh Mahmood became the new UC Links Executive Director and Karla Trujillo became the new UC Links Student Assistant (Chap. 12), thereby comprising the UC Links Office from July 2020–December 2021. With Charles' continued

consultation, Mara and Karla worked closely with university and community partners around the globe, embracing and leaning into the new virtual learning environment as a tool for reconnecting and creating community at this time of great isolation and for addressing critical problems of practice—redesigning and reimagining in-person program activities for a virtual environment. The UC Links Office kicked off the school year with virtual office hours focused on the following:

1. Creating an informal space to reconnect, share ideas, or just hangout and listen
2. Collectively imagining new futures for virtual after-school programs
3. Identifying next steps necessary to develop and/or leverage supports for our collective work

Building on the feedback from the virtual meeting in June, September's Virtual Office Hours utilized a mix of breakout rooms and large group discussions to focus on a range of topics generated by attendees, including the following:

- Communicating and engaging with undergraduates
- Providing social emotional supports for young people and their families
- Addressing logistical challenges
- Pursuing strategies for providing tech support for young people and their families
- Pursuing strategies for adapting activities for outdoor settings
- Understanding Google Classroom and creative ways to use it

These virtual convenings put university and community partners in regular direct conversation with each other. Prior to the pandemic, this direct communication between UC Links programs occurred less pervasively via email exchanges on the UC Links listserv, the annual in-person conference, or through email updates and field notes from the UC Links Office. The UC Links Office previously worked to thread "a web of understanding between diverse partners by performing communicative work" (Nocon et al., 2004, p. 368). These new virtual convenings enabled partners to interact more frequently and directly, thereby jointly weaving a web of shared knowledge and experience and strengthening the overall network. This collective web was crucial to navigating the ever-changing

times of the pandemic, holding one another through the uncertainty, and providing the structure to connect and learn from and with each other.

One result of this direct interaction among UC Links programs was the development of cross-site collaborations. For example, the CEPI program in Whittier, California, which engaged Spanish-speaking adults, was able to expand existing programming to include members of the La Colonia de Eden Gardens community in San Diego, CA. Monthly activities included a book club as well as a dialogue with a local medical doctor related to COVID-19 and community health. La Colonia de Eden Gardens community partners developed online Zumba and weight training classes in Spanish and invited members of the CEPI program to attend (Underwood et al., 2021). The Youth Summit detailed in Chap. 10 and the collaborative production of this edited volume are other examples of ongoing cross-site collaborations that emerged over time and many discussions during monthly virtual office hours.

The rapid adoption, widespread use, and development of Zoom allowed university and community partners access to videoconferencing capabilities from laptops, desktops and mobile devices. Gone were the days of holding video conferences in basement media studios. The UC Links Office leveraged this emergent technology throughout the 2020–2021 academic year, at a time when all in-school and after-school activities remained online, to convene topic-based virtual roundtable events and monthly virtual office hours, and worked with UC Links partners to develop and support evolving activities to further connect and strengthen the network. For example, in early 2021 John Cano (co-author and co-editor)—then a graduate student at UC Santa Barbara working as the LEAFY Site-Coordinator (Chap. 10)—suggested that UC Links university and community partners might explore new technologies together in a fun and informal learning environment. In February 2021, John hosted the first UC Links App-y Hour and demonstrated how to use JamBoard and Padlet. After a brief demonstration, John answered questions and provided time for participants to explore the technology and how it might be used in an undergraduate course or after-school program. This forum met a pressing need among university and community members to rapidly learn and integrate new technologies into UC Links undergraduate courses and after-school programs. It also provided intergenerational learning opportunities among the UC Links network: a graduate student developed App-y Hours and was the first to host it, followed by other graduate students, faculty members, as well as university undergraduates.

Additional activities that were developed to respond to the macrosocial context of the pandemic included the first UC Links State of the Network (https://uclinks.berkeley.edu/chapter2), a digital message delivered in February 2021 by Mara and Karla, to provide an overview of both the local context (within California) and the broader challenges and opportunities (within the larger UC Links network) and the first ever virtual annual UC Links International Conference (https://uclinks.berkeley.edu/uclinksconference2021) in March 2021. The conference was well attended and engaged partners both synchronously and asynchronously across five continents and multiple time zones and included virtual site visits, experiential learning activities, and "hands-on" work sessions. Today, the UC Links annual conference remains a hybrid activity—allowing both in-person and virtual participation. The UC Links Office continues to receive feedback from participants that the UC Links hybrid international conference is both inclusive and effective. For example, as one participant noted, "For some participants from outside the US, schedule and cost constraints can make it difficult to attend the conference. So I am glad that the hybrid conference allows me to stay connected with participants from around the world." As another participant observed, "I was really impressed by how inclusive you made it for the online attendees, more so than in other conferences/activities where often they had a separate break out room for online participants."

Like UC Links programs around the globe, the UC Links Office also had to leverage and create a range of digital tools to both engage and disseminate learnings, materials, and best practices among the wide range of UC Links participants. The UC Links Office developed a Resources (https://uclinks.berkeley.edu/resources) page on the UC Links website (https://uclinks.berkeley.edu/) to serve as an initial repository for digital materials from around the network. That page has evolved and expanded to the UC Links Digital Resource Garden (https://uclinks.berkeley.edu/uclinks-digital-resource-garden), another example of cross-site and intergenerational activity. The UC Links Office also developed a UC Links Google Calendar (https://bit.ly/UCLinksCalendar) to share events and an enhanced social media presence including a UC Links YouTube channel (https://bit.ly/UCLinksYouTube), UC Links Facebook (https://www.facebook.com/UCLinks), and Instagram (https://www.instagram.com/UC_Links/), providing more opportunities for UC Links participants to connect and learn with each other and the larger network. The

UC Links Office continues to serve its role as a facilitator and convener of university and community partners throughout the UC Links network, supporting ongoing program development, cross-site collaboration, and expansive learning around the globe.

Discussion

The UC Links network emerged as a systemic strategy in response to institutional racism, more specifically the elimination of affirmative action. Since its beginnings, a major objective of UC Links has been to extend access to digital technologies and other educational resources in ways that encourage and improve the academic preparation of young people in historically marginalized communities. Another explicit goal of UC Links has been to establish an extensive community of learners—a virtual network of scholars, practitioners, community partners, and students whose programmatic and research activities are focused on the productive educational uses of digital technologies. For almost three decades, UC Links, as a sociotechnical activity system linking primary work systems (local programs) in an organizational system (the UC Links network), has continued to respond to and be transformed by the larger macrosocial context. UC links has strategically responded to the rapid evolution of new digital and multimedia technologies by working with schools and communities to incorporate them into innovative, collaborative learning activities at localized programs engaging historically marginalized young people. The UC Links Office has leveraged these technologies to connect and strengthen the network, thus transforming its role over time. The macrosocial context created by the COVID-19 pandemic, including the isolation of sheltering in place, the emergency transition to virtual activities, and widespread access to powerful video conferencing and other emergent digital technologies transformed the UC Links network, further distributing power among the already-distributed network while bringing it closer together.

Powerful technologies like Zoom coupled with the rapidly evolving activities like monthly virtual office hours put UC Links partners and programs in direct contact with each other, in the process changing their perspective on the very nature of their activity, both separately and together. This expansive learning process (Engeström, 2016) transformed the character of both the collective work within the primary work systems

and the collaborative work among colleagues across programs. That is, the network transformed in a way that allowed more direct connection among any and all UC Links partners. Together, we were collectively weaving threads of expanded connection, understanding, knowledge, and practice that strengthened, nourished, and grew the UC Links network. Amazingly, the network actually expanded during the pandemic. Lisa Bugno from Italy (Chap. 16) had read about UC Links and was able to attend the Virtual International Conference to learn more about UC Links from her living room during the pandemic. Previously place-based, in-person UC Links programs were suddenly able to expand their geographic reach. For example, Math CEO developed an online high school program (Chap. 8), thereby expanding its range to engage students in other areas of California. The program, no longer bound by a physical location, extended an invitation to the UC Links programs throughout the network inviting high school students anywhere to attend Math CEO online.

Importantly, at this time of unprecedented uncertainty, university, school, and community colleagues throughout the network drew on the UC Links collective commitments (Chap. 1) and together came to understand how to learn through play and informal learning activities. We played with new technologies—to tinker, to make, and to innovate. During virtual office hours, the virtual and later hybrid International Conferences, and Youth Summits, we explored how to create dynamic connections and meaningful online activities and to share what we were learning in individual programs and across the network. We learned in intergenerational settings where the roles of expert and novice were flexible, depending on the activity. Graduate students developed and facilitated App-y Hour convenings, community members shared expertise related to appropriate and productive ways to access and engage community members, and school partners collaborated with university faculty and undergraduates to co-design learning environments and activities, both in and out-of-school. Collectively, university and community partners from around the globe created an expansive third space where partners reimagined not only local program activities but also the ways in which we connected and learned with and from each other as a network (Engeström, 2016; Gutiérrez, 2008; Underwood et al., 2021).

These learnings about how university and community partners can come together to build and sustain mutually beneficial collaborative activities—accumulated over three decades and intensified through a multiyear pandemic—have implications for the broader ecology of university-

community collaborations. As a sociotechnical activity system, UC Links is continuing at both the program and the organizational levels to address macrosocial contingencies, such as the US Supreme Court ruling in June 2023 to eliminate affirmative action in higher education across the nation (Montague, 2023; Sangal et al., 2023). As you will read in the following chapters, programs around the globe are grappling with other pressing macrosocial issues as they apply to their immediate communities, such as social displacement (e.g., immigration, migration, and gentrification), linguistic bias and other forms of oppression, racism, and environmental injustice. At the same time, the organizational system of UC Links—the collective whole encompassing and integrating the international, intergenerational, multilingual, and interdisciplinary array of UC Links programs—continues to learn expansively from each other. Together, we address these challenges and view them as strategic opportunities for innovation in navigating whatever the future may have in store for us.

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Transforming Pedagogies:
Planting Seeds of Resistance

Putting Culture, Language, and Power in the Middle: Dual-Language Participatory Arts for Building Community and Making Change

Leslie López

We're several sessions into our big Fall 2019 project in the Corre la Voz (CLV) after-school program when we start seeing the changes really taking place in the community. Right now, it's Proyecto Time—the last 50 minutes of Corre la Voz that everyone looks forward to. The class is now divided into two movie-making groups, clustered in desks in front of the white board, getting ready to develop their movie characters.

I'm observing the largest group, which is rambunctious, creative, and edgy. They have agreed to call their movie "Black Hood," a story about kids at school who are mysteriously disappearing, but the grown-ups refuse to believe it. The "character" activity explodes into more plot development, and impromptu theater as the fifth-grade student who both came up with the title for the story and claimed the anti-heroic role (he is Black Hood) explains the

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backstory. *The reason kids are disappearing is that Black Hood is kidnapping them; and he's doing this to wreak revenge on the school because years ago he was first bullied there and then unjustly expelled.*

Instead of continuing to explain, he demonstrates by flipping the hood of his sweatshirt way forward, pushing away from the table, and going outside to show how the camera shot will look when he is peering in the window. He has everyone's rapt attention; the kids stand up and recommend different windows or angles, nodding and laughing, then turn back to work on their own characters. Who are they in this story? The Black Hood character-author comes back to check with his undergraduate mentor, who is madly taking notes. She also has some questions for him, which she'll save for a later one-on-one.

One fourth-grader decides she wants to enact bullying by being a "VSCO Girl," a term I have to google later. "Who has a Hydroflask?" she asks. (No one.) "Put down 'Lots of scrunchies!'" she says, pointing to the "Props" list. Her mentor gently nudges the pencil in her direction. Voices are rising and falling, interrupting themselves and each other in their excitement. Oddly, it turns out that everyone so far is signing up for a bully role, which creates a lopsided effect in the cast. Will they be bullying each other? Where will this end up?

A student who has arrived recently from Mexico and speaks only Spanish is sitting slightly apart from the group, talking with his mentor. I come closer and learn that he has heard a translation of the plotline, and is very excited to participate in such a compelling story. He has claimed the role of Goku, Earth-defender (from Dragonball Z), and—gathering inspiration from the cards he has produced from his backpack—is now practicing "Goku's Greatest Speech," so he will be ready to organize the community when the time is right in the story: "Soy la esperanza del universo. Soy la respuesta a todos los seres vivos que claman por la paz…" ("I am the hope of the universe. I am the answer to all living things who cry out for peace…").

Introduction: The Corre la Voz Activity System

As the opening vignette suggests, Latinx youth in the *Corre la Voz Program* (CLV) have processed some intense conditions. Like most kids, college students, and families of Mexican and Central American backgrounds living in the United States, the CLV participants living in Santa Cruz, California, are growing up or becoming professionals in circumstances

that place them "against the winds" of global capitalism, as Gregorio Hernández Zamora puts it in *Decolonizing Literacy* (2010).

From its beginning in 2009 to the present, the aims, content, and general strategies of this program have remained very consistent. The aims are to improve immigrant Latinx community members' opportunities to thrive and pursue their full potential, both on campus and off; and to develop replicable pedagogies that educational activists can use when working with any communities or groups who find themselves displaced or in adverse circumstances. The program has revolved around an after-school workshop in multimodal, dual-language arts, where undergraduate and middle-grade student cohorts work with faculty to build transformative learning communities. The strategies and techniques work through culturally relevant, participatory pedagogies that build collective awareness and shared context, and draw out each person's contributions—their ideas, background, and visions.

This chapter focuses on an integrated set of program designs and techniques that evolved through ten continuous years: Fall 2009 through Winter 2020. In Spring 2020, COVID-19 and university budget cuts began reshaping the program. Yet the designs, techniques, and shared understanding of what the program did were so strong and effective that they were adaptable, even in much-reduced and stressful circumstances, and in varied contexts. Even today as the program faces greater economic challenges, the integrated pedagogies and community relationships developed in those years now constitute a solid "toolkit" or source of Community Cultural Wealth (Yosso, 2005) that can continue to be developed in multiple ways.

The fundamental CLV strategy for shifting power in schooling is to use collective, activity-based language arts work that creates deliberate *spaces*, and then asks members of the community to fill those spaces through discussion and action: with their bodies; with their own cultural references and , and with new ideas and dreams. This is work that "puts culture and language in the middle" (See Cole, 1996; Gutiérrez et al., 1997). The program works to resocialize learning, and its strategies are *collective* in ways that help to balance the individualist culture of mainstream schooling in the United States. This collective logic and the techniques associated with it, for gathering and building community and linguistic wealth, and for working in group process, are essential for developing confidence and skills in culture and language—which need social context and interaction.

The inherently social, contextual, and uniquely lived nature of language and meaning-making (literacies) makes any language arts teaching-learning program both labor-intensive and charged with cultural power. In recent decades, it has been easier and less expensive for schools and universities to displace or routinize these areas of learning than to engage them, along with all the inequities and deep wells of meaning they represent. This mainstream trend works intersectionally to atomize and push out immigrant students, especially when their cultures and languages are minoritized, devalued, or seen as educational problems to be remedied. As has been amply demonstrated by educational researchers, these mainstream, modernist models too often work "subtractively" (Valenzuela, 1999) on the identities and holistic power of dual-language communities of color. Individualist benchmark learning in dominant culture and language, when used as the sole metric of achievement, frames students, communities, and the civilizations they come from as social problems in need of tutoring, instead of linguistically complex global citizens with diverse resources (Garcia & Wei, 2014; Gutiérrez & Orellana, 2006; Gutiérrez & Rogoff, 2003). CLV follows in the footsteps of all the community-based and critical literacy programs that have begun with the premise that we do not have to accept mainstream language arts and literacy approaches that tend to assimilate, subtract, rank, and exclude. Indeed, we have found that transformative language arts are also ideally suited to goals of social transformation: of creating diverse communities of belonging; of articulating submerged narratives and memories; and of serving as spaces for new, polyvocal proposals for change.

CLV created something that had not existed in local institutional or community space before: a continuous space (Fall to Spring but also enduring over years) dedicated to a culturally relevant, after-school mentoring program for Latinx students. Though small, the program has connected and lifted up the talents of the Latinx immigrant community at the university and in local schools. Just by bringing mentors and youth together in this way, CLV has been part of a rising generation of leaders of color, and a larger movement in the county to better articulate the importance of representation in all social institutions, but especially the schools. CLV's collaboratively created curriculum and program designs for building regenerative communities of learning are an important contribution to that movement.

This chapter highlights a few of those CLV program structures and activity designs, in particular those that revolve around *collective-participatory*

approaches to *self-research for capacity building and power-sharing*. These approaches draw on Latin American participatory action paradigms (e.g., Boal et al., 1979; Cammarota & Fine, 2007; Medina & Campano, 2006; Fals Borda, 1979; Freire, 1972; López Vigil, 2005; Montero & Varas Díaz, 2007; Stout & Love, 2019). Each of the programmatic techniques discussed in this chapter works to shift cultural power in learning in two ways: they gather and recognize community Funds of Knowledge as a platform, and then offer collective problem-solving tools to *change* social roles and power conditions.

These participatory techniques intentionally shape physical and social space, time, and activities to create community and transformative learning opportunities. For example, CLV's Opening Council, which launches the program at the start of the school year, establishes the Contrato (Constitution) and also builds skills for restorative justice. CLV's Daily Activity Structure works to create a shared community context by building relationships, confidence, and symbolic repertoire each day, and is a critical tool for developing an inclusive, self-regulating, transformative classroom. Dinámica activities are classic Latin American techniques for holistic, transformative learning, and are the pivot point in every CLV program day. While the complexity of CLV's long-term project curricula (ensemble drama, documentary, movie-making) and their impact exceeds the scope of this chapter, we describe one group "photovoice" activity to illustrate how CLV projects gather community Funds of Knowledge and channel them into community power.

Woven through these examples are glimpses of the kind of work that undergraduate mentors do at CLV. What is not shown in this chapter is that these same collective and participatory strategies for shifting power are built into the undergraduate course at the University of California, Santa Cruz, that drives CLV. Similar to the Nuestra Ciencia program and course described in Chap. 7, the "Community Literacies" course at UC Santa Cruz uses collaborative processes to engage mentors' critical thinking and investment in activity design in theory/praxis cycles. This participation simultaneously builds understanding, a sense of team purpose, and a sense of co-ownership of the classroom, which are essential to undergraduates' reclamation of power and to their emergent leadership. The kinds of cultural power changes that undergraduates experience, and are expected to enact in the program require space, collective process, and peer support. In a very compressed time-frame (a ten-week quarter), with direct faculty mentoring and analytical course activities, they think and

talk through their own self-understandings connected to schooling, culture, language, and power; and they also bring themselves into a new place, new roles, and potentially different futures than the ones they had imagined. In fact, undergraduates are at the crux of all past and potential transformations in this activity system. Ongoing program strategies are dependent on their empowered roles in the course, and this empowerment depends on active, participatory learning and teaching spaces at the university. More broadly, their critical formation in CLV has immediate potential to reshape their futures and the future of the communities they will impact as dual-language educational leaders (Fig. 3.1).

Fig. 3.1   CLV gathers and channels Community Cultural Wealth through multimodal creative projects. Hands-on pedagogies integrate collaborative discussion, cameras, computers, and other tools into a relationally-based classroom

PROGRAM CONTEXT

Corre la Voz is located in Santa Cruz, a small, beautiful beach city on the central coast of California, renowned as the #1 least affordable rental market in the United States, which means metro Santa Cruz has the widest gap in the country between wages and housing costs. The direct and ripple effects of this burden have accrued disproportionately to Latinx immigrant families and children, who comprise 47% of the school district adjacent to UC Santa Cruz, and up to 70% of students in some schools. Teaching staff are almost all White. Corre la Voz was established in 2009, at UC Santa Cruz (UCSC) in partnership with Santa Cruz City Schools, which continues to date. In 2020, as described briefly at the end of this chapter, our partnership formally expanded to a triad with Senderos Santa Cruz, a powerful, grassroots organization promoting cultural education, family involvement, and positive identity development, primarily through dance and music education, and public events centering the contributions of the Latinx immigrant community.

CLV has been an important and pioneering program for inclusive education and university-community partnership in our region during this time, and has required continual innovation and organizing for resources, on campus and off. But it would not have begun nor survived had there not been an increase in institutional awareness and resources for after-school programming and immigrant families in the school district. At the level of initial institutional collaboration, CLV's partnership with the district was informed explicitly by awareness of a particular pressure point for (ELL)-classified students at the elementary-middle school transition. Those who did not reclassify as English proficient before middle school were not eligible to enroll in electives—which included science. Furthermore, there were minimal ELL resources in secondary schools, which raised barriers to reclassification after elementary school. In fact, in its earliest phase, CLV was conceptualized as a substitute for those missing resources at the middle school level. Initially, the program operated simultaneously at two schools that did not have existing after-school programs or staff–and was therefore not sustainable. However, just two years later, CLV began to flourish at an elementary school located very close to UCSC, where the district began to receive state support and to invest in both after-school programming and bilingual community resources. For

instance, at about this time, in 2010, the district's first free after-school program was launched, supported by After School Education and Safety, or ASES, with grant funding from the State of California. The ASES program at this school, which has consisted of nearly all Latinx students (K-5), has provided an after-school environment and infrastructure where CLV program could work two afternoons a week with fourth- and fifth-graders. At the same school, and at the same time, the district piloted its new Bilingual Community Coordinator (BCC) network with its first hire. The BCC organizer (who was also my partner) helped reshape the school into an openly bilingual, welcoming, and participatory environment for immigrant and Latinx families. The development of community trust and interpersonal, intercultural, and inter-institutional communication were the seeds and then the roots of CLV, making it a more "community-based," rather than "community-engaged" program, with the capacity to develop curriculum and approaches that could be used on a much broader scale.

At the school where CLV has worked consistently, nearly all bilingual resources have been focused on K-3rd grade and students transition to English-Only in the fourth-grade. The school's enrollment has fluctuated and generally shrunk from about 580 to 350 students as of this writing; but the ethnic proportions have stayed fairly stable, with Latinx students comprising 40–50% of the student body, White students at about the same proportion, and diverse students from other ethnic groups in small numbers. CLV's learning communities have included nearly all of the ASES Program's fourth and fifth-graders each year. These groups of 16–18 kids have usually included a few students who speak only Spanish, a few who speak and understand only English, and a majority with complex dual-language repertoires in Spanish and English. Mostly, they speak English in school spaces, and either have passed or are in the process of passing the English proficiency test (reclassification). CLV undergraduate mentor cohorts have usually averaged about 12–16 per group. The combinations of Spanish and English repertoires among mentors is diverse; most are from Spanish-speaking or dual-language homes. This group of about 35, including a faculty instructor (the author of this chapter) and, during some years, a classroom teacher, fills the largest classroom spaces at the school to the max. The main space is arranged in table groups seating two to four elementary students and their mentors. These spaces are also filled with sound: whether working on reading or creative projects, these small

groups are always talking. As often as possible, dinámica activities happen outside, so everyone can move and have a break.

After school sessions in CLV are extremely busy. Kids who have spent all day in school somehow find it within themselves to work another solid two hours on highly complex, demanding projects. They connect deeply to the material, to the projects they are developing, and to their mentors, with whom they meet one-on-one or two-to-one every week. At the elementary school, various teachers have stepped into CLV rooms over the years, and expressed amazement. "It's like they're different kids in CLV," one of them said to me. "They're so *engaged*." Another one looked around at the table groups talking and sighed deeply. "This is how it should be," she said. "This has a really good feel."

Challenging days happen—for instance, when there is standardized testing, reclassification testing for English proficiency, or parent-teacher conferences. On these days, when the opposing winds are stiffer than ever, the hardest thing for us to see is how the kids can turn on each other, or on themselves, reproducing weaponized and self-defeating language in the worst way. When that happens, the mentors have to work extra hard. They have to be not just more attentive to "their" kids, but stand up taller than ever to be "the village" that is raising all of them, and each other. Mentors need to be energetic and encouraging, no matter what kind of day they have had—and they need to model among themselves as well as with kids what solidarity sounds like. We need check-ins; but we also need activities where everyone is participating, supporting each other, and succeeding; the kids need to perceive the mentors' smiling faces all around them like mirrors of their future selves, saying, "This is us, succeeding."

Key Ideas: Program and Activity Designs—CLV Strategies for Consolidating Community Cultural Wealth and Shifting Cultural Power Patterns

The collective-participatory strategies built into CLV's approach start with proactive, intentional *space-making* at every level of social design and curriculum. These space-making strategies change the balance of cultural power in two ways: (1) *they work to build a strong, relevant learning community,* able to access its own Community Cultural Wealth (Yosso, 2005) or Funds of Knowledge (González et al., 2005), and to develop community context for sense-making, confidence, and resilience; and (2) *they*

build active, change-making creative processes, with new norms for participating, and new opportunities for authorship and other social roles. By participating in these spaces, individuals and groups learn they are able and entitled to step beyond their socially inherited spots, develop new identities, and work actively with others to *change* their roles and the stories they find themselves in.

What Makes a Strong Community? Contrato-Council

The Opening Council of CLV is a semi-ritualized gathering of the community that launches the program each year, symbolically and spatially formalizing us as a community that values *La Palabra* (The Word). Participating in Council helps teach or reteach all of us how CLV's activities work. First, especially for undergraduate mentors, the practice of planning spaces and arranging furniture—in this case in a big circle—is one of the most common ways we practice exerting "positive power" (versus authoritarian power) in the classroom, to create intentional and welcoming activities. At the Council, we explain the symbolism of the circle of chairs: we always leave an opening in the circle to symbolize our open hearts and minds, and the freedom of choice, to enter and leave; and we always leave one empty chair, to signal that we are open to new community members. Like the Wellbeing Club (Chap. 18) we use talking sticks to honor our turn-taking ("one mic" rule); and we signal when we are done talking by saying "Palabra" or "Word." Like Council, each activity in CLV is a "space," and an opportunity. Each one has norms for types of participation that are explained and practiced; but all of those norms are designed to facilitate fairness and kindness, so that each person has a chance to share who they are and what they have to say. Anyone can ask for help, and everyone there is available to offer it. Practicing these modes and norms develops a local culture for restorative justice before there are problems.

Second, the Opening Council is the visible and tangible social space where the community meets to hear from each person and see them vote (we put cards in a box in the center of the circle) to form our new Community Constitution (our Contrato). The Contrato, a wall poster we put up each day, is an explicit articulation of the group's values and aspirations, and serves as a reminder and a resource for us as we make decisions during the year. The full Contrato development process has five steps: group brainstorming, individual selection and reasoning, all-group

Council, document synthesis, and signing. Both the process and the result are essential for redefining power in our learning community, based on the kids' values, goals, and words (Figs. 3.2 and 3.3). When kids say they want a community filled with kindness, respect, and polite behavior, they are defining a positive role for mentors, who can serve the community by
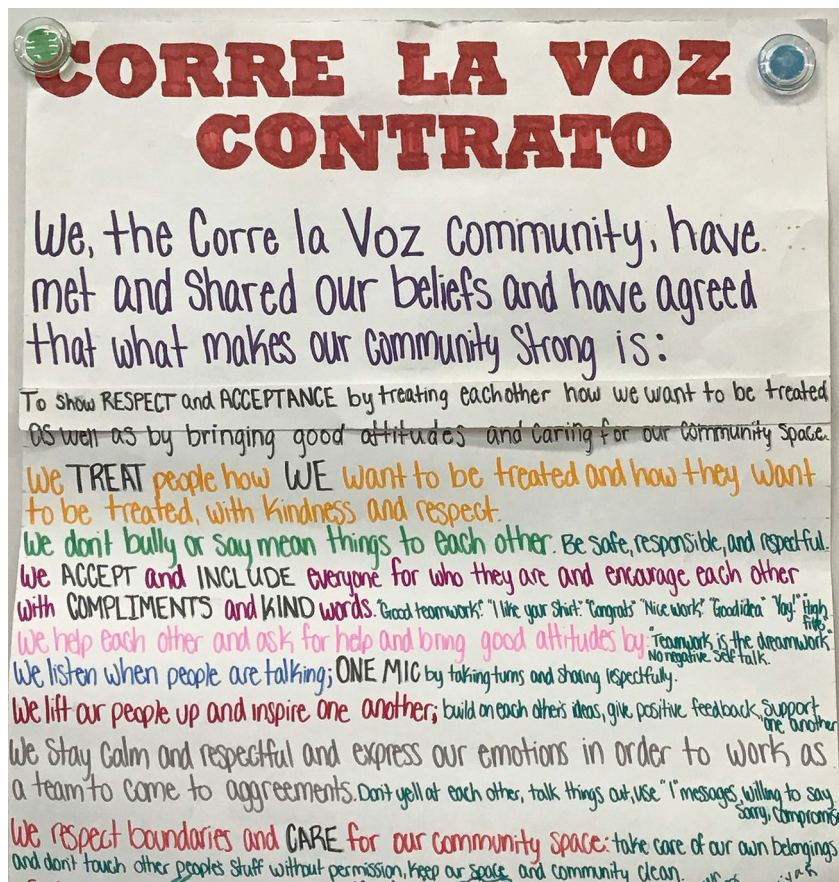
Fig. 3.2 The 2018–2019 Contrato. While most of the ideas come from the kids, undergraduate mentors help guide the community by providing language they have learned in group work, like "respect boundaries," using the "one mic rule"
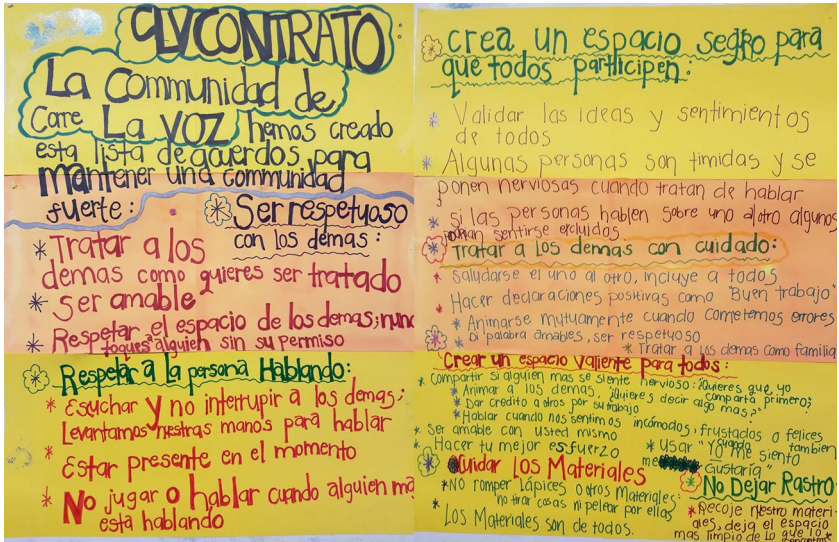
Fig. 3.3 The Spanish version of Contrato 2019–2020. This year, the theme of "spaces" (safe space and brave space—espacio seguro, espacio valiente) was very strong

helping to support kids in achieving their goals, or facilitate problem-solving using concepts that come from the kids to help them achieve this.

The first step, brainstorming toward the question "What makes a strong community?" is broken into four sub-questions (or big, open-ended "spaces") on sheets of newsprint. One of these four questions asks, *"What do good team members say to each other?"* We found this question tapped into a treasure chest of Community Cultural Wealth, in the form of kids' best sportsmanship, best-friendship, highest solidarity, and most tender family language. All of this could be made available as classroom learning language. At first, these phrases were synthesized in our Contrato as concepts. But through practice, by actually using our Contrato during the program year as a resource, we found that when kids' actual words were kept whole in our poster, the entire endeavor had more power, depth, and usefulness to all of us, in a variety of circumstances. Now, these phrases of encouragement go directly into our document, as part of our community word bank. Among the many phrases collected over the years are the following:

Nice one, compadre! #yougogirl! We got this. I got your back. Don't worry, you'll get it next time. I like your shirt. Teamwork is the dreamwork! No te preocupes, ahorita se limpia (Don't worry, we'll clean that right up). We'll figure this out. Buen trabajo! (Good job!) Vamos! Adelante! (Let's go!) No te des por vencido (Don't give up). Do you want me to share first? Do you want to say something else? Good luck!

All parts of this participatory, collaborative literacy activity are iconic of the CLV approach overall. The process *gathers* valuable community words that we can all learn from and use positively, and from the first week of CLV, it tangibly *shifts* power roles: the kids, in effect, are teaching adults and each other what we need to do *and say* to create a productive learning community for all of us; and as co-authors of the community, the kids step into much stronger, agentive places of accountability.

Daily Activity Structure for Building and Sharing Power

The CLV program structure chart (Table 3.1) shows the basic design we use to build program curricula, co-manage the classroom, and communicate with anyone who needs to know what we are doing. The three-part design is based on an intentional, and fairly predictable, series of interactive learning opportunities that build relationships, new practices, and symbolic repertoires throughout each program session as well as over the span of the quarter or year. Each program day starts with Poder de la Palabra (Power of the Word) at tables in one-on-one or small groups, and includes text-enrichment elements (reading, learning from videos, new ideas, discussion). It pivots in the middle with "Dinámica," which brings everyone together as a whole class for activity instructions, then scrambles the groups and explodes into movement, usually outside. The last half of the day settles into a continuation of project work (Proyecto), usually in groups—this is where kids are able to really create and invest in their own ideas, developing complex work over time.

On an organizational and development level, having a clear activity chart makes it possible to share power and responsibility in the classroom. Having delineated activity *types* and overall goals for each segment allows for a team-teaching structure; activity innovation and assessment based on overall opportunity or transformative effects; and classroom self-regulation, rather than reliance on top-down coordination. A clear, predictable structure is also important for diverse learners, including linguistically diverse

Table 3.1 CLV program structure

Time	Activity segment	Types of activities	Leadership, curriculum characteristics, and objectives
3:00–3:35	**Poder de la palabra** **Power of the word**	• Low-ratio; usually seated; connective face-to-face • Mentoring; check-in; table groups • CLV reading and video viewing; Read-arounds, turn-taking; pausing for discussion • Collectively reading selves "into" texts; problem-posing • Research; building background; inquiry • Generative, expressive, reflective writing	• *Faculty-staff bring in materials and introduce activity* • Reading and writing; multimodal: Text, hands-on, enacted; video, photography; internet • Building community and culturally informed social/learning relationships via individual bonding, trust, wellbeing • Developing productive translanguaging space, patterns, techniques based on community members • Norms for turn-taking and collaboration practiced • Introducing new ideas; generating shared knowledge and word banks; active expression, listening and mutual respect • School adjacent; sometimes satisfies homework
3:40–4:05	**Dinámica** ["the science of movement and force"]	• Whole group moment >> group redivision or scrambling for play; game play with learning objectives; hands-on, interactive, fun! • Project-related activities as "challenge games" or holistic enjoyment (e.g., photo scavenger hunt, role-play game) • Playground games as inclusion and fairness (new rules, new imaginary) • Enhanced "icebreaker" activities to make people the curriculum	• *Rotating mentor teams develop and lead activity/all mentors facilitate, participate, mix with community* • Expanding participation. Learning through action and play • Movement—Break from sitting and close focus • Bring people back to their bodies, their senses; relocate knowledge • Draw bilingual and culturally shaped knowing into shared space • Perceiving self as part of larger community, space, activity, all fluid • Low-risk learning; everyone wins • School-adjacent: Listening to instructions; (what to do; what constitutes "completion" or "success")

| 4:10–5:00 | **Proyecto** **Project** | **Quarterly creative projects set the tone for the quarter and orient other activities**
• Roughly stepwise development tasks, low-ratio or small-group facilitation
• Brainstorming, researching, rehearsing, editing or large movement: (photos, filming, dramatic ensemble)
• Multimodal creative production: Social interaction/dialogic development process with digital tools (e.g., movie making, photovoice)
• *Family night* at the end of the year provides authentic audience and horizon | • *Faculty-staff provide parameters, prompts, tools, and support; projects are co-developed, co-led by kids and mentors*
• Youth investment reclaims language arts and tools for self-authoring and world-making
• Support youth self-determination, channels interests in community context
• Culturally relevant mentoring and peer process establishes the right and the means to "change the story"
• Support process develops "muscle memory" of organized team work and dedication to achieve a goal
• School-adjacent and civically engaged: Identities and skill sets needed for strong leaders and thriving, just communities |

communities; and for trauma-informed classrooms, both of which describe our situation.

This structured, relatively stable design also has important pedagogical functions. Kris Gutiérrez (1993) elaborates on the learning benefits of activity-type predictability. She explains how clearly delineated activity types work as a guide for both learners and early-career educators, because the activity schedule functions as a kind of initial universe of "role assignments" that people can then improvise within. There are also important benefits of having *multiple types of activities* or interaction opportunities within program space. Gutiérrez and Jurow's (2016) study of social design for equity explains in detail how different types of activities stimulate different domains of knowing; build repertoires in shared space; and help writers build confidence and momentum as they construct their narratives. The case studies they describe share significant features with CLV.

In CLV, the development of "third space" belonging and the shared symbolic repertoire in the classroom is noticeable within two or three weeks, but it is not immediate or linear, and it is very often expressed in English, at least initially. The process of building community context and individual confidence in communication moves micro-genetically and recursively, from dyadic relationships and small groups into larger spaces and back again, in each session. The program also uses a combination of consistent structure or routine with novel activities, texts, and topics; each mentor has the autonomy to adapt the day's activities with the students around them to engage each person's interests and to let memories and thoughts attached to their languages and families circulate in school space. Depending on the cohort, the "language barrier" maintained in an English-only school environment may break sooner rather than later; and since the CLV aim is to show students how they can feel empowered in learning, we are attentive to ways students might increasingly step into or appropriate the spaces or materials we make available (Figs. 3.4 and 3.5).

Poder de la Palabra: Power of the Word

The "Power of the Word" segment of the program has been the most difficult to develop and sustain, because it can sometimes be both "most like school," and also most directly divergent from school and community norms. Development of this segment has also proven to make the most difference in growth for all members of the learning community, in all domains. The activities vary dramatically in this activity space, but are best

Fig. 3.4 Mentoring digital artwork and writing. Activities in "The Power of the Word" vary, but they all include working with texts: reading, talking it out, and writing. The modality matters less than relationality. When it's time for creative process and close editing work on projects, dyads and teams already know how to work together

described as relationship-building, and as cultivating skills and repertoire that community members can later draw from.

For instance, throughout the Fall quarter that the "Black Hood" group started work on their story, the Power of the Word segment of the program consisted of small-group reading aloud, discussing, and response-writing about Julia Alvarez's novel *When Tia Lola Came to Visit/Stay*. In Winter, weeks after the moment described in the vignette, the group

Fig. 3.5 Learning how to make a Prezi to present Spring research on "Sea Lion Crisis." In Corre la Voz, honoring kids' culture, their values, and their right to develop starts with asking what they care about and then supports their process of pursuing it

began creating a classroom scene for their movie that revolved around that novel as a prop, practicing it over and over until they got it the way they wanted it. The scene opens with students seated in a row, reading *Tia Lola*. The action rolls with bullying by the VSCO Girl, who turns to her neighbor: "I like your shoes. What kind are they? Oh, are they *leather*? That's sooo bad for the planet. My mom is going to take a bunch of us to the mall today after school to get *all-vegan* Vans. Maybe you can come too." The Latina Teacher (a mentor) comes in and greets the class, and introduces a New Student (who is also the character bringing the truth from another school about Black Hood). The social capital of his character is established when the teacher asks the students to define a Spanish word from *Tia Lola*. The "math smarty-pants" is unable to answer the teacher's question ("No, I'm sorry, that's incorrect"), but the New Student (who is also bringing the truth about Black Hood) raises his hand and smoothly

translates the word to English. "Yes, that is correct, very good," says the teacher.

In this scene, along with many others in this movie, CLV youth mobilized multiple symbolic tools to tell a story about injustice and justice, moral and immoral conduct at school. It was clear that reading *Tia Lola* together in CLV expanded their range of tools to do that.

Dinámica: Latin American Techniques for Democratizing Space

The "Dinámica" component of the program is among the most important and liberating teaching techniques that reshape and resocialize literacy activities in CLV. Dinámicas, along with role-play and improvisational drama techniques that are built into many of the program's pedagogies, are directly informed by Latin American toolkits for changing inherited and institutional power relations. As other University-Community Links (UC Links) colleagues demonstrate in their work on play (Chap. 6), these techniques expand or rupture internally rigid classroom space and role definitions; and their engagement of whole-self, multisensory learning processes and pleasure makes them highly effective. (For more information about UC Links visit https://uclinks.berkeley.edu/.)

Dinámica techniques (*técnicas participativas*, or participatory techniques) have been an essential component of Latin American (Freirean) popular education/action research methods since the 1960s, and Latin American institutes of informal and participatory learning continue to specialize in these crafts (See Montero & Varas Díaz, 2007). Dinámicas are holistic, multimodal learning activities designed to change the state of consciousness or capacity of individuals in group contexts (Fig. 3.6). Agency is released, activated, and expanded through participatory games or short learning activities that connect people with their senses, the world around them, and each other, through movement and enactment. Instead of being focused on texts or objects or leaders, their awareness—and their power—comes back into their bodies and is connected to the group.

Although dinámicas very often draw on game play, and game objectives may work as the primary focus of the group (e.g., crossing the finish line together), dinámica planners also work with subtext, phenomenology, and metacognitive learning objectives. For instance, many CLV dinámicas use actual theater warm-up activities (Fig. 3.7). Sometimes these activities are direct preparation for developing dramatic films, but they can also stand alone. Conceptually, it is tempting to think of these activities as a "break"

Fig. 3.6 Blindfolded labyrinth-walk dinámica. This activity builds trust and teamwork—and language skills. The person without a blindfold uses careful directional words to guide their partner's steps through the maze

from close-visual focus and intense cognitive work—because they are—but they are also an integral part of the pedagogy of transforming group practice. As the Boalean tradition teaches us (Boal, et al., 1979; Boal, 2002), drama and play help people focus in new ways by connecting to each other and to their feelings, and by releasing trapped potential to make change in our lives.

Even light, fun dinámicas incorporate shared imaginaries by introducing symbolic props, role-play premises, or new ways of seeing the world, like: "This energy game is called 'Comandante Siete' (Major 7), and when

Fig. 3.7 Getting dressed for a dramatic film production involving extraterrestrial characters. Creative, collaborative storytelling is a liberating space for trying out alternative identities and taking risks in truth-telling

you get to 7, you have to salute;" or "Work in teams of three on this Scavenger Hunt; today, you are bringing back photos of things that are transparent, translucent, and opaque." Lesson plans artfully use groupings, time, movement, and communication challenges to achieve some sort of group change—in energy, understanding, confidence, or other capacities. They can be easy, fun, energetic, wildly interactive, or reflective.

One apparently simple Dinámica we have used is "Category Ball." This word play, based on analytical/conceptual grouping, is helpful when kids are disconnected for any number of reasons. The game can produce connective-verbal patterns with very reserved or shy groups where a number of kids are not accustomed to responding in class; it can build connective focus among kids who are not yet relating to each other or to mentors; it can also work to bring Spanish into school space. Groups stand in

medium-sized circles on the playground, and the facilitator of the circle calls out a category, like "Candy bars!" Players bounce the ball toward another member, who catches it, and then has to think of a type of candy bar within a couple seconds. The facilitator has to keep the categories intentional, relevant, and stimulating; the next category might be "Dinner food!" Mentors in the circle should be prepared to start modeling how to answer this with familiar food: "Enchiladas!" Bounce-catch. "Tacos de asada!" Bounce-catch. Faces light up. "Pozole rojo!" They start elaborating: "Lentejas con plátano y huevo cocido!" (*Laughter.*) They start talking in between bounces about whose mom makes the best pozole, and we are off and running in a new direction.

A Sample Project: Community Cultural Wealth and Public Voice through Photovoice

CLV's dramatic film-making, photovoice, and research documentary curricula have developed enormously in 14 years. Among CLV's most useful findings have been the discovery of key parameters and stepwise activities that offer the most productive kinds of support for long-term projects. The goal in collaborative, creative project curriculum development for these two-part teams (mentors and kids) is to provide enough guidance and stimulation at the start of each day so that individuals will feel drawn in, but will still have the freedom to create, changing the plan as necessary (Fig. 3.8). This always entails sensitive, dialogic work with current learning community members, and is difficult to synthesize.

In 2015–2016, CLV took on a classic "civic engagement" project—the Beach Flats Community Garden photovoice project. Unlike most CLV projects, this project space and its set of parameters were preconceptualized by adults, directed at outside adults, and involved the entire group. Also unlike most CLV projects, this project depended on rare external circumstances— a moment of relevant community activism—that made it productive for our group to extend beyond school grounds. Despite these differences, many aspects of this project illuminate CLV's way of working; it is an especially vivid example of how the collective-participatory process gathers Community Cultural Wealth, weaves it together, and transforms it into more powerful expressions of voice.

The opportunity to participate in the project was a larger community movement to defend the Beach Flats Community Garden, located in one of the most important Latino neighborhoods in Santa Cruz, and one of the most chronically misrepresented—and also home to a number of CLV

Fig. 3.8 "Black Hood" film crew, Winter 2020

families. As part of that socially diverse movement, CLV organized a photovoice documentary project that first studied the overall problem in the classroom; then traveled to the Garden to study it hands-on, using interview, photography, and of course immersion tools for inquiry; and then developed students' perspectives and findings each year into photovoice letters that were sent to the City Council.

During Poder de la Palabra/Power of the Word, we read about the community's problem online, using news articles. The Garden, cultivated by volunteers over 25 years into a Mesoamerican permaculture spot that provided the neighborhood with free fresh fruit, vegetables, flowers, and space for events, had been notified by landlords its lease was up. Neighbors wanted the City of Santa Cruz to intervene by purchasing and preserving the property, which provided the only green space and source of fresh food within walking distance.

During one Proyecto Time, the classroom teacher and I, along with undergraduate mentors, convened group discussion with the kids, brainstorming and collecting overall questions that came out of the research. Students who lived in the neighborhood provided important perspectives

and offered sharp questions for us to consider. For instance, one student and Beach Flats resident raised his hand: "I have a question: like, which side is the City Council really on?" Another day, using preprinted pages developed by faculty with input from mentors (which we call "scaffolds"), kids worked one-on-one or in small groups with their mentors to review who they would be meeting (an elder gardener, Don Emilio, and a young volunteer) and to draft individual questions for the field trip. Mentor-student groups also reviewed the photo-documentation inquiry prompt: "work with your mentor and each other to take pictures and notes about anything that is *beautiful, important, or interesting* to you."

After the field trip, back at school, we found the kids' photos were beautiful, unique, and clear; their messages were equally compelling and eloquent. The first year, we assembled their photovoice panels in a large Google slidedeck as a letter to City Council. Each student researcher had two slides to fill, and worked with mentors to select the photos that were the *most* "beautiful, interesting, and important"—as well as to create a message to City Council explaining their thoughts. I included a cover sheet asking the Council to consider the kids' perspectives. The second year, kids worked in groups of two and developed much more extensive layouts and messages using digital newsletter formats to explain their points of view. Many of the photo-messages from the kids to the Council tried to get the Council to understand what the value of the place and the plants were: "This is a delicious chayote. You have to take the spikes off before you can eat it." Some tried to induce empathy:

Don Emilio and others have worked there most of their life and all that hard work is going to go down the drain if you take it away. Would you like it if someone took away something that you have worked for your whole life?

One was direct and fierce:

We don't believe that you will only leave a little space and we're worried that you will take everything away from our community. I think you are being unfair because you are taking the garden when you have other choices. If the farmers have to go to different places, they won't have a big space to come together in a positive way. They need a special place to meet in the neighborhood. Please let the farmers keep ALL of their land!

For more detail on this project, see Glowa et al. (2015) and the blog-post "Elotes and Eviction: Snapshot Perspectives from Youth on the Beach Flats Community Garden" here: https://uclinks.berkeley.edu/chapter3.

DISCUSSION

Most of CLV's digital projects are introspective and reflective, if not explicitly, then as meta-text: they are about process; they are recordings of a learning community talking to itself about itself, in a space they feel is their own. They are often funny, provocative, inspiring, poignant, surreal; sometimes, they take "art-house" genre to a new level. They are always beautiful, at least to those of us who have had the privilege to know the authors and to witness the process. In contrast, the Beach Flats Garden photovoice project was a brief opportunity for the kids to speak directly and collectively to an outside adult audience about the value of their community—about what is beautiful, interesting, and important to them; and how they felt about the disrespect and threats (Fig. 3.9). I would argue that ALL of that space is necessary, and should be defended.

Fig. 3.9 Mesoamerican corn shared at the Beach Flats Garden

CLV was one of the first UC Links programs up and running during COVID-19. Personal, long-standing relationships with the school and with families, and the program's already-digitized work environment made this transition fairly fluid; kids willingly logged on each week, using loaner Chromebooks and hotspots. But the most determinant plus-factor for continuity was the existing mentor cohort that Spring, and the team of three paid undergraduate program assistants, who were not only dedicated to the kids and the program, but were already skilled in creative problem-solving and community-building. Together, they came up with new organizing systems to "translate" the learning community into flat digital space. Over the following years, we learned how to create video interviews and photovoice digital projects online, and even engage in Dinámicas over Zoom and in hybrid conditions. Becoming "de-sited" actually allowed CLV to reach new schools and new groups of students—including those who had recently arrived in the United States—and we were able to work more closely with families. As a result, CLV was able to solidify its longer-term agreements with Santa Cruz City Schools; we broadened family awareness and a keen interest in Corre la Voz throughout the community; and we formed a new partnership with a grassroots immigrant organization, Senderos.

During these same years, the establishment of an Education Major at UCSC, new faculty interest in CLV, and new hiring opened opportunities for program development that had never before existed since the program was founded. At this juncture, it is possible that the CLV program will finally be integrated into UCSC's departmental offerings, and thus be able to work at scale and draw on the many talents and other resources in our region, through inter-institutional agreements. At this moment, however, those plans are pending, since the previous funding arrangement for the undergraduate course has fallen through, and programming has been interrupted. We hope the community-based strategies CLV cultivated and curated can continue to be elaborated and adapted to serve many more generations, both here and elsewhere.

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Heart of Language: Teamwork as Sociogenesis

Tom Caldwell Vogt

> *Shape clay into a vessel; it is the space that makes it useful.*
> *—Lao Tsu.*

Chiara, a 12-year-old girl at the Realschule Neusäß in southern Germany, sits on the floor of her school gym, patiently allowing the Italian Erasmus+ student Ginervra Masciullo to apply zombie make-up (Fig. 4.1). *The word gets around, imaginations are ignited, and soon more kids are lining up to join in the fun and become zombies! Fortunately, our Spanish Erasmus+ student, Zita Martinez, quickly learns how to do zombie make-up and, soon, it's all systems go for our "Zombie Dance" scene, the climax of our short film "Dark Dreams" (December 14, 2021).*

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Fig. 4.1 International student Ginervra Maciullo applies zombie make-up

Introduction

My bilingual Projektseminar at the University of Augsburg ("Media & Learning Communities/Medien & Lerngemeinschaften") makes moments like the one described in the opening vignette possible. In the text that follows, I will show the kind of interinstitutional stage setting required for such empowering project work, and delve into the level of detail necessary to form a deeper understanding of creative teamwork as sociogenesis.

Working closely with American Studies, Kunstpädagogik, and Erasmus+ departments at the University of Augsburg, my seminar is inherently inter-disciplinary and explores the invigorating contributions that American Pragmatism, jazz aesthetics, multimodality, ethnography, sociology, and feminism make to Participatory Action Research and democracy as a way of life. I podcast all of my lectures to ensure that all university students have the time to go out into the schools and community centers and work with young people. We use "digicampus" (www.digicampus.de), a moodle-like interface, to coordinate ongoing projects, reserve video equipment, share field notes, and openly discuss podcasted lectures and reading materials. Student field notes function both micro-genetically, showing how concrete learning scenarios play out in real time during our

project work, and macro-genetically, showing how the projects themselves develop institutionally over comparatively longer stretches of time. Our "Begleitstudium" (literally "accompanying study") enables students to continue working on the projects for up to three additional semesters after taking the original seminar (thus functioning like an "independent study"). This helps us to form "Site Coordinator" positions for highly motivated university students. Our Facebook group, "5D-Augsburg-San Diego" pools international resources for university students and helped to enable 10 German students to go to California and work with UCSD's La Clase Mágica, thereby enjoying the full international University-Community Links (UC Links) experience (See https://uclinks.berkeley.edu/ for more information about UC Links programs and the global UC Links network). We look forward to resuming and expanding such international exchanges in the post-COVID-19 context.

Program Context

Engaging Youth in Film and Music Video Production

Our "English Media Club" at the Realschule Neusäß meets after-school and is focused on supporting English language learning through film and music video production. The project consists of 10 or 11 90-minute sessions each Thursday afternoon, capped off by a film and music video party at the end of each semester, where we celebrate our joint creativity with caregivers, teachers, social workers, and school principals (as in Hull & Nelson, 2005). Our typical game plan runs like this: In our first session at the school, university students and kids introduce themselves and then brainstorm about what they want to do. Do you want to make a film or a music video? Who do you want to work with? Do you want to be one of the actors? Or would you rather be the camera person? Or the director? The thing that always works is to work together in small teams, usually five to eight kids working with two or three university students. Then, each team starts to develop a storyline/screenplay on the first day. Most teams are able to finish a usable screenplay by the end of the second session. We try to start filming by the third session, and we make sure to start editing the video by the second to last session, putting the clips in order, and adding transitions, music, text, special effects and credits where appropriate. Everything has to be ready in time for the film and music video party at the end of the semester, of course!

Film and Music Video as Social Praxis

Filmmaking and music video production are great tools for creating vibrant, intercultural, technology-enhanced learning communities for and with kids and university students. The university students are young enough to share a common frame of reference with the kids and to talk about things that they are genuinely interested in, such as the German Rapper Sido. So, throughout the planning, filming, cutting, and showing the films and music videos publically, our top priority is to maintain high levels of teamwork and creativity both at the university and at the schools. Everything else flows from that. The same goes for both university students and younger people at the schools and community centers. If you are not interested in something, you are probably not going to learn anything of much value from it. Sometimes things don't turn out exactly how you expected. What are you going to do? Are you just going to quit as soon as things get difficult? Or are you going to rise to the challenge, stick with it, and create something that you and your friends can be proud of?

With respect to (English) language learning, the kids in our projects are invited to relax and have fun. If they make a grammatical mistake while filming, we just delete the clip and try it again, no problem! This relaxed attitude is conducive to fits of laughter before the camera, which always makes for entertaining outtakes. Our goal is simply to create more *familiarity, confidence,* and *fluency* with spoken and written English, thus complementing the more grammatical approach that the kids get during the regular school hours.

Multimedia Project: "Dark Dreams"

In order to understand the lived emotional experiences, social realities, and human potentials that drive such projects, it is very important to look closely at the processes involved. For this reason, I offer here a description of the making of "Dark Dreams," a combination horror film and music video by our English Media Club at the Realschule Neusäß, about a ten-minute drive from the University of Augsburg.[2] In the Summer Semester of 2019, we were blessed with two highly motivated and very creative Erasmus+ students. One such student from Italy, Ginevra Masciollo, had a theater background and was very talented in doing the make-up for the zombie dancers. Our site-coordinator, Anastasiya Tsaregorodtseva, also a talented singer, songwriter, and band leader, brought her abundant music

and dance expertise with her. She had already gained the respect and trust of the kids through previous film and music video activities. This became crucial in the final "Zombie Dance" scene, where Anastasiya worked closely with the young people in choreographing basic dance moves which she later enhanced through simple video effects such as slow motion and rewind. She chose the perfect song, "Bad Guy" by Billie Eilish, with a kind of creepy vibe and a very danceable groove that was upbeat but not too fast.[3]

Key Idea: Teamwork as Sociogenesis

There are always multiple levels of teamwork going on simultaneously in the program. The power of kid-to-kid interactions, for example, became apparent right from the beginning in our first brainstorming session. The young people were full of great ideas, expressing themselves passionately (mostly in German), and also listening to each other respectfully and building on each other's ideas. Many had participated in previous film and music video projects, so they were able to envision exactly where certain scenes could be filmed. The young people were also fully capable of engaging with the university students in conversations about camera perspectives, dialogue, and plot developments. During the brainstorming session, Anastasiya wrote as fast as she could to keep up with the dialogue and posted this field note as our *drehplan/*screenplay:

The girls participated actively in the process of establishing a story line. After brainstorming about various ideas as a team, we agreed on the following scenes:

1st scene: The girls are having a sleepover in the school gym. They are playing cards, eating popcorn, and have a pillow-fight (have to ask for permission to film in the gym).
2nd scene: After a while, they fall asleep and start having nightmares.

Inside the Nightmare

3rd scene: One person wakes up and notices that someone is missing. She decides to search for that person. She walks around in the school building and gets scared by creepy zombie figures that walk around.

4th scene: She runs back to the gym and notices that another girl is missing. She wakes up one of her friends and they search together and meet more scary people (e.g. Vampire, Witch, Psychopath).

5th scene: Every time they open another door, there's something/someone else inside, not just their friends.

6th scene: In the end, they open one last door—there is a lot of light and out come all of the zombies and they all dance together.

7th scene: This is where the dream ends and all of them wake up and realize that they've all had the same dream!

Gear: Blankets (dark colors), sleeping bags, some furniture to build a blanket fort, snacks (potato chips, popcorn), pajamas, card game, bottle of water, make up.

(May 23, 2019, AT)

At the immediate human-interaction level, in addition to the acting itself and the many face-to-face discussions which surrounded the planning, filming, and editing of the scenes, the activity of practicing and performing a dance together is an extremely powerful example of the social construction of embodied intersubjectivity, that is, coordinating one's own actions while, at the same time, adjusting one's actions to fit with the actions of others, or, to use John Dewey's terms, engaging in a "contemporaneous response to a thing as entering into the other's behavior, and this upon both sides" (Dewey, 1925/1958, p. 179). The "thing" involved here, music, is a very special kind of boundary object (Boesche, 1997) where rhythm, harmony, melody, and social energy flow together and function in aesthetically holistic ways (Blackman, 2008; Sullivan, 2001; Turner, 2016). This robust form of intersubjectivity (Underwood et al., 2021), also common in team sports and live musical performance, can be lost in multimedia learning projects if the computer screen itself comes to dominate instead of the human interactions.

We were also very fortunate in having three English teachers at the school helping us out. Diana Bosacki did most of the necessary administrative work on the school side and was always there enjoying the film and music video parties at the end of the semester. Lisa Hinck, a recent graduate of the University of Augsburg, knew the kids on a more personal level and did a great job leading her own group in another film, "Love, Hate and Magic." Denise Kalde also knew the kids very well and was always

there to help out if one of the university students couldn't make it on a particular day. Denise enjoyed making her own acting debut in a previously made film, "Careers." She described the project in a very positive way in the School's yearbook.[4]

Toward the end of the project, the teamwork between university students became crucial as they had to coordinate time schedules and edit all of the video, using Apple's video editing program Final Cut Pro in our Schnittraum/Cutting Room. The cutting process is always extremely time consuming and always takes more time than we think it will. Which clips do we use? What music and sound effects might enhance certain scenes? Which clips should we select for the outtakes? Do we really have to back everything up all of the time? Anastasiya took the lead again in showing the other students how to cut and enhance the film. Her expertise in cutting the film was a perfect way for the other university students to "learn by doing" as they selected the best clips, arranged them in a narrative order, and then added the transitions, music, special effects, and credits to polish things up for public presentation.

All of the hard work and cooperation paid off in the end. During the public showing of "Dark Dreams" at the school, the kids really enjoyed themselves, eating popcorn and laughing wholeheartedly while seeing themselves on the big screen in front of the classroom. Some of them were a bit nervous at first and peaked out from between their fingers or crouched down and peaked out over their desks! Fortunately, we were able to test the sound and video files on the previous day so everything ran smoothly. Denise used the microwave at the school to make sure that we had enough popcorn to go around.

Through her prior experience, Anastasiya had a keen sense of the film party dynamics, so she crafted attractive credit screens for the kids, with the first name of each participant remaining on the big screen for a while (Fig. 4.2).

This inspired spontaneous, enthusiastic, rhythmic clapping from the kids, expressing their delight. Come to think of it, such creative moments are pretty normal and to be expected, once we get away from obsessing on a "predict & control" model (Haraway, 1983/1991) and put teamwork and creativity front and center where they belong.
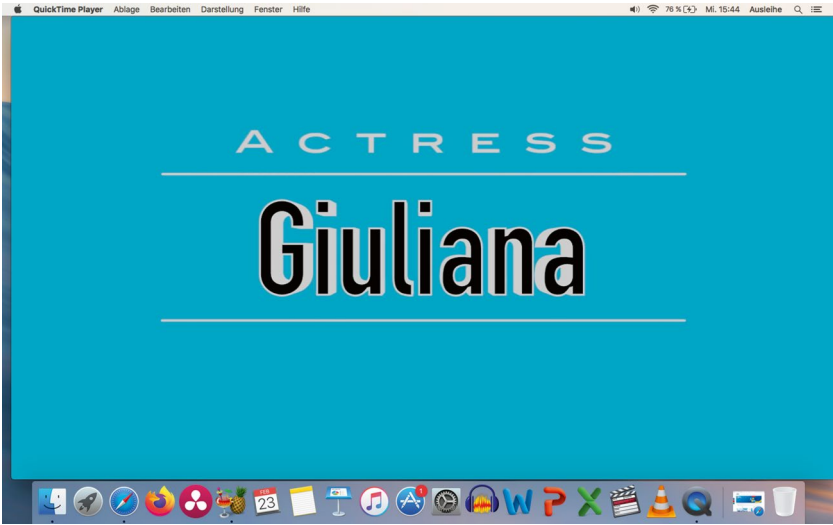
Fig. 4.2 Screenshot of the of kid-credits

KEY IDEA: THE HEART OF LANGUAGE

Thus, we have a multitude of video evidence confirming that, as Dewey put it, "The heart of language…is the establishment of cooperation in an activity in which there are partners, and in which the activity of each is modified and regulated by partnership" (Dewey, 1925/1958, p. 179). Just as when one person gives another person a flower, for example, our response to each other "involves contemporaneous response to a thing as entering into the other's behavior, and this upon both sides" (p. 179). Unlike hens, or marbles in a box, human beings are able to use language as a tool of tools to create, maintain, manage, negotiate, and constantly adjust and readjust their interactions and thereby *become* co-participants. As a form of anthropological holism then, the heart of language beats and thrives through three interrelated levels:

First Level: Scaffolding Caregivers

At the first level, "language is primarily a mode of action used for the sake of influencing the conduct of others in connection with the speaker" (p. 206). Here and now, human beings weave language into face-to-face

interactions to get things done. A child may learn the word "hat," for example, if they wear a hat when going out for a walk with their caregiver because going out for a walk together "becomes an interest to the child; mother[1] and child not only go out with each other physically, but are concerned in the going out; they enjoy it in common" (Dewey, 1916/1966, p. 15). More recent accounts of scaffolding confirm what every caregiver and school teacher always already knows (See Bruner, 1990). With time and lots of practice, such interactions enable human beings to anticipate each other's actions, become a learning community, and "see the future in the present" (Vásquez, 2003).

Second Level: Participatory Narrative

The second aspect of the heart of language is participatory narrative, describing human action in a way that participates (Bruner, 1990). Here, Dewey agrees with the ethnographer Bronislaw Malinowski:

> When incidents are told of or discussed among a group of listeners, there is, first, the situation at that moment made up of the respective social, intellectual and emotional attitudes of those present. Within this situation, the narrative creates new bonds and sentiments by the emotional appeal of the words. In every case narrative speech is primarily a mode of social action rather than a mere reflection of thought. (Malinowski, 1921, p. 475)

I think that our field notes are important examples of this kind of participatory description (Underwood et al., 2021). The students are doing much more than just reporting the facts of what happened at the site. They are also, simultaneously, creating their own voices as young researchers and learning to see the importance of "what is right before our eyes" (Wittgenstein, 1953). Isn't this, in fact, similar to what I am doing right now? I am writing about Dewey and the heart of language and how it relates to our project work, not like the last objectivist telling you "that's the way it is, Jack" but rather leaning a bit into the future, telling stories in ways that hope to inspire future teamwork and new projects which respond to the enormous sociocultural challenges which we are currently facing as a society.

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[1] Note: Dewey refers to mothers, but in this volume we are striving for gender-neutral terms and a recognition that families come in diverse forms.

Third Level: Celebrating Being Together

The heart of language also has an irreducible aesthetic aspect, "an immediate enhancement of life, enjoyed for its own sake" (Dewey, 1916/1966, p. 183). Dewey agrees with Malinowski that "there is in all human beings, the well-known tendency to congregate, to be together, to enjoy each other's company" (Malinowski, 1921, p. 476). Or, to put it in Dewey's words, "Communication is not only a means to common ends but is the sense of community, communion actualized" (Dewey, 1925/1958, p. 206). Sometimes, as educators, we tend to forget about the importance of this factor. This is a big mistake!

Discussion: From a Pedagogical Point of View

Making sociogenesis <=> the heart of language somewhat explicit:

The heart of language, then, can be seen as human capacities to coordinate action through language, tell each other compelling stories, and simply enjoy being together. How these abilities play out in any one particular project, over the period of an academic semester, are, thankfully, inherently unpredictable to a large extent. Kid–kid interactions, kid–uni student interactions, and uni student–uni student interactions overlap and merge tightly with each other in a vibrant flux of activity, all made possible by the interinstitutional work between the university and the school. "Dark Dreams" turned out to be a unique film and music video that no one person could have ever come up with by themselves, not in a million years. In this way, we learn to rely on each other's creative teamwork and move on to the next project with renewed energy.

In conclusion, we think that these kinds of film and music video projects are examples of empowering win-win partnerships between universities, schools, and community centers. On the university side, students are constantly saying how much they appreciate the opportunities to connect social learning theory to concrete educational practices. At the schools and community centers, we see a positive transformation of youth motivation levels and forms of engagement through language learning, authentic literacy, media competencies, and learning to work together. We are continually developing the projects at local (www.fill.de), national (www.goethe.de), and international levels (https://wunderbartogether.org/de/), and we look forward to your questions, comments, and also, perhaps, some empowering, open, and sustainable forms of cooperation for the common good.

End Notes

1. Erasmus+ is a European student exchange program; see www.eras-musplus.de.
2. Augsburg is one of the oldest cities in Europe and has become a model of diversity for German cities with over 50% of its youth coming from immigrant backgrounds. For more information about Augsburg, see www.augsburg.de & www.tuerantuer.de.
3. For the school's perspective, see this article in their yearbook:

Der English Media Club war auch dieses Jahr wieder fleißig!
"Auf die Plätze, los"…or as we say in English "Action".
We are one our way to having another great year in the EMC! The English Media Club is in its sixth year here at our school and in its third year working with the kids in the Ganztagsbetreuung. Tom Vogt runs the international research project "Participatory Action Research" through Media and American Studies at the University of Augsburg. He has found that media offers a perfect as well as a fun way to integrate individual and team creativity with language learning.

The Club meets once a week, for an hour, on Thursdays in the Ganztagsbetreuung. At the beginning of each semester, the kids, with the help of their group leaders (the university students), get to decide what kind of project they want to make. They can choose to do music videos, films, whatever they want. Together they write the script, in English of course, decide on the music, choose the location, and help with the filming. The University students then cut the film/videos together and add the music, along with any necessary special effects. They then celebrate their "hard work" at the end of each semester with a film party! There, they proudly watch their films or videos, eat popcorn and sweets, and simply have a good time.

The fall semester produced two super films. The first film is called "Career Day." It's Career Day at school: the kids have to think about their future! Different careers are highlighted in this comical look at some of the possibilities out there! This short film will hopefully be submitted to the Augsburg Film Contest, Meine Idee! Mein Weg! Mein Ziel! We wish them good luck! The second film is called "The Robbery". An action-packed thriller about a group of boys who, out of necessity, decide to rob a bank. Full of super stunts, the boys learn the hard way that crime doesn't pay!

The EMC is really a fun, relaxing way for the kids to learn and practice a new language! Don't take our word for it. Here is what some of the kids had to say:

- Nick, in his second year in the club, says "It's fun to film our own ideas! Tom and Omar are cool and the popcorn is very tasty!"
- Selina says, "I love watching all of our bloopers at the end of the film. They're funny!"
- Gergely says, "It was fun to help with the filming".

With great projects like these, we really look forward to next year! Having fun while learning and improving our English…sounds perfect!

Denise Kalde, Realschule Neusäß Yearbook, 2019/2020.

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Critical Digital Literacies among Youth: From Food Eating Contests to Societal Transformation

Devanshi Unadkat ⓘ *and Glynda Hull* ⓘ

At an after-school program in the San Francisco Bay Area, a group of students clamored around a computer, eager to create a video to share with peers at a partner program. The after-school staff glanced over, satisfied that the group seemed engaged in the process of creating and sharing digital stories with their peers. The group of teens, whom we will call the "Fortnite group," were avid gamers and had been working on crafting a vlog[1]-style digital story to highlight their gaming skills and "hacks" with peers they thought might share a similar passion. The group was quick to finish their work and share their artifact with their peers via a closed digital network created for the program. However, rather than working on their ongoing digital story,

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[1] Vlogging is a popular social media practice, adapted from the popular writing practice of "blogging." Through self-made videos, individuals document and share their experiences, opinions, and ideas interacting with their audience through a range of narrative styles.

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unbeknownst to the program staff, the group used this time to troll[2] another student group (we will refer to them as the "Trolled group") by creating a new video that mocked the appearance of students in the Trolled group. The Fortnite group used an image of the members of the Trolled group, zooming in on each of their faces as the screen briefly flipped to an object or animal in place of each face while a laugh soundtrack played in the background. The resulting narrative used an overlay of stereotypical imagery and scornful laughter on each student's face, creating tropes that were overtly racist in some instances and downright hurtful overall.

The students in both groups insisted that the video was an attempt at light-hearted and playful humor and everyone was "just having fun." However, program staff became concerned about the apparent unwitting adoption of trolling, a common digital practice in everyday social media use, which had quickly become a part of the networked storytelling exchange in the after-school program. Moreover, the program staff were concerned that, if unchecked, the digital storytelling practices would reproduce some hierarchies and engender forms of bullying in online/after-school that already seemed prevalent among social cliques during regular aspects of the school(s). What was intended to be a project that focused on building community and connection across three after-school program sites was seeming to devolve into an unreflective and problematic exchange via *media production. The project staff, which included teachers of the after-school programs and members of the research team,[3] intuitively knew that what they were seeing amid the students was illustrative of many infamous truisms that served as a cautionary tale to the perils of adolescents' use of social media. However, the staff were also optimistic about the potential opportunities for powerful and persuasive communication afforded through these technologies (*Hull & Stornaiuolo, 2010*; Hull et al., 2014, Hull et al., 2021*) and sought to reframe the project moving forward in a manner that would foster more intentional practices around digital storytelling and communication amongst the students.*

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[2] Trolling via social media generally involves mocking specific individuals or groups. While the practice itself is not inherently harmful and can be appropriated subversively (as political comedy or satirical genres do), generally trolling is a form of cyberbullying used to perpetuate hurtful messages.

[3] Led by Dr. Glynda Hull, our research team at the Berkeley School of Education is composed of university researchers, graduate and undergraduate students, staff, and community organizations and schools. Our team has had long-standing partnerships with the sites that were a part of this project, as well as the larger UC Links network, and the research described in this chapter was carried out as part of our regular collaboration with these sites. We heartily thank the youth, teachers, and schools for their willingness to engage collaboratively with us.

Introduction

This chapter traces the efforts of after-school program staff, in collaboration with our research team, to reframe how adolescents in the program approached the creation and sharing of digital stories. Long motivated by the striking contrasts in the many ways social media impacts the lives of children and adolescents, our team has been interested in how young people view and appropriate new technologies in their daily lives. Our work began over 20 years ago, when we collaborated with University-Community Links (UC Links) (https://uclinks.berkeley.edu/) and local school and community partners to create a community technology center in the basement of an old Victorian house in the San Francisco Bay Area (Bay Area). At this site, K-12 students and educators came together after school to create digital stories, and university undergraduate and graduate students learned how to engage in mentorship and tutoring. While participating in the after-school program, undergraduates were enrolled in a UC Berkeley School of Education course focused on literacy as a multimodal practice. Their participation at the community center provided the students an opportunity to link the theories and ideas they were learning in the university classroom with practical experience working with young people after school.

Over the decades, what started as a small local project to support young children and adults in using emergent digital tools to craft narratives of themselves, of others and their community, and of the world they imagined led to larger partnerships that eventually culminated in a global network of programs spanning four continents. Time and time again, this work showed us how proper pedagogical supports foster the creation of powerful digital stories that empower their authors and compel viewers to learn across distances and differences (Hull et al., 2006, 2014, 2010, 2021; Hull & Stornaiuolo, 2010). In the present moment, when social media is fraught with acts of harm and simultaneously acts of resistance and subversion, we are compelled to wonder about continually emerging technologies in new ways: How and why are digital spaces sites of dystopian realities filled with hate and other forms of chaos on the one hand, while at the same time sites of utopian possibilities of contestation and change, on the other? Amid the complex realities of the cultural, political, technological, and material dimensions of social media spaces, our goal in this chapter is to "center the critical in Critical Digital Literacies"(Smith, 2021, p. 229).

As digital technologies increasingly proliferate in some parts of the world, the ways in which information is shared across space and time are

rapidly and continually shifting, presenting both opportunities and challenges for meaning-making and literacy education (Darvin, 2017; Dixon-Román et al., 2019; Warschauer, 2009). Simply put, while the technologizing of our worlds enables "accessing wealth, power, and knowledge," it can also cause "one of the most damaging forms of exclusion" (Castells, 2010, pp. 93, 3). These shifts require understanding and addressing the ways in which communication across distances through the circulation of media can be empowering and reflexive rather than dehumanizing and marginalizing, thereby reproducing existing hierarchies. Toward this end, many have proposed frameworks to articulate ways to support students, particularly adolescents and youth, through the development of critically oriented skills and practices to traverse these spaces and imagine futures equitable for all (Ávila, 2021; Darvin, 2017; Bacalja et al., 2021).

Critical Digital Literacies: An Overview

 scholars have called for pedagogical efforts to support the development of students' "digital literacies." Digital literacies (DL) have been variously articulated as skills that relate to communication with and through digital media, a means to access information in a rapidly changing and fluid knowledge economy, and ways to represent oneself in the new world order (Ávila, 2021; Darvin, 2017; Mirra & Garcia, 2020; Nichols & Stornaiuolo, 2019). To allow for digital literacies to be reinterpreted in conjunction with critical literacies, the term "critical digital literacies" (CDL) was introduced in an effort to foreground ideological and hegemonic power structures that exist in digital spaces. CDL was first defined as "those skills and practices that lead to the creation of digital texts that interrogate the world; they also allow the interrogation of digital, multimedia texts" (Ávila & Pandya, 2012, p. 3). Subsequently, Luke (2014) offered an extension of this term as critical digital literacy practice, or "a process of naming and renaming the world, seeing its patterns, designs and complexities, and developing the capacity to redesign and shape it" (p. 29). Others similarly emphasize the importance of design considerations in CDL, which include weighing the effectiveness of modal affordances offered by social media spaces and their constituent technologies, as well as the design choices made by users of social media spaces in their production of digital artifacts (Mirra & Garcia, 2020; Pangrazio, 2016).

Ultimately, efforts to conceptualize CDL seek to elucidate the interplay of platforms, policies, economic interests, and educational goals to understand CDL as not only being attuned to power relations, in the context of digital worlds, but equally, media literacies, or the ability to identify the inner workings of the interplay of platforms, policies, economic interests, and educational goals. These efforts offer "undoubtedly complex and varying kaleidoscopic views" (Ávila, 2021, p. 1) that helpfully articulate a range of skills and practices that pedagogical efforts in literacy education might undertake to foster in order for students to skillfully and safely traverse rapidly proliferating, interconnected, and dynamic digital networks of information, knowledge creation, and participation, and to use their awareness of how power operates within and across these networks to appropriate these spaces as sites that enact contestation and transformation (Ávila, 2021; Darvin, 2017; Mirra & Garcia, 2020; Nichols & Stornaiuolo, 2019).

Extending Critical Digital Literacies

Many have noted that pedagogical endeavors to support the development of CDL in schools often focus on developing literacies to navigate the use of digital technologies, rather than applying or developing critical literacies in their use (Darvin, 2017; Pangrazio, 2016). Further, even the wide variety of skills and practices couched under the umbrella of "digital literacies" or "critical thinking" might still overlook the many complexities and challenges of teaching students to actually be critical (Nichols & Stornaiuolo, 2019; boyd, 2018). Equally, this focus on fostering literacies in the context of the digital sometimes seems to discount that many practices, such as bullying, that engender harm and promote exclusionary worldviews in social media spaces, as well as subsequent efforts to combat them, are not new or exclusive to social media; rather, the rapidly changing digital landscape simply offers new spaces to implement and instantiate already-existing harmful practices and worldviews. Toward this end, boyd (2018) emphasizes the importance of individuals developing and exercising empathy in online (and offline) spaces rather than simply engaging in critical thinking or having media literacy skills when using digital tools. In fact, boyd opines in a SXSW keynote address, after she lays bare the apparent rationality, not to mention the rhetorical effectiveness, of those who expertly indoctrinate youth and others into racist ideologies, "the difference between what is deemed missionary work, education, and

radicalization depends a lot on your worldview. And your understanding of power." boyd argues, then, that critical thinking can be weaponized, but she also suggests that cultivating empathy is one safeguard against certain kinds of misinformation and mistrust. She recommends "building the capacity to truly hear and embrace someone else's perspective and teaching people to understand another's view while also holding their view firm."

We have explored this capacity in our previous work as the development of cosmopolitan sensibilities and practices, reflexive understandings of self and others (Appiah, 2006; Hull et al., 2021), which we believe can serve as another safeguard against the weaponization of critical thinking and other harmful messages. As Darvin (2017) explains, "while critical digital literacy exposes how power operates in this world, cosmopolitanism shapes dispositions that allow learners to navigate this world with greater respect and responsibility" (p. 12). This chapter is thus an effort to elucidate how literacy scholars and educators might reimagine CDL as a practice of enabling youth to leverage their creative, productive, and transformative capacities when engaging with social media by supporting the development of critical capacities rooted in raising critical consciousness, a la Paulo Freire (2014), and also the empathetic imagining of self in relation to others. We ask, *how can literacy educators support the development of students' everyday digital literacies in ways that privilege criticality and empathy?*

PROGRAM CONTEXT

This project took place as part of a long-standing collaboration between our research team and a network of after-school programs in the Bay Area. The after-school programs provide expanded, expansive learning opportunities to children and youth each day after school. Activities in the programs ranged from digital storytelling, curricular support, sports, and other forms of engagement. The curriculum for these spaces was designed collaboratively by members of our research team and program staff. For the project described in this chapter, undergraduate and graduate students worked with the after-school staff to design learning opportunities based on students' interests and needs identified by program staff. We focus particularly on how students' composition practices in the after-school program became more critically and empathetically turned in response to curricular modifications enacted by program staff. We also trace the

pedagogical structures that supported these shifts as they were revealed by students' creation of digital stories.

The after-school programs were located in three faith-based private schools—St. Augustine,[4] St. Christian, and St. Erica—that served students and families from low-income backgrounds primarily identified as Hispanic and Latine. The programs were part of the federal 21st Century Community Learning Centers Program (CCLC),[5] supporting the creation of community learning centers and academic enrichment programs during nonschool hours for historically marginalized youth, and also part of the UC Links network. The programs were run by after-school staff and undergraduate and graduate students and researchers. Across the three programs, 10–20 students from each school from grades five through eight worked together to create their digital stories. The groups varied in terms of composition by gender with some all-male, some all-female, and some mixed male-female groups.[6] Students formed their own groups of three to five based on their existing friendships with peers in their classrooms.

Many students in the technologically rich San Francisco Bay Area were well versed in the practices of popular social media culture and were already members of and seamlessly navigated various social media platforms on a daily basis. They expressed that they frequently spent time on YouTube[7] and followed specific channels and/or vloggers. They also participated in viral literacy practices that were popular across the Internet (such as the Kiki challenge[8]) and thus had digital footprints across social media platforms. At the start of the program, the after-school program staff developed a *translocal* network among the three schools. The eventual goal of this project was to create and share videos across sites intended to be modeled after *vlogs*; students were encouraged to create videos that would be "liked" by their peers in response to a set of guiding questions.

Working in small groups, students responded to and provided feedback on the videos made by other groups and incorporated feedback into

[4] All site and participant names are pseudonyms.

[5] More information on the Twenty-First-Century CLC program can be found here https://www.cde.ca.gov/ls/ex/fundingop.asp#centurycommunitylearningcenters21st

[6] All students in the program self-identified in binary gender terms.

[7] Students' self-reported use of YouTube as their most frequently used social media platform in this study is consistent with trends from the PEW Research Center's (Vogels et al., 2022) report of most popular social media platforms among adolescents.

[8] The "Kiki challenge" was a viral 2018 trend where participants filmed themselves dancing alongside a moving car to Drake's "In my feelings" song.

improving their own videos as part of their efforts to create "likable" vlogs. The themes in most students' projects at this point mirrored many viral Internet and/or YouTube trends. For example, some students wanted to partake in the then popular *Mukbang*[9] challenge to see if they could push the limits of their appetite, while another group aspired to mimic *flossing*—a dance move associated with the popular game, Fortnite. More concerning was that at this point in the project, an instance of trolling, which we described in the vignette at the beginning of the chapter, became a part of the students' creation and sharing practices where groups mocked other groups through their vlogs.

The "Fortnite group," whom we introduced in the vignette, became upset by some of the feedback they received on their video and created a response video that mocked the students who gave them feedback. As mentioned before, although students insisted they were all "just having fun," the after-school teaching team was concerned that such practices would exacerbate what already seemed like social cliques and bullying during the regular school day. More importantly, given the prominent role these students indicated social media usage played in their lives, staff wanted to work with students toward becoming more intentional about their participation in social media trends so as to be aware of the ways in which their own practices could contribute to creating reflexive spaces that recognize asymmetrical power structures or harms and open up possibilities for contestation and subversion rather than reproducing exclusionary or marginalizing messages. In an effort to ensure students were engaging in digital exchanges in ways that supported their reflection on the purpose, meaning, and outcome of their practices, our research team worked in collaboration with the program staff to shift the focus of the project using the structure described below.

Reframing Project Goals

Students were introduced to ideas about storytelling through reflections on their own memories of stories that had made an impact on them or felt compelling. Students explored the terms "impact" and "compelling" as a

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[9] Mukbang is a combination of South Korean words that mean "eating" and "broadcast." A Mukbang can be a prerecorded or live-streamed video broadcast in which a host eats a large amount of food while viewers watch. This global phenomenon is characterized as a one-person food contest that consists of binge eating.

means to have larger conversations about what constitutes a "likable" story, in the sense of a memorable or meaningful story (beyond simply being literally "liked" through the click of a button). Students also reflected on the content and nature of such stories, the modalities stories were delivered through, and considerations of implicit messages and imagined audiences in telling meaningful stories. The research team introduced students to a range of short stories across a variety of genres, including through viewing commercially made films by various documentarians, media conglomerates, and others as well as hearing stories that project staff read aloud from books (or played via audio). The content that students viewed also included digital stories created by students from India and the Bay Area who had been part of a separate project, "360 storytelling," on which the research team had been working for the past two years. In the 360 storytelling project, the research team iteratively worked with middle and high schoolers at two programs—one in the Bay Area and one in India—to craft digital stories for their local communities and for a global audience of peers participating in a digital storytelling exchange. The project began with students at a San Francisco school creating narratives about their everyday lives to share with peers in India based on digital stories that had been crafted by students from India involved in an earlier project (Hull et al., 2010; Hull et al., 2021). The students in India viewed these stories created by San Francisco youth and crafted narratives to highlight salient aspects of their own lives while considering how their own stories might respond to those of their peers. These stories were brought back to the students at the San Francisco school. The research team shared the stories from this prior project with the focal sites of the current project in response to the trolling incident described at the outset of this chapter.

During this reframing of the project, the research team selected and introduced students to stories that centered on themes of identity, community, diversity, and equity. Researchers and program staff also collaboratively developed a set of questions for reflection that scaffolded students' viewing of these films. The questions focused on identifying the purpose of the story, the intended audience of the story, the meanings and messages conveyed through the story, and a consideration of elements that have the potential to make a story impactful. The same set of questions was used for each film students viewed. In discussions that ensued, the program staff and researchers followed up with clarifying questions as needed in response to student comments and observations in order to highlight aspects of powerful and persuasive narratives that privileged

criticality and empathy. Through this reframing, our team charged students with creating stories that might be impactful or compelling to a network of real and imagined peers locally and globally. Students thus composed narratives that would eventually be shared through our private digital network while considering a wider audience than initially intended. Reframing the goals of the project by introducing a variety of digital stories and explicitly considering the notion of impact created opportunities for students to reflect on the meaning behind the message of their stories and the practices they drew on to create and share these.

KEY IDEAS: SUPPORTING SHIFTS TOWARD MEANINGFUL MESSAGING

The project team noted that shifts in students' goals emerged in response to their viewing of artifacts—that is, other films and digital stories—in conjunction with explicit conversations about considerations of audience and the impact of stories on audiences. The project staff employed a consistent set of questions to support students' viewing of each artifact and followed up with probing questions as needed in response to comments made by students. We found that explicit conversations that scaffolded students' analysis of the artifacts they watched allowed them to develop skills in reflecting on the intentions and/or goals of the artifacts' authors, the meaning being conveyed through the artifacts, the intended audience of the artifacts, as well as the ways various modalities employed in the artifacts came together to create and convey specific meaning. This generative structure also enabled students to identify lived inequities in their own lives around immigration status, gun violence, food access, cultural diversity and assimilation, poverty, and police brutality. Students articulated in notes they captured during their discussions that impactful stories are those that evoke a strong emotional reaction in bringing attention to the lives of people impacted by an issue and those working to address these issues. For example, in response to a news clip about rapper 21 Savage being targeted and arrested by Immigration and Customs Enforcement (ICE), students were able to identify the poignancy of this targeting and separation from his family as being "impactful" elements of the story (Fig. 5.1). Ultimately, the viewing of several genres of films on a variety of topics led students to conclude that powerful stories are those that "tell" a viewer about the challenges and successes of the protagonists of the film and their communities through evoking empathy. Thus, questions that
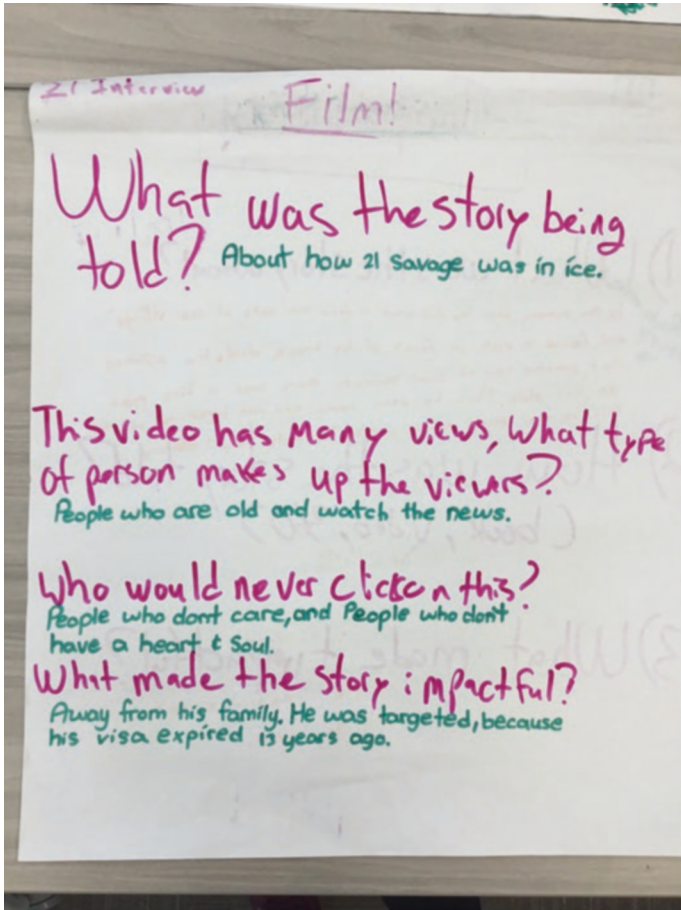
Fig. 5.1 Student notes in response to questions posed by instructors

centered explicit conversations and reflections on the idea of an impactful story and the modality through which it was told helped students to focus on the message or meaning behind a narrative, rather than on practices that were already popular on the modalities they engaged with. This shift thus allowed students to see the possibilities of the stories they could tell through social media platforms and the many ways these stories could have an "impact" beyond simply the garnering of "likes."

Over the course of the program, we observed how students became more adept at recognizing and articulating elements of narratives that were powerful and persuasive and sought to incorporate these elements into their own digital stories. There was a distinct shift in the kinds of practices they instantiated as they sought to appropriate digital technologies as tools to create impactful stories that were rooted in acts of care, responsibility, and a commitment toward improving the lives of others, near and far. For example, in the digital stories made by other students in the San Francisco Bay Area and India, themes around LGBTQIA2S+ rights were raised and resonated with the students in this project, allowing them to reflect on the experiences of LGBTQIA2S+ individuals and question how people who identify as queer might be treated within their own community.

Key Ideas: Intertwining Narratives

Collectively, students' questions for and interest in their global peers located in a country they didn't know much about, and their local peers who lived a few cities over but had vastly different experiences eventually bumped up against their initial desires to go viral; their goals to participate in a social network that they already were members of and knew intimately became intertwined with considerations of "impactful" narratives and their interest in raising social awareness. In the sections that follow, we highlight this tension and students' resolution of this tension. We draw on examples of videos made by two student groups that represent themes common across all.

We Are What we Eat … and Discuss

One student group at the St. Augustine site initially planned to create a video to participate in the popular Mukbang challenge. They insisted that this theme would give them the most views/likes compared to other student groups. However, inspired by some of the films they were introduced to, they decided to work on making a film about their school and also articulate ways they could each be agents of change in tackling a social issue. Their final video was a combination of these seemingly disparate goals wherein they juxtaposed a tour of their school, followed by them eating at a table in their cafeteria while engaging in a conversation about one thing in their local communities or the larger global world they each wanted to change. Their responses reflected the current sociopolitical

climate in the United States with one student expressing her wish for a president other than Donald Trump, whose policies had made her immigrant family confront and fear deportation on a daily basis. Another student advocated for systemic change to end racism, referring specifically to examples of police brutality against the Black community and anti-immigrant sentiments that many in his community had experienced. The group agreed that it is important to "change the way things work" because the current system only serves the interests of certain privileged groups and continues to marginalize others. This convergence of ideas to create their final video seemed to allow students to participate in a popular viral literacy practice they desired to be a part of by filming themselves eating a meal and doing so in a healthier way than the original challenge since the students did not eat excessive amounts of food as in the ethos of Mukbang. Simultaneously, students shared stories about their lives, aspirations, and hopes to bring about better futures for themselves and their communities through a collective conversation about a number of issues and specific ways to tackle these.

Fluidity "Makes-Up" Gender

A student group at the St. Erica site had planned on creating a make-up tutorial as their initial film idea. Their goal with this was to teach young girls like themselves how to use make-up (eyeliner, lipstick, etc.) since they felt this was something a large number of viewers would be interested in. They planned to include an element of what they described as "stupidity" and to use the title "make-up tutorial gone wrong" to capture audience interest. They mused that this *clickbait*[10] strategy would help their video become viral. When viewing the films during the project reframing, the students in this group noticed symbolism for LGBTQIA2S+ pride captured in the footage of one of the videos and were drawn by themes of gender equality which were more explicitly emphasized in two other videos. Program staff supported students in elucidating themes around social issues that were emerging in the narratives students viewed. For example, in noting the rainbow-colored sidewalks captured in the Castro district of San Francisco, the students noted advocacy efforts for LGBTQIA2S+ that

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[10] Clickbait refers to a strategy used by many social media content creators to garner attention and interest in content through the use of titles that increase the likelihood of viewers clicking on content.

were recently brought to light. This conversation was scaffolded by program leaders to facilitate a reflection on additional social issues in their communities and opened up conversations about racial justice, police brutality, gun violence, forced deportations, and more. As a result, they expressed a desire to reimagine their video as an awareness campaign to bring to light several important social issues. Namely, the group wanted to critique the role that media and the make-up industry play in the Given the tall order of their goals for this video and unsure of how to make sure their campaign popular, this group decided ultimately to create a make-up tutorial that focused on make-up used by girls and boys since they felt the latter group is stigmatized for using make-up (Fig. 5.2). This compromise thus allowed them to construct a story that would circulate widely while tackling a social issue around gender discrimination—namely that "makeup does not have a gender, it's [use] a choice [for all]," thus attempting to disrupt gender norms and stigma around the use of make-up by

Fig. 5.2 Student collaboration on reimagined video on make-up (Note: Image intentionally blurred)

nonfemale-presenting genders. The group concluded with a direct message spoken in unison to viewers: "Remember, you are beautiful just the way you are." Though their video did not explicitly define gender, there were clear implicit messages that alluded to gender as a fluid and nonbinary construct and pushed back on dominant exclusionary binaries. Thus, the group shifted the focus of their video from simply teaching girls how to wear make-up to using their platform to raise awareness around gender discrimination and unrealistic beauty standards; their final video title, "make up tutorial," was informed by their initial clickbait approach of having a popular tag but included a more complex narrative than they had begun with.

Both abovementioned examples illustrate an intertwining of the goals from students' initial ideas to create a narrative that would go viral and the goals from their later ideas involving the use of media to raise awareness and address social issues. Students explicitly acknowledged that their initial ideas at the start of the project would likely receive more likes, while narratives involving reflections on current issues would be less popular. They reflected that the latter would perhaps be polarizing or viewed as "political" by potential viewers and thus were less likely to garner interest than the former. Ultimately, students incorporated elements of what they considered viral videos, intentionally also choosing to avoid any political markers in their video title, but demonstrated a recognition of and engagement in forms of meaning-making that were ethically turned in their final narratives. In other words, the students moved toward a recognition of incorporating elements of ethically turned narratives through issues centered on and justice in conjunction with other "cool" aspects of their everyday experiences. Thus, students were able to craft a message that both highlighted inequities and tackled social issues through seemingly ordinary actions in their everyday lives. While they were careful to leverage clickbait strategies to supposedly garner more views, students were able to craft their narratives and showcase their lives in ways that were critically and empathetically turned.

Discussion

Students' practices over the course of this project illustrate important considerations about ways to scaffold adolescents' social media practices as they traverse various digital spaces. This scaffolding, rooted in critical pedagogy and dialogue, engaged students in intentional reflections on

impactful meaning-making via stories and an interrogation of the modes used to share their message in an effort to engage in cosmopolitan habits of mind (Appiah, 2006; Hull & Stornaiuolo, 2010). An important part of the scaffolding was a willingness for students to build from instead of abandoning their own youthful interests in popular Internet culture. Darvin (2017) notes that in social media spaces, popularity is quantified by the number of likes one receives on their posts and the construction of social networks and membership/participation within these networks shapes the social and political discourses that individuals participate in. However, students' shift from the idea of popularity as measured by the algorithms on social media platforms, to an understanding of impact as an emotion rooted in empathy, care, and concern for the wellbeing of others, is remarkable and illustrates an emerging criticality of literacy practices as they traverse social media spaces. This shift perhaps corresponds with a recognition of the ways that the "rules" of the game—in this case, practices on social media—are hurtful, an intentionality that perhaps needs to be explicitly taught to disrupt the status quo of conforming to and maintaining hegemonic structures.

The shifts in students' understanding of impact led to a corresponding change in the messages of their own narratives—one that was still rooted in wanting to be popular or highlight "cool" aspects of their lives, but through practices that demonstrated a reflection on inequities in their worlds and ideation on subsequent action toward better-imagined futures. Thus, students appropriated the digital tools and spaces they engaged with by practicing critically oriented ways of caring about the world with their "heart and soul," as they described, while being attuned to how power shapes the differential experiences of individuals and communities. Their final narratives drew on their own everyday experiences to address social issues and participate in civic discourse and action in reflexive and agentive ways, providing an example of boyd's (2018) goals for empathetic as well as critical social media practice.

This shift was achieved primarily through opportunities for intentional reflections provided within the reframed program curriculum. The staff at the program sought to redirect students' attention to aspects of meaning-making practices that centered the meaning and message itself, rather than solely the tools that also mediated these practices. Exploring narratives through a range of media allowed students to focus on the intent behind the messages and to consider how various modalities might support creating and sharing messages that were "impactful" in the sense of evoking

empathy and care for the wellbeing of others, habits rooted in raising critical consciousness (boyd, 2018; Freire, 2014). Thus, students centered these orientations in their narratives, rather than the medium itself. Amid recent efforts to better support the students' literacy practices in digital contexts and in their efforts to imagine better lifeworlds, our work allows us to offer a renewed charge for adults—whether educators, caregivers, or others—who support adolescents in their social media practices to uplift above all else, a focus on the criticality leavened with empathy.

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Nurturing Connection through Joyful, Creative Play: A Heart-Driven Approach to Educator Preparation

Andréa C. Minkoff, Janelle Franco, and Marjorie Elaine (iD)

"To play requires love and trust."—Gabrielle Zevin, Tomorrow and Tomorrow and Tomorrow.

A video made by undergraduates and kids to represent B-Club, the after-school program that we describe in this chapter, opens with three fifth-grade boys waving at the camera. One of the boys, whom we'll call Tristan, wears an

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orange tie-dyed graduation gown that he took from a box of dress-up clothes. Peering at the camera from under thick-rimmed glasses, he announces with a grandiose voice: "Hello! We're introducing you to our movie!" An UCLA student (Hermán) jumps and waves behind them. The camera pans around an open, grassy field to show other kids laughing, jumping, and kicking a soccer ball; five fourth-grade girls turn graceful cartwheels and another UCLA student (Alana) follows suit, achieving a half-wheel and giving a thumbs up to the camera. From here, the camera leads us to an outdoor patio where tables are set up: one with materials for scientific exploration, another with recyclable materials for creative expression, and a third that boasts a talking world globe and a handwritten invitation to read the books on the table about children's lives in various countries around the world. We see kids mixing water, salt, food coloring, and oil in empty water bottles to create lava lamps, guided by UCLA students; they mix and pour with steady eyes, using flashlights to illuminate them, with delight and surprise spreading over their faces as they view the results (Figs. 6.1 and 6.2).

Viewers of the video then follow the camera through the open door into a cafeteria space where three boys munch on goldfish crackers and pretend to feed their stuffed animals. Two sisters are showing an UCLA student how to make shadow puppets with their hands, projected against the wall from the light of a portable projector. One girl sits with a pencil in hand, studying photos on a laptop that a UCLA student (Sara) has brought to discuss college and career pathways. A girl and boy are playing chess while three others look on. There's a station with paints and large poster paper and another with paper for writing notes to each other. Across the way, a group gathers to check on the latest growth in the garden we have planted. Another mixed group of kids and undergraduates run to see a bottle of coke spout a geyser into the air over the field as a Mento mint is dropped into it. Another mixed group smiles and waves to the camera, shouting, "We love B-Club!" This is echoed by individual kids who explain that they like B-Club because "it's fun" and "you get to play."

INTRODUCTION

In this chapter, we look beneath the surface of the joy that fills the screen in this video and our own minds' eyes as well, as we reflect back on our days at B-Club over the last decade. We offer examples of creative play and joyful human connection that took place in this multilingual, cross-age space, showing how children and university students worked and played as

Fig. 6.1 A third grader, Erica, walks around wiggling the "nose" she has created out of a long paper tube, which extends from a cardboard-box-turned-mask worn over her head

they moved across activities in this free-flowing, indoor-outdoor space. We illustrate the learning that happens for children and adults alike, and argue for creating more such learning spaces that integrate mind, heart, and activity, approaching learning as a playful and creative act. We also underscore the importance of connection and the ways in which open-hearted and open-minded relationships can nurture buds of development, promote agency, produce powerful forms of learning, and support the wellbeing of body, mind, and spirit.

Fig. 6.2 A group of UCLA undergraduates, faculty, and kids conduct a science experiment

The opening vignette provides glimpses into a day at B-Club, an after-school program that engaged children in a densely populated, low-income community in the heart of Los Angeles from 2009 through 2020. On any given Club Day, kids from the school and UCLA students could be seen moving freely between our indoor and outdoor spaces, trying out different activities, laughing and talking, their bodies revealing a sense of relaxation and ease that is rarely seen in school classrooms. They decided for themselves what they wanted to do each afternoon, experimenting with the many materials that were offered to them. University students participated in the play themselves, while supporting or "mediating" kids' learning in non-didactic ways and building relationships with them that make visible what it means to be a college student. Virtually all of the children, and many of the UCLA students, identified as people of color and as immigrants or children of immigrants from diverse national origins including Mexico, Guatemala, Honduras, the Philippines, Bangladesh, India, and Korea.

The authors of this chapter have different life experiences and identities, which informed our work at the club as well as the ways we write about it here. Andréa and Janelle were graduate students who supported the work at B-Club during their doctoral training. Janelle wrote her dissertation based on work at the club (Franco, 2019). Both were also mothers of young children at the time, and sometimes brought their children to work and play with us at the club. (See Chap. 12 for Janelle's reflections on this unique positioning.) Marjorie was the faculty director of the club and lead instructor for the university class; she is the parent of two now-adult children, and had been a former elementary school teacher at a nearby school from 1983 to 1993. We brought our experiences with diverse learning environments and different kinds of learners, both in and out of classrooms: as teachers (of pre-K through graduate school), caregivers, and learners ourselves. What united us was our commitment to co-creating spaces where children and adults could collaboratively engage in play that facilitated joyful learning and development for all, including for ourselves, as life-long learners.

Program Context

Children's natural love for play and connecting with others is at the center of learning at B-Club, a program that took different forms across the eleven years of its existence (2009–2020). The program varied based on the school's needs and our capacities. Sometimes we worked with children from transitional kindergarten (TK) to 5th grade; some years we constricted the age range from 3rd to 5th (as in the year represented in the video described in the opening vignette). Some years we were able to sustain the program for three days a week; other years we limited it to just one afternoon. Some years, the club was held in a multi-purpose room at the school; other times it was housed in a large cafeteria with windows looking over a grassy yard (the site of the video we described in the opening vignette). Most years, the university participants were undergraduate students who enrolled in a service-learning course as part of UCLA's Education minor program. For three years, we ran the program with teacher education graduate students who participated in B-Club as part of their educator preparation fieldwork. Doctoral students consistently participated in the club in various ways—engaging and playing with kids, taking field notes and analytic memos, participating in the university course as teaching assistants, and reading and responding to field notes

written by undergraduate and teacher education students. Three dissertations were produced from work at the club (Franco, 2019; Rodriguez, 2016; Rodriguez, 2019). These variations were shaped by the needs of the two institutions (the school/after-school program and UCLA). They were also driven by our interest in exploring how informal, playful learning environments can respond to the needs of diverse learners, including undergraduates who are considering the field of education, pre-service teachers who are learning about children, learning and development, graduate students who want to look closely at these processes, children, and researchers, who are continuously learning with and from all of the participants.

The program was organized around UCLA's quarter system, running for 8 to 10 weeks each quarter with short breaks in between. Designed as a club that was part of the school's larger after-school programs, child participants were absorbed back into the main programs when the university was not in session. Kids were always excited to return to B-Club after these breaks. Undergraduate students participated at the site for at least one quarter, with many opting to return for a second and even third quarter, schedules permitting. Teacher education students worked at the club for at least two quarters and saw some of the children in their classrooms as well, allowing them unique insights into how children engage in different kinds of learning environments (Orellana et al., 2019).

The school that housed B-Club was located in a linguistically and culturally diverse, print-rich community in central Los Angeles, making and connection. (See the blogpost "Minding the 'Word Gap'" [https://uclinks.berkeley.edu/chapter6] for consideration of the under-utilized *wealth* of urban print environments; see also Orellana & Hernández, 1999.) In other work, we discuss the challenges and opportunities that this provided, as we thought about how to organize language collectively, and reflected on language and cultural processes together (Orellana & Rodriguez-Minkoff, 2016). The school itself also highlighted language as a resource; students at the school were enrolled in dual-language programs during the school day (either Spanish and English, or Korean and English), and the community around the school was rich with multilingual signs and sounds. See Franco et al. (2021) for an in-depth exploration of young children's play with language (and literacy/numeracy) within this multilingual space; see also Orellana (2017).

B-Club is the direct descendent of a program run by Kris Gutiérrez at another Los Angeles school (Gutiérrez & Vossoughi, 2010) and cousin to

the other programs that are represented in this volume. Our intention was to create a Community of Learners (Rogoff, 1994) that linked theory to practice in significant and meaningful ways and that provided opportunities to apprentice into ethnographic research. Writing field notes or reflective memos was central to this work; see Ángeles et al. (2023) for a discussion of how field notes helped students deepen their understanding of theory as well as use theory to guide practice. We also offer a few examples from students' field notes in this chapter to illustrate this point. Like other University-Community Links (UC Links) programs (https://uclinks.berkeley.edu/programs), we were guided by sociocultural principles of learning (Vygotsky, 1978), with our own contribution defined as integrating *heart* into the mind-culture-activity triad that is central to socio-historical approaches to learning (Orellana, 2019).

A socioculturally informed approach to creating a community of learners emphasizes collaboration between participants of all ages and the fluid shifting of expertise, as was evident in the opening vignette, where people of different ages learned from each other in different ways. Often, kids were positioned as experts, with UCLA students as learners, as for example in the cartwheel modeling in the opening vignette. We encouraged university students to reimagine expertise as not just located within the teacher/adult, as is typical in school settings. We illustrate these shifting views of teaching and learning with a field note written by a teacher education student after engaging in a card game with kids at B-Club:

> Alison (an elementary student participant at B-Club) and Mark (a UCLA teacher education student) are playing Uno at the game table. Alison teaches me the rules of the game. I believe this is a great example of shifting the teacher and student roles. In this instance, Alison is the expert and I am the student. What other activities can we set up that would allow the students to teach us from their knowledge base? Alison was very enthusiastic about her instruction, so I imagine it is a confidence boost to explain something to an adult.

This field note illuminates how teacher education students took up the expanded notions of expert and novice that we highlighted at the club (and in our talk about the club in their related coursework). The note reveals this student's recognition of the value for the child in acting as her teacher. He further wonders about other ways of creating more space for

youth to be the experts. He sees the enthusiasm and engagement that occurred when children's knowledge and expertise were validated.

University students under the guidance of the research/instructional team facilitated activities by providing materials with which the children could engage in creative processes and sometimes brought their own ideas and interests to the club. But our emphasis was always on following children's leads and interests, centering their agency, and seeing where they "lit up," where they seemed to be *animated* from within. This animation is more than mere "engagement," a term that can suggest the image of cogs being caught in a wheel (see Orellana, 2017 on this point). This, too, was evident from the sparks in children's eyes in the video that inspired our opening vignette.

The activities at B-Club varied each year, and changed or evolved over time, as we followed the interests of the children and university students, who were encouraged to "bring what they love" to the club. For example, in the year in which the video was made, the children and their caregivers had expressed interest in science learning; undergraduate students brought their own love of science and experience with exciting scientific experiments. Our hope was to motivate playful engagement with science, language, literacy, and learning of all kinds. Generally, we set out a wide range of materials and activities for children to choose from: art materials; stationery supplies for writing letters to each other as part of our club "mail" system; cardboard, tape, and glue for what came to be known as "cardboard city;" sports equipment, dress-up clothes, games, and much more. Our goal was to create a "permeable curriculum," which Anne Haas Dyson first introduced in 1993 and revisited in 2016 (Dyson, 2016). As Dyson wrote: "a shared world is essential for the growth of both oral and written language, and it is essential as well if teachers and children are to feel connected to, not alienated from, each other" (p. 1).

In these and other ways, participants and practices varied at B-Club throughout the years. In other work, we have detailed how the space supported children's learning of language and literacy (Franco, 2019; Orellana, 2017; Orellana & Rodriguez-Minkoff, 2016; Rodriguez, 2016) and math (Franco et al., 2021), as well as the learning of undergraduates (Ángeles et al., 2020; Ángeles et al., 2023; Orellana, 2019) and teacher education students (Franco et al., 2020; Orellana et al., 2019). In this chapter, we want to unpack two key themes that anchored our approach to engaging and co-creating with youth: (1) a commitment to play and joyful explorations of learning and (2) the significance of relationships.

KEY IDEA: THE VALUE OF PLAY

In this section, we explore themes of learning and through a relational lens. As suggested in the opening quote by Gabrielle Zevin ("to play requires love and trust"), we recognize the value of play at B-Club and consider what it means to center relationships and connection in the process of engaging in play and facilitating learning. In particular, we consider possibilities for educator preparation. Classroom learning environments (where most pre-service teachers are socialized into the profession) have traditionally invoked hierarchical structures that reinforce distance between educators and students. These contexts position teachers as authority figures with power and expect students to comply with rules established by those in charge. By participating at B-Club as part of their educator preparation program, teacher education candidates were able to see a different kind of learning environment and **experience** joyful and playful connections as a foundation for learning.

The value of play is well established in sociocultural theory as a platform for "children to act a head taller than themselves" and engage in skills such as planning, negotiation, cooperation, and creative problem solving (Goodwin, 2006; Thorne, 1993; Vygotsky, 1978). Developmental theories also speak to the value of play (Bodrova & Leong, 2015; Fisher et al., 2010; Hughes, 2010; Vygotsky, 1978). However, there are many debates within educational circles about the place of play in learning environments, beyond proscribed spaces and for limited purposes. Play is often minimized (as in "they were just playing") and children as well as adults may counterpose play with "real" learning.

Recently, there have been some renewed calls to bring play into schools in response to the COVID-19 pandemic. Here, however, it is often seen as a means to an end: to release post-pandemic tension so that children can focus on the real matter at hand: catching up on the learning that was "lost" during the pandemic. Play is not generally treated as valuable in and for itself.

Souto-Manning (2017) cites Fred Rogers in asserting that play should not be constructed as a privilege but a right of childhood:

> If we are to unleash children's infinite potential, not only do we have the responsibility to position play as a right, we must also understand the agency children need to have during play. Their play will likely come to life in ways that are unfamiliar—and at times uncomfortable—to adults. May we blur

the roles of teacher and learner and learn alongside them. Mr. (Fred) Rogers explained: 'Play gives children a chance to practice what they are learning.' I posit that play allows children to rehearse and enact change, by asking questions, developing community, and standing up for fairness—which will later be (re)named justice (p. 786–787).

At B-Club, we took seriously this notion of play as a *right*. We also took up Souto-Manning's call for "blurring the roles of teacher and learner"— by learning *and* playing alongside them. We honored the practice of play for the sake of play and the joy that it fosters. Play was the core practice in which we *all* engaged. Scholarship on play and development tends to focus on *children's* play, but at B-Club we invited older youth (undergraduates) and other adults (pre-service teachers, doctoral students and researchers) to join in. As illustrated in our opening vignette, these forms of play were co-created with children in the space. Sometimes, children initiated the activities (for example, by sharing their love of cartwheels or shadow puppets with undergraduates). Other times, UCLA students brought their interests and experiences to the club (e.g. sharing about college life, science, and gardening). Most often, there was some merger between the two, as undergraduates listened to children's ideas and then expanded their interests.

This was a departure from approaches where adults take on positions of authority in their play with children, often *guiding* their play and channeling it toward particular ends (usually academic). Educational literature on guided play tends to focus on how adults can scaffold and guide children's play (Fisher et al., 2010; Weisberg et al., 2016). At B-Club, we co-created spaces where children had opportunities to guide themselves and the adults (undergraduate students, graduate students, faculty members, etc.) as they collaborated, negotiated, and engaged in play together.

Initially, university students seemed to struggle with the idea that they were in a space where they were expected to partake in play themselves as part of a learning experience. We especially saw this when the teacher education students were asked to step outside of a traditional teacher–student dynamic. Their experiences at B-Club were initially perceived as existing in contrast to what they experienced in their classroom settings, where they were being asked to take up voices of authority and to clearly establish themselves as "in charge." In their student teaching assignments, much attention went to "classroom

management." We were asking them to do something different: to engage *with* youth in order to experience for themselves the power of play and to see how it shaped their relationships with the youth. This prompted reflection upon the kind of teacher they wanted to be. For example, one student wrote in her field notes:

> We started with the opening circle. Since I was leading the opening circle, I was nervous about keeping the group together and orderly. I had to keep myself in check with my teacher tendencies. I wanted to keep the students engaged but not seem too much like I was managing behavior and in charge. I wondered what was the best way to lead, in the middle? On the side? I decided that since my voice is quiet, I would stay in the middle and walk around as we sang the song. We sang a song about a gusanito (little worm) and I was happy with how much the kids seemed like they were enjoying it. I noticed myself trying to control a lot of the behaviors of the students and I kept wondering, "What is my role here? Am I supposed to control them? Am I supposed to let them run around?" I also realized how self-conscious I was about what other adults in the room were thinking of my style. Did they think I wasn't being strict enough? Too strict? Not in control?

Reflecting on the ways in which this anxiety gave way to feelings of connection, one teacher education student wrote:

> I was pretty energized during B-Club. I had feelings of anxiety (will I be able to connect with a child? Will there be conflict?) and some self-consciousness (are they going to like me?) … I was glad that throughout B-Club, I connected with both Jeanine and Sandra, and I think that made me feel great about my ability to connect with students. At the end, I felt exhausted, but satisfied…

We offer this example as a way to show that while we firmly believe in the reciprocal relationship between play, learning, and connection, we also have seen the ways in which these develop over time and through establishing relationships and connections.

University students came to see the value of creating more space for children's agency in play. In reflecting on an early experience at B-Club, one student wrote about the ways in which a fellow graduate student had prepared an opening activity, and how it became more engaging when she surrendered control and invited the kids into the process:

> We started in the main circle with all the students. They came running in loudly talking and laughing. Lena was ready with an opening activity and had us do "Head, Shoulders, Knees and Toes" many times. At first the students seemed not that into it, but when Leslie asked for suggestions and made it more participatory, they took ownership over the activity and seemed to enjoy it more.

In describing the same activity, another student reflected on the importance of including kids in decision making in her future classroom: "I didn't see anyone in the circle not participating. This made me think that this was a really successful activity and I liked how Lena integrated the students and it was not just her leading the whole time. I really liked this activity and it is something I definitely would want to use in my classroom on a day when the kids have a lot of extra energy in them."

By working with a broad definition of play, university students were able to use their imaginations alongside kids to create games, write letters, move their bodies, and even create a mini metropolis (which was referred to as "Cardboard City" by B-Club kids) within the context of our after-school program. Activities like these surely contribute to the development of critical thinking, reasoning, language and negotiation skills, as well as socio-emotional development—all of which support children's learning and development in and out of academic contexts, but our commitment to play was not outcome-driven. Rather, our team prioritized the process of play and the ways in which relationships were built and nurtured through play.

The creation of "Cardboard City" also paved the way to other kinds of creative and playful expression and engagement. Work by Franco (2019) details ways in which kids would fluidly move from building houses and stores out of cardboard to using the materials to create props and costumes that supported their vision. For example, she describes how Ben10,[1] a kindergartener, created a superhero identity for himself and utilized cardboard to make a costume to wear when he became "SpidermanWolverine" (one word), a superhero who went on "misión secretas" to help the world and the people in it. When talking with two graduate students (Janelle and Lilia) and one undergraduate (Jasmine) about his plans, Ben10 decided to create a comic book as part of a secret mission in his quest to save the world. Ben10 asked for paper, carefully

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[1] Children's names appear as pseudonyms, which in most cases they chose for themselves.

folded the pages to resemble a comic book, and began writing and drawing. It is important to note that Ben10 was clear in his desire to craft and write his own book. As he wrote, he dialogued with three adults, detailing his metalinguistic choices as he considered what elements of the comic would be written in Spanish and English. He intentionally reflected on his audience (explaining that his mom would be a reader and that she preferred to speak in Spanish, but could listen to and understand English). This suggests how play facilitates language and literacy and allows room for children to display what Martínez (2018) refers to as the "richness of bi/multilingual students' linguistic repertoires" (p. 515).

We see joyful connection as an important element that facilitates play, and in our framing, we are inspired by work from Ward and Dahlmeier (2011) that asserts that joy is not the same as instant gratification. They state "Achieving joy is a process, parts of which are not always pleasurable and may require considerable effort" (p. 94).

Discussion: Re-Imaging Education

We write this chapter at a time when concerns about "learning loss" and calls for "acceleration" are driving forces in the discourse around schooling. Equity-driven trauma-informed educators Venet and Casimir (2021) state, "There's a belief that we have to work twice as hard with students from marginalized communities, that we have to be vigilant and not waste a minute of learning time in effort to 'close the achievement gap' and help them compete with their peers. What we are now calling an 'opportunity gap,' can be interpreted as the many opportunities we miss, as educators, to foster joy, love, and peace in tumultuous times in our classrooms." As we move beyond the pandemic, consider what is possible, and re-imagine education, we hope for the creation of more educational spaces that look and feel like B-Club: places for play, connection, joy and belonging, where learning comes along for the ride.

B-Club was a site where children and adults collaboratively engaged in play that facilitated joyful learning and development for all. It offered a collaborative space that reimagined how people of different ages could co-learn and grow together. It took place on a school campus, but the energy and felt experience was different than in most schools. We offer this model to contrast with educational institutions that have historically been places that have privileged logic and rationality and seen emotion and connection as potential obstacles, rather than vehicles for learning. Classrooms

and classroom activities are typically designed to constrain bodies, control minds, and divide and separate. Schools often group students by age, grade, and supposed abilities. They carve up time and space for different subject matter. They separate heads and hearts, bodies and spirits. Schools seek to *control* learning rather than to *spark* curiosity.

At B-Club, in contrast, we tried to create the conditions for people to learn, and the desire to do so—without necessarily even realizing that they were learning. The kids in the video, and in our many conversations with them, never talked about the learning that happened at the club. They saw it all as play. As educators, we see both. We see the joy and learning *and* we also recognize how B-Club participants engaged in language and literacy development (including developing communication skills in various languages, dialects, and communicative repertoires), as well as social-emotional skills (i.e., negotiation, advocacy, collaboration, cultivating voice, etc.).

In order for joyful learning to take place, we assert the importance of inviting reflection and emotionality into the space (Riley, 2010). Connection is important, so much so that Maslow's well-known hierarchy of needs includes love and belonging right above safety and security and physiological needs (Maslow, 1943). B-Club offered a space where children could form secure attachments with others in their school context. In addition, we underscore the fact that adults can and do learn from kids—a reality that we wish more schools would recognize. This is particularly important for educator preparation and development. Since teachers tend to teach how they were taught, spaces like B-Club offer a new paradigm for seeing and relating with children.

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Co-designing Science Lessons in Spanish: Connecting Science, Home Language, and Community for Undergraduates

Jasmine McBeath Nation ⓘ *and Alejandra Yep* ⓘ

Our teaching team of undergraduates and professors sit nervously behind computers at home, texting each other to verify the Google Classroom link for our first time teaching elementary students online. Suddenly, a grid of 25 little squares with children's faces fill the computer screen, smiling and talking on mute, as we join a 4th-grade online classroom in spring 2021. Two blond girls climb onto an outside picnic table while a handful of boys peer out above desks in various bedrooms, dining rooms, and a kitchen. Other children sit side-by-side on living room couches looking into the screen. Maestra J greets students cheerfully in Spanish and welcomes us as special university teachers visiting their classroom to lead a science activity. Students hold their pencils and worksheets up to their cameras as Maestra J states, "¡todos pueden enseñar los materiales, académicos preparados!" listing one by one the materials they need for today's lesson.

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The worksheets the students hold up were designed by the Nuestra Ciencia program team to introduce the everyday science topic of vaccines. The first one is a Nuestra Ciencia pre-activity questionnaire in their home language (either English or Spanish) that asked students to talk with their families about childhood vaccinations and answer how they thought vaccines worked. It also asked them if they thought of themselves as scientists. As the students hold their completed questionnaires up and look at the screen expectantly, our teaching team feels nervous but excited. We have been developing the vaccine lesson for a few months now, and today is the big day. It is also the very first time teaching for everyone in our team of four Cal Poly undergraduates and two faculty members (chapter co-authors). The Nuestra Ciencia logo that the undergraduate facilitator, Julio, designed fills up the screen. "Hola a todos, somos Nuestra Ciencia," says Fernando, another undergraduate facilitator, and the first virtual lesson begins. After introductions, facilitator Jade brings up findings from the pre-questionnaire and the fact that many of these ele-mentary students did not think of themselves as scientists. The students sit up a little straighter and lean in as she talks. She says, "El cuestionario que con-testaron al principio de la semana, en el cuestionario dijeron que no se con-sideran científicos. Hoy es el día para cambiar eso. Hoy es el día para que todos sean científicos." She emphasizes the last part, "Today is the day in which all of you are scientists."

For 6 months, the team of undergraduates that includes Julio (Political Sciences), Fernando (Psychology and Child Development), Jade (Biomedical Engineering), and Marina (Biological Sciences) have been meeting virtually on Zoom and designing different parts of the vaccine lesson. They have pre-pared pre- and post-activity questionnaires, developed an analogy to explain the mechanism of action of vaccines, and created an educational video and storyboards with original cartoons, all in Spanish and English. In the days leading up to the lesson, our university team meets almost every day to prepare slides and a script and practice our lesson. During our "dress rehearsal" the night before, Jade changes her portion of the teacher script and says she wants to be more intentional with how she will address the elementary students.

As a first-generation college student with family from Mexico, Jade is pas-sionate about teaching science in Spanish. She recalls watching Bill Nye on TV and loving science as a kid, but also internalizing the message that science is something done only by white men in lab coats. She says that Spanish should not be a second-class language and should not be a separate identity from being a scientist. She wants the students to think of themselves as scientists, so she changes the script to address them as "científicos." Julio agrees and chimes

in with his own childhood memories of a split identity between learning in English and speaking Spanish at home. "It was so hard trying to translate, I did not have the right vocabulary." The conversation reminds all of us that we may have spent the last few weeks focusing all of our efforts on making sure we convey the safety and efficacy of vaccines in Spanish, but when we go to the classroom, we will be simultaneously teaching something else, equally as important. We will be teaching that scientific inquiry has no owners and no set language, we will be teaching that we can all be scientists.

At the end of the vaccine lesson, students hold up their storyboards, showing their interpretation of the villain vaccine and superhero immune cell. Our team feels on cloud nine seeing how excited the elementary students are to learn about vaccines and create stories in Spanish related to how the immune system works. Jade is impressed with the breadth and depth of questions they ask, similar to the ϒ-Plan group's dual appreciation for lenses that allow us to both "focus" and "widen." She also expresses gratitude to be giving back to her community. Reflecting on the experience teaching and overall Nuestra Ciencia program, she explains, "I feel like this project helped me redefine, like, what science is, or should be, and helped encourage a different culture within the science community too."

Introduction

The scene described in the above vignette is from Nuestra Ciencia (NC) (Yep et al., 2021), a university-school program run by an interdisciplinary team of students and faculty from Cal Poly San Luis Obispo (Cal Poly), a state university in central California in the United States. Jade, who reported that this program redefined the meaning and purpose of a science community, was one of four undergraduate facilitators who felt similarly. Developing a sense of belonging and encouraging asset-based science instruction is a goal of the NC program, and we show how this collaborative process unfolded and its relation to belonging and sense of self for undergraduate partners. Unfortunately, many campus groups and classes provide what undergrads described as "push out" experiences (Galloway & Valadez, 2018), instead of promoting a sense of belonging in higher education or research. During a 2019 internal study at Cal Poly, Latinx students reported one of the lowest perceptions of being valued/belonging at the university (CPX report, 2019). We would like to change the story for marginalized undergraduates, especially in STEM. A first step is examining what increases a sense of belonging and what are the benefits

for marginalized undergraduates of participating in a form of research that is collaborative and co-designed.

In Nuestra Ciencia, we hope to impact both elementary and undergraduate students, in regard to understanding microbiology content and learning science in Spanish. At the elementary level, we teach microbiology concepts that impact daily life, provide exposure to science and scientific role models in Spanish, and follow a student cohort to assess how NC affects their view of science and of themselves as scientists. At the undergraduate level, we assess how participation in NC impacts their sense of belonging in STEM and higher education. Therefore, NC addresses simultaneously Latinx underrepresentation in STEM and lack of microbiology literacy in the general population, both of which have been identified as pressing issues (Kafai et al., 2022; NSF, 2017; Timmis et al., 2019) (Fig. 7.1). Latinxs account for >50% of students in California but occupy only 6% of STEM professions (Census Bureau, 2018; NSF, 2017). This
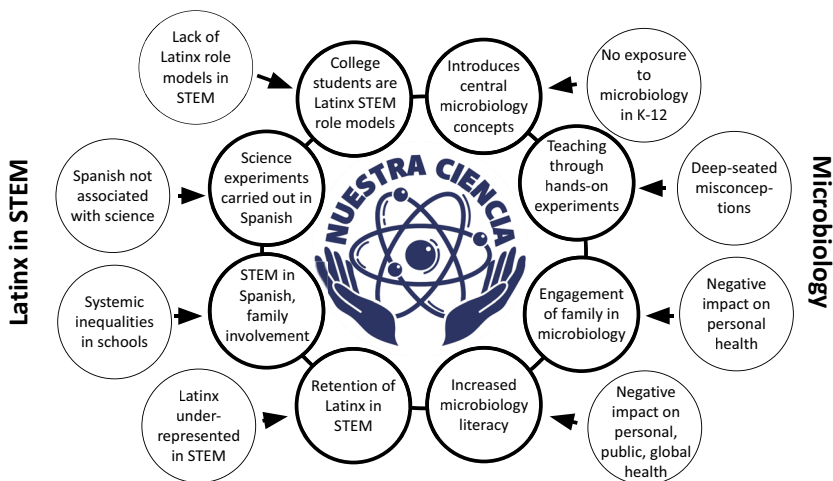
Fig. 7.1 Summary of the parallel sets of challenges and negative consequences in the fields of Latinx retention in STEM and microbiology and the ways in which Nuestra Ciencia addresses them. Originally published as Fig. 7.1 of Nuestra Ciencia: Transforming Microbiology for Spanish-Speaking Elementary and College Students, by Yep et al., 2021, reproduced by permission of Oxford University Press: https://academic.oup.com/icb/article/61/3/1066/6288461

underrepresentation is complex and, unfortunately, much of the research focuses on deficit models (i.e. Taningco et al., 2008). Findings from such research include language focused on "lacking English proficiency," "underperformance," and "deficits in necessary skills" but also places blame on "cultural issues" and "lack of parental involvement." For example, a 2006 report for the Tomas Rivera Policy Institute makes the offensive claim that "Young Latinos tend to have poor study habits, critical thinking ability and communication skills. This may be due to factors such as inadequate high school preparation, family and cultural dynamics, shortcomings in institutional policies and practices, or any combination of these" (Taningco et al., 2008, p. 3).

Our work instead acknowledges the resources and disciplinary expertise that is sometimes disparaged and often overlooked. We intend for asset-based Spanish language instruction in NC to influence the local context and generate more wide-scale design principles relevant to other bilingual programs. Research shows that conducting science in students' home languages, so they feel comfortable expressing themselves and engaging in scientific practices, builds up disciplinary knowledge and positions Spanish in the United States as an asset to science learning and participation in the scientific world (Stevenson, 2015). Most Latinx people in the United States speak Spanish at home (73%) (Krogstad et al., 2015); however, they face bias against Spanish at school, where they view Spanish as less "academic," and prefer to communicate in English. Communicating in Spanish is minoritized, and even in bilingual schools, the common model is transitional/subtractive. Spanish is viewed as a "crutch" along the path toward mastery in science, which is ultimately conducted in English (Palmer, 2011). Critical scholars call for new, equitable approaches to conducting research and teaching science that disrupt these paradigms and instead center the lives of students and partners with their communities. Nuestra Ciencia (NC) addresses this call.

From the microbiology standpoint, Nuestra Ciencia emerged in part to counteract the lack of public awareness around the impact microbes have on our lives and on the entire world. Even the most basic microbiology concepts such as infection and contamination prevention are absent from the entire schooling of most adults. However, as microbes are very much present in our daily lives, and everybody is aware of their effects, such as rotting food or infectious disease and especially COVID, there is a large trove of vernacular knowledge that is often conceptually incorrect (Briggs et al., 2017). Many of the daily decisions that can have severe impacts on

individual and public health, such as the decision to vaccinate or not, breastfeed or not, which house cleaners to use, or what hygiene rules to follow, become clear when informed by basic microbiology concepts (Timmis et al., 2019; Yep et al., 2021). Concurrently, public lack of understanding of the ways microbes impact the world has vast negative consequences for the health of individuals, the public, and the environment. We only need to look at recent years to see the profound impact this lack of public information revolving microbes can have on individual and public health. It is this concern that drives our work within our surrounding community and serves as a substantive context for our chapter.

In this chapter, we describe the collaborative process where NC undergraduates co-developed and taught a virtual lesson in Spanish about vaccines' mechanism of action and safety. We connect this process to the impact on undergraduate students' views on scientific research, scientific content in Spanish, and sense of belonging to higher education.

PROGRAM CONTEXT

Nuestra Ciencia (NC) was born as a university–school partnership where Cal Poly undergraduate students visit K-6 classrooms to teach microbiology concepts in Spanish to bilingual elementary students. NC started informally as an outreach activity in 2015. Initially it was only faculty-led, and it started incorporating undergraduate students in 2017. We formalized it as a program and became part of the University-Community Links (UC Links) network (https://uclinks.berkeley.edu/) in 2019, when we integrated our observations over the years and designed NC to simultaneously address microbiology misconceptions and elevate undergraduates as STEM role models for Latinx children (Fig. 7.1). Interdisciplinary teams of undergraduates and faculty developed experiments and educational resources, and visited classrooms to lead activities in Spanish. Our partner site was a Spanish–English two-way immersion K-6 school situated in a neighborhood less than a mile from the university. The school was open to all students living in the school district but was selective based on a lottery system. On the school's website they advertised that, "[Our] School is a wonderful mix of language, culture, challenging standards, arts, and music." With NC's small pilot program, we visited one classroom once to twice a year, reaching approximately 25 youth each visit. At any given time, our collaborative team included four to eight undergraduates and two faculty. The undergraduates either received a stipend as a researcher or enrolled in an upper-division

research seminar course in elementary education. The undergraduate seminar met every week for a few hours, where students worked collaboratively with the faculty program directors. The undergraduates participated in every aspect, including topic selection, experiment development and troubleshooting, lesson plan development, teaching, data collection and analysis, conference presentations, and publications in peer-reviewed journals. Student researchers in NC not only "learned by doing" but further "learned by being" as they became teachers and researchers. In the long term, it was our hope that NC would increase visibility of Latinx students at Cal Poly as well as recruitment, retention, and student success for the Latinx community. The interdisciplinary team also generated materials that benefited the profession of education such as our repository of K-6 bilingual activities, lesson plans, and other resources for educators, and tools to improve science communication and public scientific understanding.

KEY IDEAS

In the following section, we present key themes that emerged during the year-long experience of designing and implementing a lesson on vaccines in Spanish. We first describe how undergraduates co-designed and taught the lesson on vaccines in Spanish, to illustrate what we mean by "learn by being" and this collaborative form of research and teaching. Then we present how designing and teaching a lesson in Spanish altered students' perspectives on Spanish, as Spanish became an asset for teaching content, expressing themselves, mentoring, and connecting with family.

Co-design Process

Nuestra Ciencia has been, since its inception, a true partnership in which all members' contributions are essential. It is an elementary school/university partnership, an English/Spanish partnership, and it is fundamentally a student/faculty partnership. Our team is composed of two Cal Poly professors and an interdisciplinary group of undergraduates that changes each year as students graduate. While children have not been included in the design process, that is a goal we drive to in the future, to achieve the more intergenerational collaboration seen in other sites such as Community Based Literacies (Chap. 10) or Y-PLAN (Chaps. 14 and 15).

The vaccine lesson was designed and implemented during unprecedented times, in Winter 2021, by the four undergraduates mentioned

above, and the two professors who co-authored this chapter. Not only was our society in the midst of a pandemic with immense health, social, and financial implications, plagued by scientific disinformation and misinformation, but also the elementary and the university systems were facing the challenges of virtual instruction. In this context, it was hard to imagine how to implement the kind of hands-on lab activities that Nuestra Ciencia had been developing.

The initial Zoom meeting of the NC research group was, like many at the time, slightly awkward. We started out thinking about new experiments and hoping that elementary schools would be back in person by the time our lesson was ready. We also talked about developing an online presence for Nuestra Ciencia that included the most commonly used platforms by kids, YouTube and TikTok. After a few weeks, since the pandemic was first and foremost on everybody's mind, we had a meeting devoted to explaining the microbiology of SARS-CoV-2 and what we knew at the moment about COVID-19. The vaccines had been recently approved and the Cal Poly community was expecting to receive the first dose soon. The questions and answers turned toward the topic of vaccine safety and mechanism of action. Fernando, a psychology major without previous microbiology knowledge, was visibly worried. "Everybody in my community is scared of the vaccine. They are worried it will make them sick, and they don't think they want to get it." He told us some misinformation his family had heard: the vaccine contained a microchip, it could make you become magnetic, or it contained the virus itself and would give you COVID. The rest of the group chimed in with similar stories. Jade and Julio agreed that what they had learned about vaccines during the meeting was useful information to pass on to their families. Jade and Fernando asked, "Can we do a lesson on this for the kids?" The mechanism of action of vaccines was a topic that undergraduate students in microbiology classes often struggled with, and we wondered how to make the topic accessible for elementary school children. Our research group was keen on taking on the challenge. The undergraduates all expressed a strong feeling that this was an important topic that was affecting their communities and had to be addressed immediately.

The first challenge was explaining how vaccines work in a way that was scientifically accurate but avoided scientific jargon and did not rely on previous microbiology or immunology knowledge. Several weeks passed as we tried different approaches and analogies that were either too abstract for kids or not scientifically sound. Our initial attempts were mere

simplifications of the mechanism of action of vaccines that lacked any analogies and were very dry, if scientifically accurate. We started trying analogies in an effort to make the message more relatable for a younger audience. Other early ideas were more engaging for kids, like trying to "make a vaccine" by mixing baking ingredients that would represent vaccine components, but lacked scientific basis and had the potential to confound the public health microbiology message.

Finally, the group came up with a good analogy: Vaccines are like a "most wanted" poster of a robber—they help recognize who the bad guy is so when he shows up in person, he can be detained before causing any damage. A "most wanted" poster of the robber cannot steal anything though, just like a vaccine cannot cause the disease it is designed to prevent. Through group discussions and personal childhood experiences, the undergraduate and professor team decided that the immune system (the "good" guy) would be best represented by a superhero-like figure. The virus (the "bad" guy) would be a robber, and the "most wanted" poster would represent the vaccine. Initial outlines of the analogy depicted a policeman as a representation of the immune system, but it was replaced by a superhero in the final version after Jade brought up the issue that police might not be recognized as "the good guy" in all communities.

The next challenge was explaining this analogy online in Google Classroom. "I like drawing," said Julio, a political sciences major, "I could try drawing the superhero and the robber and make something like a comic strip." When Julio showed the group his first sketches, everybody was impressed. His drawings (Fig. 7.2) were far more detailed and professional than the other undergraduates had expected, since Julio had downplayed his skills. Many rich conversations on our respective childhoods and what we thought kids would find most appealing followed.

Over several meetings, as we simultaneously progressed on our scientific explanation scripts and what each element of the analogy would represent, the idea of using the drawings for a video took form. A video fit with Fernando's initial idea of using TikTok and other platforms, but it could also work well for a virtual lesson. Once we knew we were making a video, every member of the group was ready to put in as much work as necessary—the day we had set for the online lesson was getting closer. Individual skills started to shine and every member of the group was eager to contribute. Julio was pursuing a career in education policy, but he was also completing an art minor. Fernando's elementary schooling in Mexico made him a skilled translator and a perfect voice for the Spanish version of
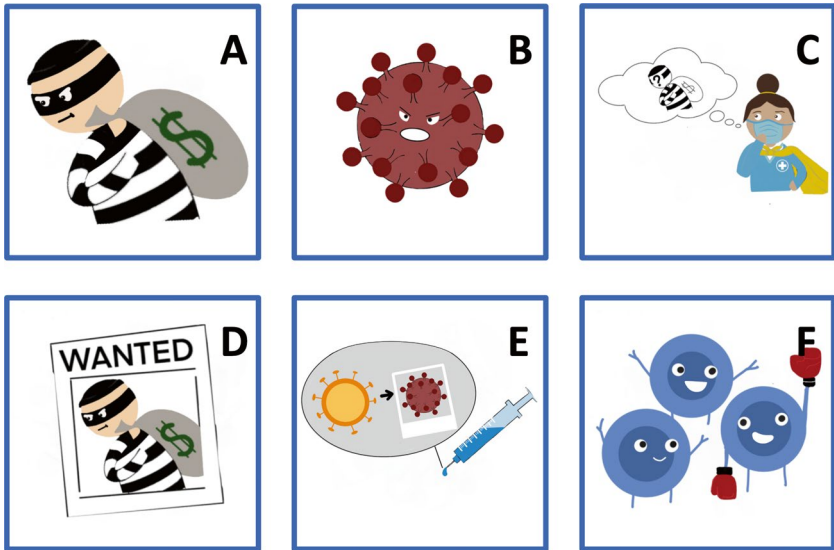
Fig. 7.2 Images from vaccine video. (**a**) Robber (**b**) Virus (**c**) Superhero wondering how robber looks like (**d**) Most wanted poster (**e**) Vaccine working as a most-wanted poster of the virus (**f**) Immune system cells training to defeat the virus

the video. While Marina did not speak Spanish, she was an excellent video and sound editor. Jade was especially attentive to wording, tone, and representation as we wrote and modified the script, as she knew first-hand how reinforcement of certain stereotypes can push a kid out of STEM.

As we thought about the actual lesson, the team tried to accomplish all of our multiple goals from Fig. 7.1. Nuestra Ciencia activities always have a hands-on component, how would that look like in a virtual lesson? We decided to keep the comic book feel of the video and prepare a blank storyboard where kids could draw their own superheroes and villains and connect their roles with the virus/robber analogy (Fig. 7.3). To foster family engagement, we prepare pre-activity questionnaires (Fig. 7.4) that always include at least one question requiring family involvement. In this case, we decided that there would be a question about previous vaccines, as that would require asking an adult in the household, and it would also remind students and their families that they had already safely received multiple vaccines, since the state of California requires five different
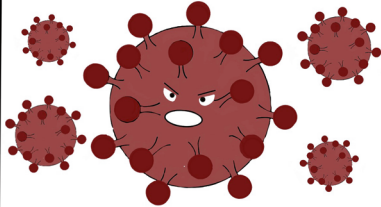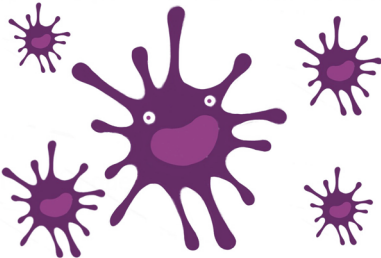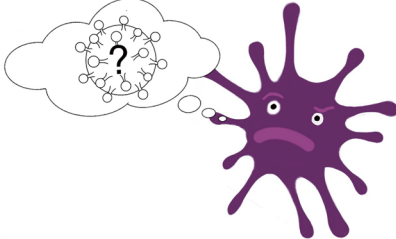
Fig. 7.3 Storyboard activity in Spanish where children were provided a storyboard recapitulating the main points of the analogy explained in the video. Children later drew their own villains and superheroes on empty storyboards

Preguntas Antes de la Actividad

¡Hola, somos Nuestra Ciencia, un grupo de profesores y estudiantes de Cal Poly San Luis Obispo! Juntos hacemos lecturas y actividades de microbiología en español y inglés para los grados K–6. Para la tarea de hoy, queremos aprender lo que ya conocen sobre las vacunas. Por favor completa el cuestionario antes del miércoles.

1. ¿Crees que eres una persona científica?
   - Sí
   - No
   - A lo mejor

2. ¿Crees que podrías ser un científico?
   - Sí
   - No
   - A lo mejor

3. ¿De qué manera eres como un científico? Piensa en los experimentos que has hecho en la escuela.

   _____
   _____
   _____
   _____.

4. A veces necesitamos ir al doctor para recibir una vacuna. ¿Por qué crees que necesitamos vacunarnos?

   _____
   _____
   _____
   _____.

5. ¿Cómo nos ayudan las vacunas? Puedes escoger más de una respuesta.
   - ❏ Entrenan nuestro cuerpo para no enfermarnos
   - ❏ Matan al virus que causa la enfermedad
   - ❏ Nos curan cuando estamos enfermos
   - ❏ Las vacunas NO nos ayudan
   - ❏ Otra: _____

6. ¿En dónde puedes ver qué vacunas te han puesto? Puedes escoger más de una respuesta.
   - En línea
   - En la oficina de tu doctor
   - En tu cartilla de vacunas
   - Preguntarle a alguien en tu casa

7. Con la ayuda de un adulto en tu casa, contesta la siguiente pregunta. ¿Cuáles vacunas has recibido?
   - ❏ DTAP – Difteria, tétanos, tos ferina acelular
   - ❏ IPV – Poliovirus inactivado
   - ❏ VAR – Varicela
   - ❏ Hep A – Hepatitis A
   - ❏ Hep B – Hepatitis B
   - ❏ IIV/LAIV4 – Influenza, Flu shot
   - ❏ RV – Rotavirus
   - ❏ Hib – Haemophilus influenzae tipo b
   - ❏ PCV13 – Conjugado neumocócico
   - ❏ MMR – Sarampión, paperas, rubeola
   - ❏ Covid-19 – Coronavirus, SARS-CoV-2

8. ¿Conoces a alguien que haya recibido una vacuna hace poco? Escoge una respuesta.
   - Sí
   - No
   - No sé

Fig. 7.4 Ahead of the lesson, pre-activity questionnaires were distributed in the main language of each household. These pre-activity questionnaires allow us to collect information on children's views on science and scientists and also spark conversation with their families about the upcoming lesson

vaccines for enrollment in the public school system. We want to know how the kids' attitudes toward science and scientists evolve during Nuestra Ciencia activities, so our post-questionnaire had to include some questions pertaining to that as well as questions directed at gauging the kids' understanding of vaccines' mechanism of action. All materials had to be available in the home language, which meant developing everything in Spanish and English simultaneously.

When we develop a new lesson at Nuestra Ciencia, the activity itself and the way the scientific concept is explained through the activity are always worked out as a team process, which can be slow and sometimes feel a bit disconcerting and devoid of direction for new members. Because Nuestra Ciencia team members come from many different backgrounds and microbiology is absent from most undergraduates' education, it is extremely

important that everyone understands and internalizes the scientific concept themselves before trying to explain it to young kids. It is not uncommon for the undergraduate researchers to express that they truly understood the concept only as we were working on the activity, but it also comes up as one of the most challenging parts of the project. Fernando, who was not a STEM major, explained: "As we were teaching to them, I was learning myself about this so that was challenging". Even biology/microbiology majors like Marina find it hard to distill a complex concept into an engaging activity for elementary school kids without losing scientific accuracy.

> You have to kind of dial it back and help them understand the material and in a way that helps you understand it better too. Which is good, but it is challenging because you don't want to overcomplicate it or you don't want to oversimplify it and lose the message of what you're saying, so I think that was something that was challenging: to kind of gauge that right balance between the two.

Once the vaccine activity was outlined, and a script written, specific parts of the lesson were taken up by individual members so we could work on our own and bring completed tasks to group meetings. In this phase, the pace picked up quickly as the tasks were much more clearly defined. Members felt more confident and free to contribute their individual creative process to the project. For example, the script of the video and what action should be depicted for each part of the script were decided collectively, but Julio had complete creative freedom in his drawings, Marina edited the video to her personal satisfaction, each of the members made individual decisions on what to say and how to say it for their portion of the lesson.

As the lesson day approached, deadlines became more pressing. The hard-copy materials like the pre- and post-activity questionnaires, and the blank storyboards, had to be finalized early to allow for distribution to the kids, who would be at home, or at their families' place of work, during online class. Nuestra Ciencia team members would be in our own home offices, or bedrooms, during the presentation. We had to smooth out any technological glitches stemming from each of us: teacher, kids, Cal Poly faculty, and undergraduate students being in our own separate physical spaces but sharing a virtual room together. Would we be able to keep the kids engaged? Would they understand the mechanism of action of vaccines

as we were explaining it? Would they participate, would they have questions at the end? Even for the elementary classroom teacher and the Cal Poly faculty, this was entirely new territory that felt simultaneously daunting and exciting. In the last few days before the lesson, we rehearsed the whole lesson several times, adding and modifying small things every time. It was hard to match schedules, and on the last day, we had an 8:00–10:00 pm rehearsal. "I don't think I would have ever accepted an 8:00 pm meeting if it hadn't been for this project," joked Fernando.

After leading the lesson, the team reflected on the six months working together. We had published a paper together, given a talk, and developed and piloted the vaccine mechanism lesson, which had left us with an easily shareable video that we could further use. Besides the dual goals shown in Fig. 7.1, Nuestra Ciencia also has the additional goals of promoting a sense of belonging both at the elementary and the college level. For the undergraduate students that participated in the development and implementation of the virtual vaccine lesson, a few aspects of their participation were highlighted as promoting a sense of belonging during our end-of-year focus group. We found that NC undergraduate students felt ownership and pride in what they had created, realized the importance of collaboration in research, and felt they could bring their whole self rather than only focus on a narrow view of what counts as science.

It is worth mentioning that Spanish played a role in belonging and bringing their whole self into the research group. Designing and teaching a lesson in Spanish influenced students' perspectives on Spanish as an asset for teaching content, expressing themselves, connecting with family, and mentoring. When designing the program, we hoped that teaching science in Spanish would be transformative for elementary learners, but did not fully grasp the impact for undergraduate students. Analyzing the focus group interview revealed how Spanish was transformative for undergraduate learners, as they shifted from viewing Spanish as a home language used for "day to day things" to "a tool" that empowered them and their communities.

Discussion

In this chapter, we described the design and implementation of a Nuestra Ciencia lesson explaining the mechanism of action of vaccines, and how the interdisciplinary team tackled challenges. This lesson is both a good representative of the NC program in that it truthfully reflects our

co-design process and the effect it had on university students, and also an unique outlier in that the creation and the implementation were conducted entirely in virtual spaces. The undergraduates' reflections on their experience also revealed the affordances of teaching science in Spanish for undergraduates, and how it shaped their perspectives on research and themselves.

Undergraduate Shifts in Views on Research Based on Co-Design Process

Undergraduate students joining a research group often expect to simply execute the faculty member's ideas. Cal Poly's motto is "learn by doing" and undergraduate students are eager to "do." In the context of research they tend to interpret "to do" as "to proficiently follow instructions and protocols." At Nuestra Ciencia, we purposefully keep initial instructions general and open-ended. As we design together, we simultaneously acknowledge individual contributions while making sure they blend into a communal purpose. By the end of the process, it is often hard for individual members, including faculty, to pinpoint whose idea any given aspect of the project was originally. However, everybody's contributions to the final product are recognized. This deemphasizing of who came up with a certain idea versus emphasizing whose contributions actually turned ideas into reality helps new members feel more comfortable since time and experience within a project are often needed in order to come up with new ideas. As NC members gain experience, they also become more vocal and confident, espousing new ideas that are added into our brainstorming document to be worked on as we progress. We rarely discard ideas entirely—instead, they are put into a back burner to be revisited later.

NC members participating in this co-design process come away with different views on research. Undergraduates often have a preconceived notion of research, or a very vague idea of what research can be. Fernando said, "Honestly, I had no idea what research was" and Fernando, Julio, and Marina all described a researcher's main task as "reading articles." Students came away viewing research as more diverse and "collaborative."

Another aspect that influenced NC members was the tangible application of their work and its impact in the world outside academia. As Fernando puts it, "I never really had the chance to put together something in real life, you know because it's not a class it's like for the world, I

guess, you could say it like that, so this is different than just what I've been used to. So I feel like it's been one of the first real-world experiences because publishing the paper was definitely real and then just the presentation and the whole putting the video together it was like all new to me, and it was very professional, I think."

Bringing Undergraduates' Whole Selves into Research and Co-Design

Co-designing and teaching the vaccine lesson collaboratively influenced undergraduates' views on research and real-world impact. Additionally, they saw new connections between Spanish, science, and their communities, which allowed them to bring more of their "whole self" into the process. For example, selecting a topic that was important for the communities of all NC members. At the beginning of this particular year, the faculty members of NC had some ideas of topics that could be turned into lessons. During the process, none of those topics was selected; instead, the topic of vaccine safety, which was directly impacting their friends and families, was chosen. In addition to choosing an impactful topic, students from Spanish-speaking families started to bring into the process aspects of themselves that did not typically bring into the college setting.

For most NC members, Spanish has not been the language of science instruction, and they need to practice certain scientific vocabulary ahead of lessons. During the preparation for the vaccine lesson, this afforded them an opportunity to talk to their own families about the correct vocabulary, grammar, spelling, and so on, and engaging them in their college education in ways that they are not typically able to. For example, Jade, who participated heavily in the design of pre- and post-activity surveys, often asked her mom for help translating or deciding what way of saying something was most common in Mexican Spanish. Through this lesson, Spanish language skills became an asset, and family members were utilized as a resource by our undergraduate members. NC members almost invariably report telling their families about the lessons they are developing, showing them the materials, and often bringing to the group suggestions and encouragement from family members.

We know, both from research (Kiyama et al., 2015; Witkowsky et al., 2020) and personally from student confidences, that language, educational, and societal barriers prevent many Latinx family members from fully participating in their student's college experience. Many past and

present Nuestra Ciencia members have commented on the yearning to talk to loved ones about the new concepts learned in college but struggling to do so in Spanish. Julio commented, "I want to talk to my parents about things like climate change or any science stuff, even the vaccine, it's hard to translate it and to talk about it." At Nuestra Ciencia, we have always been acutely aware of how learning science exclusively in English can stop the flux of knowledge and ideas between Latinx children and their family in the US. We have purposefully designed all NC lessons to foster family involvement of the elementary school kids and ease the language barriers by providing all materials in both English and Spanish. However, an added benefit was the connection between undergraduates and their family members when designing these materials. Many undergraduate students report family being proud of them for their role in Nuestra Ciencia, and feeling grateful they could help by translating or clarifying points. Students have also commented that being able to bring in their passions for teaching, research, community concerns, and science in Spanish and make a real-world impact was rewarding and a "pull-in" experience in comparison to the majority of spaces at Cal Poly.

The multiple goals of Nuestra Ciencia summarized in Fig. 7.1 revolve around increasing children's microbiology literacy and especially focus on children growing-up in Spanish-speaking households. However, the observed impact of our co-design process on undergraduate students shows that, as we work on designing and implementing Nuestra Ciencia lessons, it also has positive effects on undergraduate students and their families.

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Math CEO: A Mutually Beneficial Partnership between College Mentors and Latinx Youths

Alessandra Pantano ⬤

*A week has passed since the last Zoom meeting, and the three middle schoolers—Fernando, Jayden, and Juan—are eager to meet their college mentors. When they join their breakout room, they are surprised to find Aimy and Koen wearing a virtual top hat (courtesy of the Zoom filter!). There is a "Phineas and Ferb" vibe in the air, how cool! Just like the two step-brothers in the television show, Aimy and Koen are ready to embark on a spectacular adventure with their mentees, to make the most of their time with them. Aimy and Koen excitedly announce the "mission" for the day. Using simple lines of code with just four commands (move 1 unit **F**orward or **B**ackward, and pivot 90 degrees to your **L**eft or to your **R**ight), they will be drawing interesting shapes on a digital grid. But the fun will not stop there… A digital app will allow them to "fractalize" their shapes by replacing every occurrence of the **F** command by the existing code. Will the students be able to predict what the fractalized images will look like?*

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Aimy and Koen send the link to the app through the Zoom chat, and share their screen to illustrate how the app can visualize code commands. After letting the students practice generating code(s) for simple images like a cane or a staircase, they are ready to spice things up, and they explain the function of the "fractalize" button. "So, this code is going to repeat itself over and over again?"—Fernando asks. "Yes! That's it!" Koen responds with excitement. Aimy adds, "And then, that code is going to come up with some image!"

Suddenly, the Zoom meeting is silent, and it's a good silence. You can feel in the air the buzz of excitement, but what you hear is the quiet of engaged concentration. The students are busy on their apps, trying to create fun images with simple codes. Aimy and Koen can see their eyes at work through the little 3cm² Zoom square box. Abruptly, Jayden raises her hand. She is usually shy about sharing her ideas, but today, her eyes are fixed on the camera and you can tell that she is eager to share her work. "I made a shape of your top hat"— Jayden tells the mentors! Aimy and Koen are moved by the kids' attempt to model their hats and connect with them across the digital divide. As Aimy and Koen express genuine appreciation for Jayden's work, their eyes are pointing straight at the camera in a goofy attempt to make eye contact with Jayden over Zoom. This warms up the environment. Encouraged by the mentors' reaction to the top hat, other students start sharing their code. All of a sudden, the Zoom chat box is filling up with mathematical discussion amongst the students, and multiple hands are raised. "I can't wait to see what wonders they will draw when they fractalize their shapes"- Koen thinks. "These kids are so amazing."

INTRODUCTION

This vignette describes an after-school math session at Math CEO during the COVID-19 pandemic, when health-related restrictions forced the program to run online. Fig. 8.1 provides a snapshot of an in-person meeting at Math CEO, bringing together youth and college students for joyful mathematical explorations on a college campus.

The University of California, Irvine (UCI) Math Community Educational Outreach program (Math CEO) is a high-quality university–community partnership that connects faculty and students at the University of California, Irvine, with Latinx families in Santa Ana, CA. Founded in 2014 by Prof. Alessandra Pantano and Li-Sheng Tseng, math faculty at the University of California, Irvine, Math CEO has grown rapidly over the years to become one of the largest informal STEM after-school programs

Fig. 8.1 A snapshot of an in-person meeting at Math CEO

engaging Latinx youth which is focused specifically on mathematics. The program offers weekly after-school math-enrichment sessions for middle-school students from Title 1 middle schools in Santa Ana, CA, as well as STEM-focused field trips to UCI and college-orientation workshops for caregivers. Teacher liaisons at partner schools advertise the program and children participate in it voluntarily.

College students act as mentors of adolescents and take practicum courses at UCI, which integrate principles of culturally responsive math pedagogy with fieldwork experiences in community settings. Twenty-four times in the academic year, the middle-school students board a school bus after school and come to UCI; for the next two hours, they work in small groups with their mentors on interesting curricula designed to enhance understanding and appreciation of mathematics. An hour at Math CEO feels very different from a math class at school. At Math CEO, there is no direct instruction nor didactic learning; students learn informally and collaboratively. In particular, college mentors and middle-school mentees
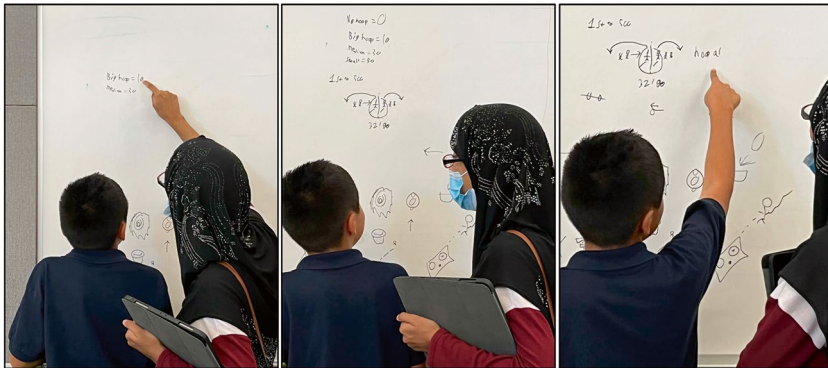
Fig. 8.2 Intergenerational learning at Math CEO

learn *with* each other and *from* each other (Fig. 8.2). The math activities are fun and engaging and exploratory in nature; they are designed for collaboration and allow noisy play. Indeed, the goal is for students to learn how to think mathematically and to come to appreciate mathematics, rather than to learn a specific skill. Students use their own ideas and their peers' explanations to reason; this helps develop a durable understanding in math for the future, which can transfer to other domains.

At Math CEO, we pose special attention to social aspects of learning, and we intentionally create and diligently maintain an informal and positive climate where youth can develop academically, socially, and emotionally. Building connections with middle schoolers is regarded as a fundamental priority for college mentors, and a prerequisite for learning. The positive relationships that develop in the program elevate the role of college students from facilitators of math activities to mentors and role models.

During the 90-minute Math CEO after-school sessions, middle schoolers gain confidence in tackling challenging math problems. They also develop close bonds with UCI students, many of whom are also from historically marginalized groups, and learn about their experiences in college. By serving as tangible models of success in college pursuits and in STEM, undergraduate mentors can positively impact youth's attitudes towards school achievement and their interest in STEM. By providing emotional support and positive feedback, mentors can also enhance youth's ability self-concept, which, in turn, is related to more positive

perceptions of scholastic competence and school-related achievement and behavioral outcomes.

Since 2016, Math CEO has been the setting for a rigorous mixed-method research study led by Dr. Sandra Simpkins, a professor in the UCI School of Education and a long-term collaborator with University-Community Links (UC Links). (Sandi and Mara, co-editor of this volume, were both graduate students at UC Riverside and worked together as site coordinators for the Riverside Trolley UC Links program described in the Introduction.) This study has shed light on mentoring strategies to promote collaborative learning and math motivation among Latinx adolescents in a STEM after-school program (Soto-Lara et al., 2022; Yu et al., 2020, 2021, 2022). Results from this research have informed the practice at Math CEO by providing invaluable insights on the program structure, by offering careful evaluation of program impact through surveys and interviews, and by training college mentors on evidence-based informal pedagogical practices.

The research presented in this chapter was led by Dr. Sandra Simpkins, in collaboration with Dr. Mark Vincent B. Yu, Dr. Stephane Soto-Lara, Dr. Ta-yang Hsieh, Glona Lee, Dr. Su Jiang, Dr. Yangyang Liu, Dr. Kayla Puente, Perla Carranza, Dr. Nestor Tulagan, and the author of this chapter, Dr. Alessandra Pantano, director of Math CEO.

My collaboration with Dr. Simpkins, and the integration of research and practice, has fueled the development of the Math CEO program. Systematic research and evaluation of Math CEO has allowed me to continuously improve the program and enhance its impact on the community. Engaging in research, teaching, and service at Math CEO has become a central component of my job as Professor of Teaching at UCI and has allowed me to sustain this outreach work over the years. At the same time, by serving as the stage of rigorous scholarly studies, Math CEO has provided invaluable training opportunities for graduate students and postdocs in Dr. Simpkins' lab. As a genuine research-practice partnership, Math CEO has benefited all parties involved. Most importantly, it has had a profound impact on the community. Our program has engaged 1310 youths and 838 college students since Fall 2016 (when we started to keep attendance records) and has changed many lives.

Program Context

Community is a core value at Math CEO. This quote by a college mentor effectively describes the atmosphere in the program:

During the quarter I was in Math CEO I genuinely met and worked with wonderful mentors and students. In the time working with the students, we all felt a strong connection with the students we had. The community within this program provided support and relationships with everyone involved with the program. The mentors not only got to know a variety of students but also coordinators and leaders that are compassionate people who love to help students of all kinds, even college students. This program will leave mentors with an idea of how much they can affect a student's life in a positive way.

Math CEO mentors have the opportunity to develop strong connections with their middle-school mentees ("The best part of being a mentor was helping and bonding with the kids"), and also with faculty and fellow undergraduates ("Math CEO has helped me meet people with similar interests to my own and slowly but surely feel more at home at UCI"). Similarly, the middle-school students grow very attached to their mentors and look forward to seeing them every week ("The best part [of Math CEO] is the feeling of having to come here every week, talking to someone that you can trust because I have a lot of trust in my mentor"). The white broad drawings in Fig. 8.3 are a testimony to the youths' affection towards their mentors. The drawing on the left shows a petition crafted by youths at Math CEO to demand that their mentors would not graduate from college before they themselves had a chance to graduate from middle school, thus maximizing their time together. Shown on the right are joyful portraits of mentors drawn by their mentees.

While being a good mentor requires a lot of effort and dedication, being able to develop strong mentorship relationships with youth constitutes a great reward. When asked to provide some advice to future mentors in Math CEO, a college student responded: "I would tell each individual that Math CEO definitely requires time, patience, and a passion for both helping students and mathematics; though, it becomes rewarding when the students look forward to seeing you every week". As shown in Fig. 8.4, Math CEO college and middle-school participants are not just doing math together, they also practice "team-work" and "communication" together and share "friendship," "fun," "laugher," and "kindness."
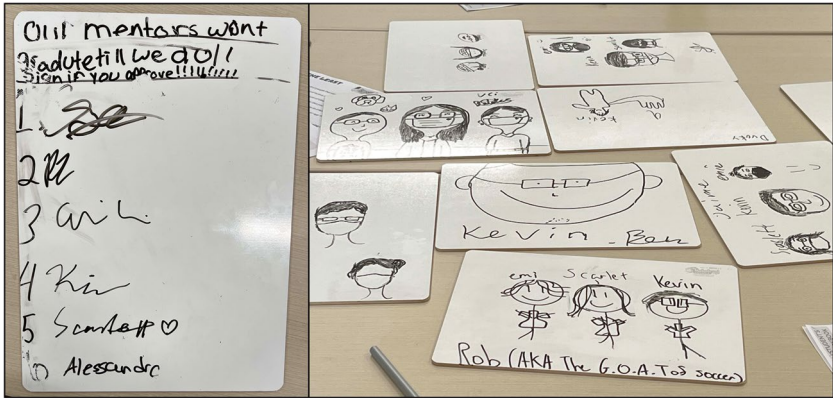
Fig. 8.3 Drawing from youths demonstrate attachment to their mentors

Fig. 8.4 "What we have together": Art submissions from a youth and mentor participants

College Students as Mentors of Adolescents

While facilitating mathematics' learning for youth is their primary focus, the undergraduates participating in Math CEO are intentionally referred to as "mentors" as opposed to "tutors." This choice reflects the fundamental understanding that the role of a college student at Math CEO goes beyond engaging with youth to navigate math activities and solve complex problems. The undergraduates at Math CEO act as friends, helpers, and role models. In the words of a mentor:

The most important lessons about teaching and/or mentoring that I learned through this experience in Math CEO is that the students look up to the mentors. This means that my students view me as a friend and role model. With each after school session, I hoped to build a more positive relationship with my students and help them become more confident in their abilities to solve the math puzzles as a team.

Joyful Math Activities and Intergenerational Learning

While rather unique in its specific focus on mathematics enrichment, similarly to all its fellow UC Links programs (https://uclinks.berkeley. edu/programs), Math CEO is rooted in joyful after-school activities, collaboration, and intergenerational learning. The goal of the Math CEO math-enrichment sessions extends beyond the development of procedural knowledge of mathematics. At Math CEO, we seek to promote conceptual understanding of mathematics through inquiry and exploration.

Intentional efforts are made to build interest and appreciation for mathematics by designing math activities which are fun and relevant to youth and by engaging students in a social process of learning. Youths are constantly encouraged to share their ideas and explain their approach to mentors and peers. College mentors learn math *with* the middle-school students and co-construct knowledge together ("I did not expect that I would be learning alongside those kids as we explored the fun games and activities of the packets. I'm happily surprised that I was able to enhance my math skills as well"). The weekly coaching sessions expose mentors to new mathematical ideas and new representations ("I saw math through bar graphs, number trees, and games that changed my perspective on how numbers can be manipulated. It made me excited to share these new tricks with the students"). Mentors also learn *from the* youth, who occasionally surprise them with creative and novel approaches to problem solving.

Participation in Math CEO increases mentors' pedagogical skills and their interest in pursuing a teaching career. It also influences their perception as future educators in regard to *who can* do mathematics. The many benefits of intergenerational learning at Math CEO are unpacked throughout the chapter.

Key Idea: Impact on Youth

The UCI Math CEO program was originally created with the goals of improving youths' math proficiency and motivation and boosting their familiarity with college settings. Pre- and post-quantitative surveys of youth show that Math CEO has been successful on both accounts (Fig. 8.5). Qualitative research reveals that Math CEO mentors also play an important role in promoting positive youth development.

Math Outcomes

In-depth interviews of middle-school participants show Math CEO can have a positive influence on youth's math skills ("I learned new strategies to find and solve equations. Now I'm able to think of new and easier ways
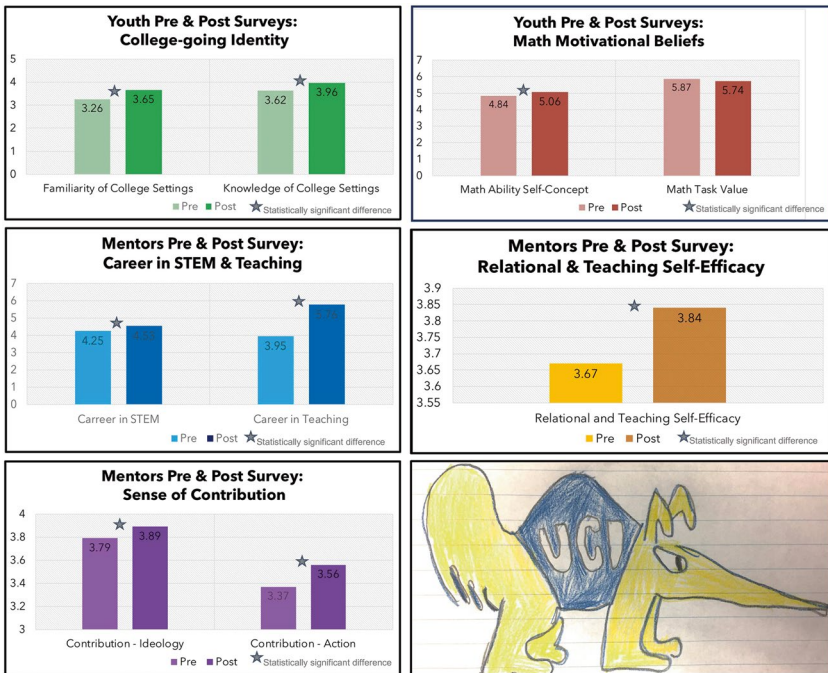
Fig. 8.5 Quantitative analysis of youths' and mentors' outcomes at Math CEO

to solve things, not only the ones they teach me at school"). This impact may transfer to the school domain ("I think [my view of math] has changed because now I pay more attention to my math class") and lead to increased proficiency on school's standardized tests ("I have been growing and growing in my Mathematics. It has helped my MAP score go off the charts"). Math CEO mentors witness the youth's mathematical growth with pride ("As the quarter progressed, I saw my group grow in confidence when doing math problems").

By acting as mentors to the middle-school students—and not just tutors—and by framing mathematics as a collaborative and playful activity, Math CEO can also enhance youth's interest and motivation towards math. In the words of a youth: "I didn't really like math. It would be the worst subject in school. Coming to UCI helped me a lot. Math CEO showed me that like math was actually fun, even if it seemed hard."

This sentiment is echoed by the caregivers of participating middle schoolers. For example, in the course of an in-depth interview, Itzel (all names are pseudonyms) recognized how Math CEO is "trying to make math fun, instead of boring" for her daughter, Luna. Itzel further elaborated: "She's like, 'Oh, I like math. I like the way that they [Math CEO mentors] are teaching us without getting boring, [that] there is another way to learn math.'" Later on, she added: "I've noticed now that she starts talking more about math … And it was a surprise that she was even talking about it because … she never liked to talk about anything to do with math."

Beyond boosting proficiency and interest in mathematics, participation in Math CEO can also help youth gain appreciation for the utility of mathematics and its relevance to their daily lives. Quoting a student: "Without math, I won't be able to know how to solve problems, and I won't find a good job because every job wants people to know math."

Like all other UC Links sites, Math CEO is rooted in collaboration and intergenerational learning. Math CEO mentors co-engage in the math activities with the youths. They model persistence on hard tasks and demonstrate reasoning in the context of problem solving; quoting a student: "When my mentor doesn't know how to do the activity, she always figures it out. She's always trying many things to solve the problem."

In the weekly coaching sessions, Math CEO mentors learn pedagogical strategies to promote students' reasoning skills and involve them in the critical thinking process. In addition, they practice effective ways to motivate youths, navigating the fine line between challenging students and making them feel supported. Quoting a student: "[The best part of Math

CEO] is when the mentors help you when you don't get something and they motivate you so you could understand it, the problems … Because when they motivate me, I think I could do the things."

According to Vygotsky (1987), as children and their more knowledgeable peers co-construct knowledge, the child seeks to understand the actions or instructions provided by the tutor, then internalizes the information, using it to guide or regulate their own performance. This mechanism helps create *a zone of proximal development* (Vygotsky, 1987). By engaging in productive struggle with their mentors, youths learn how to persist on mathematical tasks ("Math will never get easier, but if you keep trying and trying it won't feel hard at all") and become more willing to accept those challenges ("Some of the problems challenge me but that is good, for if they challenge me, I can learn more!"). Most importantly, this sense of persistence appears to transfer beyond the study of mathematics and becomes a life skill. Quoting a middle-school participant: "They [the mentors] influence us to try hard math and not to give up. UCI wants us to know that we can do amazing things in life. We can do anything we want as long as we try."

Future Aspirations

By acting as role models to middle-school students, college students have the potential to influence youth's future aspirations and inspire them to work hard in pursuit of their dreams. Quoting a middle schooler:

> Math CEO has made me think a lot. I know I'm still young and everything, but it really makes me think that there's such a big future ahead of me. I could do so many things with my life. Math CEO, my mentors, push me to work harder to get one of those choices to become reality.

Some of the youths participating in Math CEO begin to envision STEM careers as part of their future ("Well, now I know, actually confidently know, that I'm going to do something with math. I want to go into a STEM career"). Similarly, some caregivers are starting to point their hopes towards a future career in STEM for their children ("You never know what he wants to be when he grows up, hopefully something that's going to use math a lot [laughs] because that's his strength").

At Math CEO, youth do not only learn math, they are also acquiring knowledge and familiarity with college settings, which are statistically

significant predictors of Latinx college enrollment (e.g., Sánchez Gonzalez et al., 2019). Quoting a middle-school participant: "I've been here for almost two years now, and it's been great. We get to learn more about college campuses [like UCI]. I think that it's amazing."

In her comprehensive review of the literature on barriers to college access for Latinx adolescents, Gonzalez (2015) posed that barriers can be clustered into three main categories: *relational* (e.g., limited access to college role models; overestimation of costs of college; low education completion of caregivers; family socioeconomic status; limited knowledge of college application processes), *individual* (e.g., low levels of English language skills, math proficiency, or study skills; individual experiences of discrimination and culture-based experiences; fluctuations in motivation or educational aspirations), and *systemic* (e.g., school tracking; limited access to rigorous academic curriculum or to counseling resources; lack of educational outreach programs; rising costs of college and reductions in the availability of financial aid).

Math CEO has a comprehensive approach to increasing youth's access to college by engaging students in a rigorous math curriculum designed to boost students' math proficiency and motivation, providing caring mentors who model successful college pathways, hosting weekly meetings on a college campus and welcoming the youth for a yearly, whole-day, STEM-focused field-trip to live the life of a college student for a day, and running college-orientation workshops for caregivers. This comprehensive approach has proven successful in fostering a college identity in participating youth ("UCI also influenced me to go to college because I see all different types of people who are hungry for learning and I want to become one of them") and enhancing their familiarity with college ("Being in a university makes me feel prepared for what to expect").

Most of the caregivers of Math CEO youth participants did not have the opportunity to pursue a college education; nonetheless, they have successfully instilled in their children the value of education and the desire to attend college:

> My dad says all that matters to him is that I do get an education because he didn't get a good one. My mom didn't go to college because she had me. My dad didn't finish high school because he came here. They just want me to be able to be more of something than they were not able to do because financially, we struggle. They wish they would have finished school or gone to college.

This finding is consistent with the literature that states that immigrant caregivers of Latinx adolescents have high expectations for their children's educational achievement, as this is often a primary reason for immigration to the United States (Suárez-Orozco & Suárez-Orozco, 1995). For some youths at Math CEO, going to college is an achievement for the whole family:

> I believe I can do anything, by not giving up and trying my best, because I'm doing this for my whole family. Not all of them went to college. I will keep on trying because I think I can do something in my life.

Math CEO is entering its ninth year. Many students from the early cohorts are now in college. Some are actually at UCI, participating as mentors for a new cohort of Math CEO youths. We are thankful to the families for planting the seed of college aspiration into their children; at the same time, we recognize that undergraduate mentors can play an important role in modeling successful college pathways and increasing youth's familiarity with the college experience.

Positive Youth Development

In response to the question "What did you learn from your mentor?" during in-depth interviews, some youths answered:

> To respect someone for who they are not on the outside but on the inside.

> To treat people good. Because I'm not the nicest person out there but over the years I see them acting nice to everyone even if some don't deserve it … I try to follow and do the same.

> To be a generally nice person.

> To help others instead of only thinking of ourselves.

The ability of Math CEO to impact youth at such a deep level was a crucial discovery for the leadership team. Since then, the program has been more intentional about supporting students' socio-emotional learning. In particular, during the COVID-19 pandemic, fostering youth's wellness by promoting a sense of connection with both mentors and peers

Fig. 8.6 Mentors and youths learn together at Math CEO

became a priority. Math CEO has evolved significantly over the years; without any doubt, the most substantial change was broadening the program mission from (only) promoting math outcomes and college knowledge to supporting the whole child, by (also) fostering wellness and socio-emotional learning of participating youths. The new vision has influenced the structure of the Math CEO program at many levels, from the design of the math activities to the coaching of the mentors. Key to this transformation is an intentional effort to create a welcoming, collaborative and stimulating learning environment that capitalizes on the cultural, social, and academic assets of each student (Fig. 8.6).

KEY IDEA: IMPACT ON COLLEGE STUDENTS

Mentors at Math CEO learn critical academic and career skills, feel rewarded, and gain a sense of belonging within the larger university setting. This is consistent with the findings of the body of literature which explore the positive impacts that mentoring youths (Anderson & DuBois, 2023) or peers (Amaral & Vala, 2009) can have on adult mentors. Citing Kira Banks (2010): "Mentoring is often considered a gift of time and resources that a mentor gives to a mentee. However, research suggests that mentoring has benefits specifically for the mentors."

Analysis of quantitative data collected through pre- and post-surveys of college mentors reveals that participation in Math CEO leads to a statistically significant increase in (1) interest towards careers in STEM and in teaching; (2) teaching and relational self-efficacy; and (3) sense of contribution (Fig. 8.5). Qualitative analysis of mentors' in-depth interviews, paired with coding of end-of-the-quarter mentors' reflections, allows us to unpack these results and understand the impact on undergraduate mentors.

Interest in Teaching Careers

Mentoring youth at Math CEO can help college students appreciate the profound impact of a career in teaching ("Being able to connect well with [my mentees] really showed me how important and rewarding teaching can be"). The experience may lead some undergraduates to discover an interest for careers in teaching ("I am currently undeclared and came into college with a sense of impending dread at choosing a major and career. Now I know with a large degree of certainty that I'd like to be a teacher"). Participation in Math CEO may also influence the career direction of undergraduates who are already interested in teaching, for example by providing an opportunity to narrow down what grade or subject they would like to teach, or by exposing them to alternative career choices (e.g., after-school operations or programs focused on curriculum design and implementation as opposed to traditional, classroom teaching).

Teaching Skills

While the initial teaching competency level of Math CEO mentors may vary, most Math CEO mentors report a significant increase in their teaching skills. In particular, mentors report learning:

- **Self-confidence**
  From being a mentor, I've gained more confidence. Before I would always be scared to lead the way for the activities, but over time I felt that I gave myself more trust in what I was doing. I learned to not hesitate in my abilities. (A Math CEO mentor)
- **The importance of engaging youth in joyful learning activities**
  This program not only taught me useful skills for my upcoming career as an educator, but it taught me the importance of making

school exciting for students. When students join programs, they expect it just to be more learning, but in Math CEO it was much more than that. (A Math CEO mentor)

- **The importance of prioritizing the quality of learning over the quantity of material learned,** because at Math CEO, fostering deep mathematical understanding is more important than covering all the activities included in the weekly teaching manual.
- **How to build positive connections with youth** ("I became more outgoing and talkative to break the awkward moments in the first few weeks. I also become more caring and friendly to my students").
- **How to promote youth's engagement** by bringing positive energy and a caring attitude to the math-enrichment sessions ("Smiling and being overall energetic will rub off on the students as well in the meetings").
- **How to engage youth in productive struggle,** while also providing effective scaffolding and continuing to make youth feel supported.

  So when it came to my turn to teach and try and help these students, I would work with them as a group but also individually, in the sense that I would help each student where I noticed they needed help, but also allowed them to face challenges where I knew it would provide them with a learning experience. (A Math CEO mentor)
- **How to navigate group dynamics where youths exhibited different skill sets,** by asking the students with a better grasp of a mathematical activity to explain the task (and the corresponding problem-solving process) to fellow students who need more help, prior to stepping in to explain the activities themselves.
- **How to increase student engagement in online instruction** by leveraging technology and exploring new platforms such as Pear Deck or Google Jamboard.

Most importantly, Math CEO mentors realize the importance of developing positive relationships with youth. Not only does it promote a sense of community in the program, which benefits college mentors and middle schoolers alike, but it also fosters better communication, mutual understanding, and mutual enthusiasm for engaging together in the math activities. Quoting a mentor: "The most rewarding part of this experience is getting the students to start warming up to us mentors, as they gradually start participating more and helping each other more in the lesson." As

Bayer et al. (2013) pointed out, relationships as the "active ingredient of mentoring."

Getting to know youths at a more personal level also allows mentors to make math tasks more relevant to students. For instance, when using storytelling to introduce a mathematical activity, mentors can use their knowledge of youths' interests to set the task in a context that students care about, thus increasing their engagement. As mentors become more familiar with the mathematical strengths and weaknesses of their mentees, they also learn how to individualize instruction to better support each individual student in their group: "With every meeting, I got to know these students better and, with my fellow group mentors, come up with ways that we can alter our teaching methods to suit the needs of each student."

During the weekly coaching sessions, Math CEO mentors learn how to create an intellectually and emotionally safe space where youths can explore new math concepts without fear of making mistakes. In the process of developing and maintaining this space, mentors build meaningful connections with their mentees that humanize the learning experience. Figure 8.7 depicts joyful interactions between mentors and mentees (and among youth) at Math CEO.

Fig. 8.7   Learning with joy at Math CEO

Discussion

Math CEO research shows that participation can positively influence mentors' sense of contribution to society and their commitment to helping their community. While some mentors originally join Math CEO with the precise intention to give back to their community, others choose to engage in the program for a different purpose; for example, to increase their competence in teaching or to earn units or fieldwork hours. Nonetheless, through mentoring, college students establish deep connections with both adolescents and fellow mentors, which give a new sense of purpose to their experience at Math CEO, as indicated by the following mentor quote:

> Personally, being a mentor at Math CEO makes me feel like part of a bigger picture. I love seeing the students excelling, and it is great to be able to use what I have learned and my experiences to help and relate to this new generation of students.

The sense of reward gained from mentoring youth at Math CEO may grow into a continuous commitment to engage with the community: "I am sad that I joined the program so late into my undergraduate career but I am so lucky to have found something that I love doing. I know I have had a few challenges this quarter but for my last quarter, I vow to make it the best and grow even more as a mentor so that I am able to apply these skills so that I am able to stay involved in community service even after graduation."

In addition to valuing their own personal contribution to supporting minoritized youths, some mentors report an increased appreciation for UCI as a research institution that is committed to making a positive impact on the community. Quoting an undergraduate student: "Math CEO has changed my overall perception of UCI. It's programs like this that make me proud to be a UCI student."

In closure, we want to thank all the youths and college mentors who have been part of the Math CEO family over the years. Together, they helped co-construct a safe and joyful learning community, where so many of us have found a space to grow, engage in authentic learning of mathematics, and feel connected and supported.

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Making Connections: Pandemic-Era Lessons from a Maker-Centered University–Community Partnership

Lee Martin , *Jade Lee, J. C. Leapman* ,
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We're making a makerspace of makers in separate Zoomspaces, teaching tricks of the trade through tiny lenses—we can only show so much, see so much—we're building fan-powered vehicles, each student given a motor with two wires attached: one red, one black, to connect with a battery, to complete a circuit where the motor will run and the fan will spin and the vehicle will be built up around that internal structure like a thick exoskeleton protecting delicate organs; and my oh my are these innards delicate — ever so finicky — one misstep, and the wire parts ways with the motor, leaving only a tiny nodule of metal exposed; the student's whole world shudders to a halt—"it's broken!! I've broken it!! Now what will I do??"—the mentor's heavy sigh is audible even through this virtual interface that was specifically built to block out menial audio such as sounds of processes that keep us all alive—"ok, so

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here's what we'll do", the mentor is mediating her reaction impressively, effervescing disciplined calm—in-person it would take little effort to remedy this common obstacle, but from behind the screen, the mentor can't simply guide the fumbling fingers of a fourth-grader, who's never played with wires, or motors, or the combination, before—"ok, can you hold up your motor so I can see it?"—up until this point the little one had her camera on, but tipped back so the only visible part was the crest of her head with her neat middle part slicked in two space-buns spiraling up and secured with cerulean bobbles— "ya" she says—space-buns tipping downward and sliding out of view—"here ya go"—space-buns back in the picture, but still that's all we see—"ok, can you tip down your camera, please, so we can see?" the mentor is admirably patient—"oh ok, ya" — a small umber hand with sparkly teal painted fingernails reaches up, angling the camera to the grey carpeted floor upon which she is working—the wire is disembodied from the motor and now the mentor must verbalise the surgical procedure to suture the set together again, and it's no small feat: first, you have to strip the wire, but unlike in-person, you don't have the proper tools, so you've gotta take your kiddy scissors and slice super carefully—press hard enough so that the protectively blunt blade can cut through the tubing, but delicately as to avoid chopping right through the copper (this is essentially impossible, even for grown-ups who have played with wires, and motors, and the combination, before) she tries, and CHOP, "what do I do now?? "ok, try again, but gently", she tries, and CHOP, "I can't do it", "you can!" she tries, and CHOP, eyes watering, space-buns drooping, sparkles dimming… "I believe in you!" "try holding the scissors very lightly and rotate the blades around the wire, ever so slightly, sawing in circles, until the plastic wears down, and the copper is exposed and, you can peel away the plastic and then you'll have stripped the wire, and then we can move on to the next step!"

– A spoken-word piece written by J.C. Leapman in reflection on an online making and tinkering session.

INTRODUCTION

The spoken-word poem that serves as our opening vignette captures the reflections of a graduate student and mentor (and co-author of this chapter), writing shortly after navigating this challenging moment as they facilitated an electronics activity with a small cohort of fourth-graders, all at a distance, via Zoom video-conferencing software. Such moments—a wire pulls loose and must be reconnected—are mundane and recurrent in

hands-on electronics work, but the pedestrian nature of the moment did nothing to mute the big feelings that emerged. The poem notes, repeatedly, how very limited the tools were in this moment, with the typical suite of in-person moves cut down to just words and gestures through a small rectangle of video and an audio stream. The piece evokes the profound longing of this micro-era of mentoring and tinkering at a distance—longing for a better view, for better tools (wire strippers!), for more reliable parts and, most of all, for hands that could reach safely across the social-distance to guide and reconnect those recalcitrant wires. Yet too, the poem evokes hope and joy and humor in connection, in re-connecting not only loose wires but people, despite distance and grainy video and unintentionally being on mute—"I believe in you!"

Breakdowns are frustrating and, at times, demoralizing. Traditional models of schooling work to divide the learning of complex concepts and skills into a sequence of achievable steps, each within manageable reach of the last, so that one can make steady progress up a ladder of learning with no setbacks or failures (Tyler, 2013). Such is not the case for authentic real-world problems, which often thrust us into complexities we are not fully ready for, with consequent setbacks, moments of impasse, or outright failure. So too for projects and problem-based approaches to education, which favor holistic engagement within activities over carefully sequenced curricula. In these environments, authenticity is a central value, as is learning to navigate through inevitable challenges, pitfalls, and stopping points.

Moments of breakdown, unpleasant as they may be, offer profound opportunities for reflection, growth, and learning. The connection between breakdowns and learning is well established in philosophical treatments of learning, including the work of Heidegger, Leont'ev, and Dewey (Koschmann et al., 1998). Breakdowns disrupt the status quo of our thinking; throw us into disequilibrium with our environment; and demand shifts in knowledge, skill, or context. One of the core theoretical and pedagogical commitments in our work in Beta Lab Links is a focus on how young people come to be more flexible, adaptive, and facile in dealing with the inevitable breakdowns that occur when pursuing project work (Martin & Dixon, 2016). It is perhaps appropriate, then, that this chapter focuses on insights gained as we coped with and navigated through disruptions to our programming caused by COVID-19 related school and after-school program site closures.

By reflecting on what was important at our sites before COVID-19 closures, and what emerged as important principles as we moved online,

we have seen a set of parallel ideas come into relief that highlight a reciprocal dynamic between the hands-on project work (building things) and the social processes of trust and rapport (building relationships).

We will begin by sharing our core pedagogical commitments and how they were manifest in our work with youth in the "before times" prior to COVID-19 closures. We then discuss our efforts to move our work with youth online, and how this major breakdown in our educational routines acted as a catalyst for reflection.

Program Context: Across Transitions

Beta Lab Links creates opportunities for young people to engage in imagining, designing, and building "maker" projects of their own choosing. The idea of "making" is broad and has a long history, but the term has more recently become associated with playful tinkering and design work that combines low-tech craft technologies, such as sewing, woodworking, or papercraft, with high-tech tools, such as microcontrollers or 3-D printers (Martin, 2015). Making and tinkering hold promise to connect youth to fun, hands-on experiences with design, engineering, and STEM ideas and competencies. Unfortunately, the ideas of a "maker movement" is often associated with White, affluent, and male pursuits, but many scholars have countered this narrative by embracing an asset-based lens on making and connecting the core tenets and practices of making and tinkering with diverse experiences and epistemologies (Calabrese Barton & Tan, 2018; Vossoughi et al., 2016).

In this vein, Beta Lab's pedagogy has long emphasized a broad notion of "meeting youth where they are." We employ this idea in several senses. First, we mean it physically, with a mobile maker van or virtual spaces that can travel to or connect to the spaces youth already inhabit. Second, we mean it cognitively, in beginning with the cognitive assets youth bring into interaction, including their knowledge, skill, and interests. Third, we mean it affectively, in attending to youth identities and sense of what is good and important as well as troubling or undesirable in their lives (Martin & Dixon, 2019). Navigating the disruptions of the pandemic helped us to see these multiple senses in a new light.

Like many other University-Community Links (UC Links) sites (https://uclinks.berkeley.edu/programs), Beta Lab includes undergraduates as mentors. The leading goal in working with undergraduate mentors is to help them see youth through an asset-based lens (Martin & Wendell, 2021), attending to and fostering the unique skills, knowledge,

interests, and practices youth bring into a space. Mentors also bring their own assets, of course, including their own interests, cultural repertoires of practice (Gutiérrez & Rogoff, 2003), and disciplinary ideas and tools such as representational systems (like written mathematics) and processes (like the engineering design process). Beta Lab's broad educational goal is to foster the development of adaptive expertise in designing and making, so that youth have the cognitive and non-cognitive tools and literacies needed to adapt to challenges, learn new things, and solve novel problems.

Prior to the COVID-19 pandemic, Beta Lab had two active sites in the Davis/Sacramento California area. At our high-school based site, we visited the school once per week, taking over the science laboratory and creating a "pop-up" maker space for students enrolled in a maker elective (in lieu of an off-site internship day). The maker van (Figs. 9.1 and 9.2) would arrive on site in the morning and the high-school students, UC Davis undergraduate mentors, graduate students, and faculty would all pitch in to unload and transport the materials and machines to the classroom. After the tools and materials were moved into place, we would gather in a circle to start our day with an ice-breaker question (a student favorite, "Describe your mood today as a type of breakfast food") to foster a sense of playful rapport. If it was early in the school year, we would move into small-group skill-building workshops (e.g., learn to sew, or learn to

Fig. 9.1 Beta Lab maker van

Fig. 9.2   Inside of the Beta Lab maker van

use the laser cutter), but later in the year students would break out into small groups to work on projects of their own choosing and design. Past projects included a go-cart, a light-up headboard, cosplay gear, and an embroidered patch to commemorate Mexico's participation in World War II.

Students worked in groups to think critically, plan, and execute their maker projects. No one in the space was an expert on every tool, but as time passed, students grew savvy on who knew what and where to look for information. They also learned that, in this space, asking for help was the norm, not a sign of weakness. Undergraduate students would circulate from table to table to check in or lend a hand. They were encouraged to work on their own maker projects as well, sometimes asking the high-school students for design or technical advice.

At the elementary school site, we worked with an after-school program for Latinx youth in fourth-grade. Each year, we chose a signature project for all students to pursue. Projects were selected to hit the sweet spot

between being open to individual creative expression while being constrained enough to allow for progress in hour-long sessions. Past project themes always involved electronics and included creating highly decorated motorized vehicles, and, in the lead-up to Spring 2020, creating robotic "pets" out of cardboard, decorative craft supplies, and motors, lights, and sensors, all connected to a microcontroller that students could program to act the way they wanted.

When the COVID-19 pandemic closed both sites, we worked to transition to online education. Beta Lab's emphasis on in-person and hands-on making made this transition challenging. While we were quickly able to distribute maker kits and activities to youth, a variety of logistical and bureaucratic difficulties made it slow to reconnect our undergraduate mentors with youth in synchronous sessions. By late Fall 2020, and through the end of the 2021 academic year, we were able to partner with the Boys & Girls Club of Sacramento to host weekly online sessions with upper elementary school-aged youth to facilitate maker activities with them. These activities focused primarily on papercraft and electronics, as these are low cost and do not require additional tools. Each week, the mentors led online Zoom sessions creating and sharing simple craft and electronics creations, from catapult-like launchers to light-up jewelry to fan-powered electric cars.

As our opening vignette highlights, these sessions were a stew of frustration and joy. Children and mentors alike were happy to connect with one another, but were also exhausted from months of video-conference-based schooling. They were eager to create together, but also frustrated by misbehaving wires and batteries and spools of tape. This period of time ended with a paradoxical sense that what we had collectively created in these months together on video was beautiful and important, and that none of us wanted to do it ever again. What lessons, then, can we glean from this profound moment of disruption?

KEY IDEAS

When we envision a Beta Lab Links site working at its best, we see a dynamic environment with all participants (youth, undergraduates, graduate students, and faculty alike) engaged in a community of making and tinkering. Everyone feels a sense of belonging, purpose, and comfort in knowing that their particular assets are valued within the space. Everyone engages in making things, whether silly or serious, trying new things out,

taking intellectual risks, sharing with others, and getting new ideas, feed-back, and inspiration from the group. In such a space, we can see that both the making of things and a robust sense of community are critical compo-nents. While we have long noted the importance of making and commu-nity, moving online helped us to see how each provides a pathway to the other. This realization came not as a lightning bolt of unexpected insight but as a slow realization of an idea long carried but previously unnamed.

To begin with, we can consider the ways in which a **sense of commu-nity and belonging can create opportunities for rich engagement with making and tinkering**. The importance of community, rapport, and belonging have long been acknowledged in our spaces. We can see this in undergraduate mentors' reflections from before the pandemic. As one undergraduate mentor wrote in a reflection in pre-pandemic 2020, "Even though the Maker Movement is focusing on learning and growing stu-dents' skills, I think that a major part of it is also the community-building aspect. Community building involves creating a sense of belonging by building relationships with the students and other mentors." She added, "The first tip I would give future mentors is to create relationships with various students. Ask them how they are and tell them little things about you to spark some kind of conversation. It makes it easier for students to ask for help from people they feel like they know."

Although established in the past, the need for connection and relation-ships became much more salient with the school closures, social distanc-ing, and lockdowns of the pandemic. Ideas for warm-up activities, or icebreakers, were a favorite topic among undergraduate mentors, as they were eager to share ideas and compare notes on how to quickly and effec-tively open up a social space during a session, despite widespread "Zoom fatigue." These warm-ups were not just about breaking the silence. They were really about building connections across people. As one undergradu-ate mentor reflected:

> During the mentoring sessions, my peers used the warm-up question as a way to strike up further discussion during the work period. By learning more about the students' personal lives, I learned from my peers about the importance and impact of connectedness. I think the pandemic felt isolating for many, including some of our students who enjoy interacting with others. By providing students the opportunity to talk freely, be heard, and discuss their interests, we started to create a sense of belonging for our students in our virtual classroom. Belongingness opens the door to feeling safe in a

classroom and eventually leads to a willingness to vulnerability. A student's vulnerability is demonstrated when they share ideas and test out their projects, despite any fears, such as failure.

Here, this mentor notes not only the importance of connection as a basic human need, but also the ways in which being and feeling connected to others was essential for deeply and authentically engaging in the work of making and tinkering, including sharing ideas, testing out projects in front of others, and being vulnerable.

Another mentor reflected on the importance of belonging for doing one's best work:

I did not expect to be moved by the Beta Labs sessions in the way I was, but I was simply in awe of how children are able to connect so easily with other humans. Even after such a difficult year living through a pandemic, they did not seem to care that we were interacting through a computer screen. Children share their thoughts openly and want to converse. At one point, a student even asked if everyone could just stay on the call to talk to one another – a clear sign that they crave human interaction and connectedness. Everyone wants to feel like they have a safe space that they belong to, and I think K-12 schooling should try to create this space in every classroom. Working with Beta Lab reminded me of the importance of belonging, for all people, not just younger students. For example, I felt a sense of belonging, as I felt motivated by the entire team to show up to meetings and contribute what I could. The power of belonging and connectedness can motivate people to do their best work and show up authentically, which I was able to witness throughout this experience.

In this view, belonging allows people to "show up authentically" and make contributions. Feeling safe allows people to share their work, try things, make mistakes, and then keep going, all of which are essential to engaging in making and tinkering. Here we see that efforts to build relationships can help youth to engage in "building things" in the maker learning environment (Fig. 9.3).

At the same time, we saw that **engagement with hands-on making and tinkering created opportunities for social engagement and connection with others**. Not all youth find warm-up activities, which are often highly verbal and often ask them to share information about their personal lives, interests, and so forth, to be engaging. Some stay quiet or engage as minimally as they feel that they can get away with. For some of

Fig. 9.3 A sense of community and belonging can create opportunities for rich engagement with making and tinkering

these youth, engaging with materials is a much more comfortable entry point into collective activity. For example, one mentor wrote about their experience with a student who did not want to share during the warm up about favorite foods, but whose excitement about their project got them engaged and sharing later in the session:

> However, once the student was allowed to begin the project, their curiosity sparked, which shifted their focus. By being able to work with their hands and test out their ideas, the student was able to invest their interest in the project in front of them, rather than their feelings of reservations. By the end of the session, the student was open to sharing their project and curious about next week's project.

In this example, showing (and talking about) their project was easier than talking about their own self in a warm-up activity. The hands-on activity provided an entry point to the social space. Within a reflection assignment, a different undergraduate mentor shared a similar story of movement from being reluctant to speak to being more fully engaged in the social space of the session, emerged:

> Although this student can be quite shy, she is definitely blooming every session so far. I was really excited to see her ask most of the questions this session regarding how to keep the wires on the motor, how to strip the wires, how to test the direction of her motor, and how to attach wires properly on the switch. … Towards the end of the session, she had shared a colorful fan she had created and was excited to see it work and move efficiently.

Here too, engagement in the session flowed out of excitement for project work and all of the components and how they might fit together.

Across these examples we can see that, for a subset of students, making and tinkering came first, and a sense of connection to the group came second (Fig. 9.4).

Fig. 9.4 Engagement with hands-on making and tinkering can create opportunities for social engagement and connection with others

Discussion

As we noted in our introduction, traditional models of schooling often present learning as sequential steps, each step within manageable reach of the last. If you follow the path, the logic goes, learning is supposed to come along. Yet all of us who have walked more than a few steps in the world know that life is full of disappointments and breakdowns, from those as small as a loose wire to those as large as a global pandemic that completely reshapes day-to-day life. Learning to live more fully in the world means learning to grow and adapt with these inevitable challenges, and we believe we do a disservice to youth when we shelter them too much from setbacks and bumps in learning. A primary attraction of making and tinkering activities has always been that they are fertile soil for (usually) manageable breakdowns. In navigating the Beta Lab program through the pandemic, we too had to learn and adapt from breakdowns, big and small.

In this chapter, we examined the reciprocal processes between belonging and making. When we reflected back upon our efforts before the pandemic, we can see that this reciprocity was in play all along, but the move to an online space, which disrupted both our ability to make connections and our typical processes of hands-on tinkering, made salient the ways in which each of these essential components of our pedagogy are facilitative of the other. For some students, beginning with hands-on materials and playful engagement was a means to connect others. We have always encouraged Beta Lab mentors to play with materials and work on projects within sight of youth, to create a sense that we are all makers and tinkerers. This can be a great way to build relationships, as it gives people something to talk about that is present, that can be gestured at, and that can feel less personal than revealing things about oneself. For other students, hands-on materials, especially unfamiliar ones like motors and microcontrollers, can

be intimidating. It can be embarrassing to share that you do not know or understand, or to ask for help. In these cases, it is beneficial to build trusting relationships first, whether through shared interests, favorite foods, or shared cultural connection such as speaking the same language. When a sense of trust and safety is established, it becomes easier to be vulnerable, to ask for help, to try new things, and to learn.

Beta Lab's focus on belonging and connection across people aligns well with a broad theme in this volume: we see how Y-PLAN emphasizes connections across youth and adults and the concerns of the community; how Nuestra Ciencia examines the power of language practice for connecting people to each other and their heritage; how B-Club, Math CEO, Corre la Voz, Community Based Literacies, and others take belonging as a central construct on their work. We take connection literally and metaphorically—connecting people while also connecting components and circuits as young people build, together. We hope for assemblages, both material and social, where wholes are greater than the sums of their parts, and where people feel invited not in pieces, but are welcomed wholly.

Connection and belonging, as lovely and important as they are in their own right, are not only about good feelings. They are essential to creating opportunities for the deep and transformative intellectual work we hope to see all participants—youth, undergraduate mentors, graduate students, and faculty—take up. Making and tinkering activities are not always profound—many maker activities hew to the familiar formula of a step-by-step guide, or provide only marginal opportunities for personalization of an otherwise turnkey project. While there can be value in such activities, they are limited. We are most interested in versions of making and tinkering that invite participants into a much more expansive proposition, one that suggests that all people ought to have the chance to see their worlds as designed and to envision themselves as designers, capable of bringing their ideas to fruition.

Such a vision requires a focus on a sense of belonging, for we do not meaningfully engage people as designers until we honor and engage their rich and varied assets—their strengths, ideas, hopes, cultures, and knowledges—and these assets can and will only enter collective spaces when community, connection, and belonging create opportunities for them to do so. Learning environments focused on making and tinkering must therefore be as much about building relationships as about building things, both in reciprocal relation with one another, making connections across whatever divides we face.

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Rising with the Tides of Change Through Community Based Literacies

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Prior to March 2020, our maritime community of youth and undergraduate co-learners *were exploring our marshlands and researching how oil rigs impact (and possibly support) marine life. We were building an outdoor movie theater to watch how plastic finds its way into our channel. We were writing books about our maritime community and the too-often invisible work of women and transgender scientists who have contributed to new*

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understandings about the impacts of climate change on our local environment. We were planting, gathering, painting, designing, and representing. On March 17, 2020, everything shut down as a result of the COVID-19 pandemic. Up to this unforeseen moment, our multi-program team of program leaders, graduate student coordinators, and undergraduate facilitators, all of whom work within the initiative called Community Based Literacies (CBL) in Santa Barbara, California, were exploring a number of place-based interests and curiosities with local youth from respective partnering elementary school and after-school programs. Such collaborations came to an abrupt halt on that fateful day in March, necessitating a different plan for maintaining our mission to empower our young co-learners to engage in collaborative, creative work as authors, artists, environmental stewards, and activists that have much to contribute to our community.

INTRODUCTION

Community Based Literacies (CBL) is a multi-program initiative for local multilingual youth living in a coastal community in central California, providing opportunities to critically explore and participate as equitable members that contribute to the understanding and wellbeing of our community. This chapter presents an account of how our intergenerational university-community team pulled together during intersecting challenges of COVID, sociopolitical upheaval, and extreme environmental conditions to connect with and engage in meaningful experiences with our local community of youth and families. Our efforts involved major shifts from in-person to virtual explorations and collaborative projects (e.g., an anthology co-authored by youth) with an even greater emphasis on social activism and celebrating the experiential knowledge of youth that is often overlooked. Hence, this account traces our journey through one of the most difficult periods in modern history without compromising our core programmatic principles of agency, co-learning, and belonging. The graphical overview (Fig. 10.1) provides a broad sketch of this multi-programmatic initiative.

During 2020–2021, 132 youth living in a multilingual community that broadly identifies as Latinx/Chicanx participated in CBL through partnering school-based or after-school programs. Biweekly sessions in each site centered on interests and concerns related to local environmental issues such as the ongoing drought in California that has led to an onslaught of firestorms. A key trait of CBL is intergenerational learning,

Our Community of Practice

Community Based Literacies (CBL)

Goleta Boys and Girls Club
Located in the heart of 'Old Town Goleta', this club serves are most vulnerable family residents, providing free meals in addition to afterschool programming for youth.

Santa Barbara Unified School District
Serving a total of approximately 13,000 students across 21 schools, this district agreed to a CBL collaboration at one of their elementary schools, which has one the highest percentage of multilingual students.

McEnroe Reading and Language Arts Clinic
Housed within UC Santa Barbara, this clinic serves as the main conduit through which all other CBL programs engage in activities and projects when visiting the campus.

Santa Barbara is a tale of two cities, one of which is more 'hidden' from public knowledge. Only a few miles separates movie stars and recently transplanted royals from communities striving to make ends meet. Of the nearly 89,000 residents, more than 47% identify as Latino/x with Mexican descent. More than 90% of Latinx, multilingual youth attend public schools and are eligible for free lunches. This region was host to the very first Earth Day in 1970, which was inspired by a catastrophic oil spill in 1969. Environmental awareness and activism is woven throughout CBL programming.

Interdisciplinary literacies (reading, writing, knowledge building, and communicating) for community engagement. Young CBL members are considered 'co-learners' who both learn from and teach university members (students and faculty) as well members of the broader community.

Fig. 10.1   Graphical overview of community based literacies (CBL)

which begins with discussions about shared interests and curiosities that highlight locally relevant interdisciplinary concepts. Initial activities focused on building a sense of regard and trust among members. Once a foundation of trust was established, co-learners engaged in myriad inter-disciplinary literacy activities–reading, researching, discussing, and writing about local environmental issues such as the vast amounts of fertilizer and microplastics that have made their way through our withering waterways to our ocean. All activities were sources for creative work in both English and Spanish. Like previous years, we encouraged young students to par-ticipate in knowledge building that is anchored in place-based practices less commonly available in schools.

The overarching trio of CBL principles–agency, co-learnership, and belonging–guided the decisions we collectively made in order to stay true to who we are as a community. Young participants were positioned as *co-learners* with undergraduates, most of whom were pursuing a minor in

education. Graduate student coordinators and lead faculty modeled and encouraged co-learning teams to raise questions that reveal hidden inequities about local issues such as the dumping of debris on public beaches following post-fire mudslides. (See UCSB's post, "Mudslide Microbes," here: https://uclinks.berkeley.edu/chapter10.) This goal is echoed in Y-PLAN programs described in this volume; a common value our respective programs share is acknowledgement that youth can be agents of change within their community. Such critical, collaborative approaches were informed by sociocultural, critical theories of literacy (Lewis et al., 2020) and a Funds of Knowledge framework that emphasizes the importance of community-based knowledge and expertise in learning (González et al., 2006). The democratic positioning of CBL members reflects a steadfast commitment to diversity, equity, and inclusion foregrounded in the introduction of this volume.

Youth and undergraduates shared similar cultural and linguistic roots. More than 85% of K-8 students in our community are from working-class families within a predominantly Latinx/Chicanx neighborhood near the university and speak at least some Spanish at home. Our university is a Hispanic Serving Institution (HSI); nearly half (49%) of undergraduates enrolled in CBL-related practicum courses in 2020–2021 identified as Latinx/Chicanx and also reported speaking some Spanish, Mixtec, Zapotec and other languages indigenous to Mexico. Such cultural and linguistic diversity is a welcome resource to our learning communities given that the vast majority (~70%) of local public school teachers are white and speak only English.

This chapter offers readers a 'spotlight tour' of CBL programming during a tumultuous period. See works led by Cano and Arya (2023), Arya et al. (2022), Arya et al. (2022), Cano et al. (2021), Hirsch et al. (2021), Muller et al. (2021), and Nation et al. (2019) for more in-depth descriptions about the CBL framework and its impact on participants. Here we share parallel tales of perseverance and transformation of three key CBL programs—*LEAFY* (*Literacies for Environmental Awareness and Farming for Youth*), *Curie-osity Project*, and *CBL in the Schools* (a partnership with Santa Barbara Unified School District) to show what possibilities abound when we collaborate with young co-learners on key societal issues that in turn contribute to the transformations needed for a socially just and equitable society.

Virtual conferencing narrowed the ways in which members of the three programs could gather and engage in programming activities. However, we also found it liberating in terms of how youth and undergraduate co-learners explored various digital and synchronous spaces, particularly those

beyond the local context. Similarly, a new initiative we developed to bring young co-learners across CBL programs as well as across the University-Community Links (UC Links) network–*Youth Summit (YS)*–emerged from the ashes of the Curie-osity Project, which abruptly ended in March 2020. Figure 10.2, representing a kind of walking tour map, outlines the programs featured in our tour of trials and transformation.

1. **Literacies for Environmental Awareness and Farming for Youth—LEAFY** (https://www.cbleducation.org/leafy). Third through eighth-grade members of the local Boys & Girls Club were invited to participate in this program. Undergraduate co-learners associated with this program engaged in environmental activities that included explorations of the surrounding natural environment and gardening/farming. Art projects (e.g., visual displays and poetry) were integral to such activities, shared in periodic, 'open-house' family events. Upon the onset of the pandemic, the leadership team created an alternative online program called *Nature Near You—***NNY**. (Watch the "Nature Near You" video here: https://uclinks.berkeley.edu/chapter10.) During NNY sessions, young co-learners were invited to direct a guiding facilitator within a natural environment (e.g., forest in Costa Rica) through Zoom. NNY became a featured activity of the first Youth Summit in 2021.

2. **CBL in the Schools (CBL-School).** Fourth through sixth-grade students engaged in co-researching, drafting, peer editing, and publishing a multimodal anthology (i.e., print-based essays, stories and poetry as well as video reflections and documentaries) about environmental topics and issues related to the local maritime community. (Watch the CBL-School video here: https://uclinks.berkeley.edu/chapter10.) All sessions occurred online following the onset of the pandemic. Young co-learners participated in both **NNY** sessions and the Youth Summit. (Watch "Nature Near You Kids' Edition" video here: https://uclinks.berkeley.edu/chapter10.)

3. **Curie-osity Project—(https://www.cbleducation.org/curie-osity).** Fourth through twelfth-grade members of two local Girls Inc. sites participated in explorations of STEM-related topics and issues through connections with STEM professionals at our university. Co-learners collaborated in researching, writing, and publishing accounts of their explorations using interview data they collected. Curie-osity Project (CP) sessions paused after the onset of the pandemic due to a significant overturn of leadership. (Watch the

Fig. 10.2 A 'walking tour map' of Community Based Literacies (CBL) programming

Curie-osity Project video here: https://uclinks.berkeley.edu/chapter10.) The coordination team chose to pivot programmatic goals to act more globally across all remaining CBL programs. This shift led to the creation of a community newsletter and the first virtual gathering of the *Youth Summit*. **(Watch the Youth Summit 2022 video here: https://uclinks.berkeley.edu/chapter10.)**

Each of these 'mini tours' are anchored by a common set of questions about the people involved in each program and how they are equitable partners in building locally relevant knowledge about and creating innovative tools and approaches for addressing a rapidly changing world. We include images, video links, and quotes from participating members to provide a transparent representation of multilingual, intergenerational learning. Each mini tour focuses on one CBL principle, collectively telling the story of our efforts to connect and create with our young co-learners during the pandemic. While we were unable to learn, play, and create within the same physical space—as shown in Fig. 10.3 from an earlier LEAFY session—we found ways to connect through virtual portholes that took us further than we originally expected.

Branching Towards New Virtual Ground (Agencia en LEAFY)

Estefanía Pihen González
John Cano,
Matthew Shackley

Literacies for Environmental Awareness and Farming for Youth (LEAFY) emerged in 2017 from an existing partnership with a local after-school program located less than two miles from our university. This partnering site (the Club) is affiliated with the *United Boys & Girls Club of America* and is one of approximately 10 affiliated clubs within the Santa Barbara area. The surrounding town is home to some of the oldest family-owned businesses in the Santa Barbara region (Goleta Chamber of Commerce, 2019). The Club resides behind a community center that offers family services and temporarily housed evacuees from the devastating 2019 Cave Fire near Santa Barbara's Los Padres National Forest.

This historically recognized town is home to a number of undocumented residents from Mexico. The linguistic landscape is infused with variations of Spanish and Mixtec. Shoppers can often hear *música ranchera* playing softly in the background, purchasing ingredients one cannot

Fig. 10.3   LEAFY poetry session in progress

generally find beyond the Mexican border. In 2018, US Immigration and Customs Enforcement (ICE) included this area in a 3 day raid. The Club was one of few safe spaces for community members, providing guidance and resources for navigating confrontations with ICE agents. The majority of youth at the Club live in working-class homes and are eligible for free lunches at the nearby school. The Club continues to be a key food distributor to families living nearby.

In 2020, 16 young co-learners (14 elementary and two high school students) attended weekly sessions in what we call the *vivero*. This outdoor space was once the Club's alleyway, filled with plastic packaging from lunches, broken furniture, and remnants of cardboard. We transformed this space into an edible garden that began with the expressed desires and interests of our young co-learners. (Watch the Edible Garden video here: https://uclinks.berkeley.edu/chapter10.) What fruits and veggies should we plant? What do we want to explore? What do we want to learn? As in all our programs, we collectively decided what we planted, what we built, and where we visited in our maritime community. We needed more places

to sit and relax. Could we plant maracuyá? Yes, we certainly can. Young co-learners harvested, prepared, and ate vivero-grown organic salads, all with their own hands based on their own ideas and goals, which included building an outdoor movie venue from upcycled wood pallets in order to watch the documentary, *A Plastic Ocean* (Leeson et al., 2016) while munching on popcorn from the Club's kitchen.

We listened and encouraged action from young co-learners who grew more trusting and confident in expressing their curiosities and desire to protect the surrounding natural environment. Such expressions ranged in scope and focus, from grand questions for our era (*How can we save our planet?*) to the more everyday logistics (*Where can we hang our backpacks?*). Similar to other CBL programs, LEAFY co-learners collectively determined program outcomes–what to plant, build, create, learn, and share. All young co-learners had unmatched knowledge and experience, and hence were essential contributing leaders in our community (Figs. 10.4 and 10.5). Young co-learners had shared power and authority with

Fig. 10.4   LEAFY
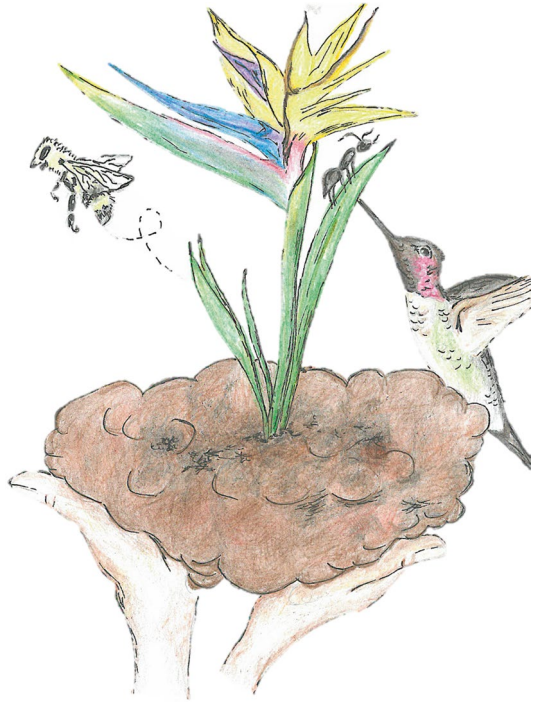
Fig. 10.5 Images from LEAFY sessions

undergraduate and graduate students, weighing in on options, working with financial and scheduling constraints and available resources (e.g., reserving recording equipment or e-tablets).

Young co-learners recorded salient moments through video/audio footage and kept personalized plant journals. They had final say in what information would be included and illustrated in published works and presentations for community audiences. Such agency has been highlighted in research across disciplinary, school-related contexts including mathematics (Brown, 2009), science (Cavagnetto et al., 2020), and literacy (Arya, 2022; Moje & Lewis, 2020) as well as in informal, after-school contexts (e.g., Rappa & Tang, 2017). Furthermore, the agency we emphasized was one of social transformation; the creative work produced by co-learners stemmed from curiosities and concerns about the ways that local residents can support and benefit from the surrounding environment. Through sharing and discussing life-supporting resources to the broader community, young colleagues developed both the mindset and leadership skills of environmental stewards, hence transforming into citizens committed to fostering a better world for all forms of life (Hopwood, 2022). Our practices deliberately involve a social dance among natural and digital artifacts as exemplified by the plant diaries represented in Fig. 10.6.
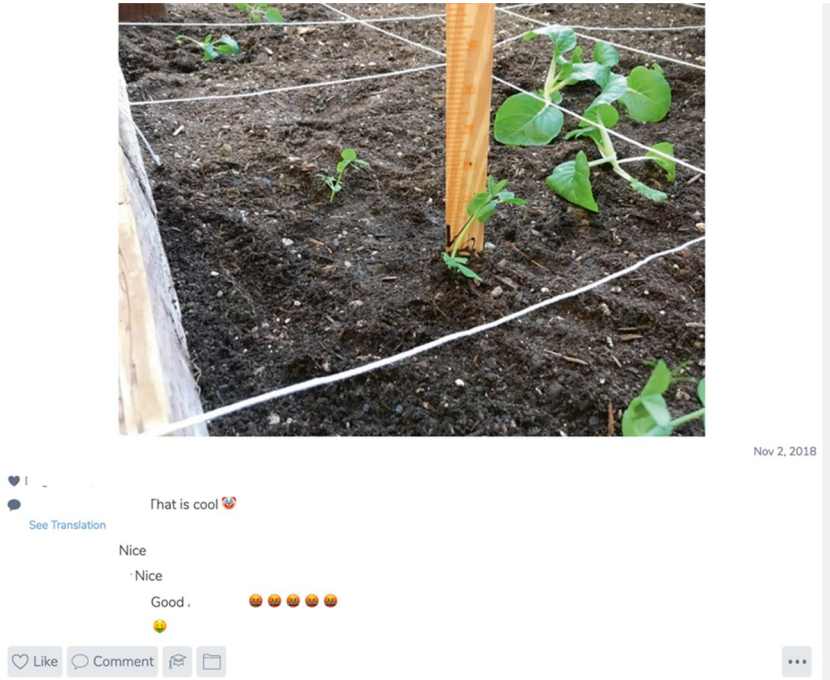
Fig. 10.6   Digital plant journaling and interaction

On March 17, all creative efforts stopped, just before the university's spring break. The onset of the COVID-19 pandemic seemed to happen in slow motion and then all at once. Upon our return from break, we thought programming would be paused for another 2 weeks. Yet 2 weeks became 2 months, with the Summer fast approaching. In collaboration with our partnering leaders at the Club, we contributed to and shared a CBL digital newsletter with youth and family members sheltering in their homes. We coordinated a monthly at-home maker challenge through this newsletter (Fig. 10.7), encouraging recipients to upload videos of their creative work that we shared in subsequent issues. Rube-Goldberg machines filled our screen; marbles rolled through fantastical obstacles constructed from rolled newspaper and rubber bands. The potential of youth filled the digital pages, showing that if given the opportunity, our young co-learners can create light during dark times.

Fig. 10.7 Spanish excerpt from a CBL newsletter issue

One of our greatest successes stemmed from an experiment a couple of months into lockdown. What would happen if a lead coordinator ventured into her backyard and offered a tour to co-learners via Zoom? After some discussion and planning with program leadership, the first session of *Nature Near You* (NNY) came to fruition. If we could not explore together in person, we would figure out a way to bring nature up close to online attendees, who seemed to welcome new views beyond bedrooms, kitchens, and living rooms. Young co-learners were active viewers of nature videos and agents of virtual exploration in real time. During each exploration, young co-learners guided our field of view. NNY hosts selected places with potential for encountering various forms of life, opening eyes and ears to the natural world in need of passionate stewards (Fig. 10.8). Our co-learners had a front-row seat to the symbiosis

Fig. 10.8 Virtually exploring nature
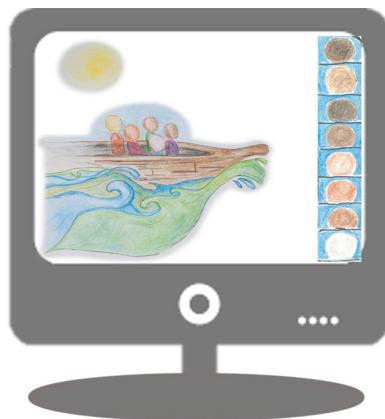
demonstrated by wood ants navigating the grooves of a tree's trunk. The first series of virtual explorations took place along the coastline of Ventura and Malibu, showcasing local tide pools, beaches, and estuaries. Virtual explorers spotted and questioned the perils of plastic remnants near marine birds hunting for small bivalves along the shoreline. Our young co-learners took in the beauty of estuaries, how the brackish water provides unique habitats for plants and animals that could not thrive elsewhere. They also took in the debris collected at this sacred zone of both freshwater and ocean, wondering what perils the discarded plastic cups and candy wrappers have on the life they were observing. Such explorations led to more questions about the impacts of single-use plastics and the importance of environmental stewardship. Discussions about observed phenomena led to insights into and explanations for the ways our sociocultural, sociopolitical, and economic issues are connected with the health of life on our planet.

We noticed a steady increase in virtual attendance over time, which inspired us to select locations beyond our local community. One of the coordinators (Pihen) took advantage of pre-scheduled international trips by zooming us into the lush jungles and rivers of Costa Rica and the dense tropical forests of Nicaragua. We also Zoomed our young co-learners back to our campus, guiding their eyes around a microbiology lab. As NNY sessions continued through the 2020–2021 period, youth from across

California and beyond–including Vancouver and Costa Rica–tuned in each week to explore new sights and sounds. This expanded audience was made possible by relations and previous work affiliations of our coordination team and afforded access to natural spaces farther from home, leading to deeper discussions of commonalities and differences across geographic regions. Showcasing spaces merely required a co-learner to step outside their door, making nature accessible to everyone. A shared awareness grew from such virtual discussions, particularly about the number of hidden, local natural spaces that are free and open for public use. Co-learners were becoming agents of their own natural explorations, hence maintaining the programmatic goals that originally guided LEAFY activities and projects.

After our return to in-person programming in Spring 2021, we decided to continue our popular weekly virtual NNY sessions. Co-learners gathered at the Club's computer lab to participate in virtual nature walks, this time as a whole group viewing the experience on a big projector screen. This new setup allowed for underwater explorations of unique and protected marine places, including Santa Cruz (Limwu) Island and La Jolla Cove. We began collecting a repository of pre-recorded explorations in order to visit various natural spaces and better prepare for discussions. We viewed and discussed recordings of swaying kelp forest in our channel and discussed how the increased intensity of storms have imperiled their survival. Co-learners also viewed schools of fish, playful seals, sleeping sea lions, and colorful sea stars up close on the large screen. This repository provided the explorer and site-based coordinator with different opportunities to engage students; young co-learners asked for the videos to be paused when they had key questions or comments. The array of insights and curiosities that emerged during these sessions fostered systemic thinking about living environments (e.g., the mechanics of a biome), even among the youngest co-learners (kindergarteners). We collectively wondered about the role of kelp in climate mitigation, why sharks were not a concern for the underwater explorer, and why large-scale fishing was damaging the underwater world they were observing (Fig. 10.9).

As pandemic restrictions continued to shift during 2021, we noticed the effects of 'Zoom fatigue'; young co-learners seemed to struggle in maintaining their focus on the screen and the number of attendees began to wane. They expressed interest in exploring phenomena that they could actually touch. We expanded NNY practices to include hands-on explorations by bringing in marine life, like sea kelp and lobsters, in a cooler of ocean water. Young co-learners connected their new

Fig. 10.9 Nature Near You session in progress

tactile knowledge (*the kelp leaves are so bumpy!*) with imagery of the swaying kelp forest in previously recorded virtual sessions. As demands for NNY visits grew across programming sites, the number of undergraduate facilitators and researchers expanded, resulting in more mentoring opportunities and hybrid explorations at local botanical gardens, beaches, and various patches of untouched land. Moving forward, LEAFY and NNY will continue to coexist to provide a more comprehensive, transformational experience for our young co-learners who must develop the agentive skills of environmental stewardship if we are to sustain life on Earth.

Making Waves with Coastal Literacies (Aprendizaje Colaborativo en la Escuela)

Dogukan Ozgen
Valerie Meier

Our partnering elementary school (*the School*) has been affiliated with our university's graduate school of education since the early 2000s, beginning with nominal connections such as co-sponsored school supply drives and annual field trips and evolving more robust programs like our Community-Based Coastal Literacies program. The partnership began in 2019 with a grant from the California Library Association. Seventy-five fourth- to

sixth-grade students and their teachers participated. Our young colleagues at the school engaged in weekly sessions with their undergraduate co-learners, reading and discussing ideas and information from textual media ranging in both genre (research reports, interview articles, poetry, etc.) and modality (printed texts, infographics, podcasts, etc.). In Fall 2019, we were in the beginning phases of the co-authorship grant, building a complex, multi-site experience for all developing co-authors. Field trips were a key component of this program; our young co-learners visited our campus on a weekly basis for engaging in interest-based, small-group research and reading discussions and visits to various campus locations for gathering information related to marine science. We found that such campus visits were invaluable for fostering equitable, collegial relationships among elementary and undergraduate co-learners (Fig. 10.10). Over time, we observed a growing confidence and comfort among the young co-learners in making assertions and editorial decisions about activities and projects. After a couple of months of campus visits, we observed a greater willingness to share curiosities and experiential knowledge that served as a foundation for collective knowledge building. (Watch the CBL-School video here: https://uclinks.berkeley.edu/chapter10.)

The school is further from campus than the Club; the added distance (10 miles) poses a challenge for our undergraduate co-learners who have packed class schedules and uneven access to transportation. Similar to the Club's youth members, the majority of students (more than 85%) attending the school are from working-class families with Latinx/Chicanx roots and live in subsidized housing within driving distance to the school. The gentrified neighborhood surrounding the school features tree-lined streets and renovated, craftsman-style bungalows. Most children attending the school are bussed in from subsidized housing a few miles away. The segmented topography of this part of the city prevents easy access to community resources; traffic barricades and freeway on- and off-ramps divide the school from the community.

Similar to previous years, our coastal literacies program focused on a shared goal with our partnering school leaders to support the literacy development and overall academic growth of students in Grades 4-6. Our undergraduate co-learners took a practicum course earlier in the Fall that centered on collaborative learning and researching with a goal of fostering multilingual reading and writing practices. They learned about various assessment and instructional approaches, including a reading discussion tool called the CRUSH-it Model (Arya & Meier, 2022), a heuristic for

Fig. 10.10 Community Based Literacies at the school

guiding small-group dialogic discussions in a way that positions young students as knowledgeable contributors.

We also encouraged our elementary and undergraduate co-learners to search for hidden biases or authorial assumptions in order to question the author's intentions and what (or who) may be excluded in their accounts. We were inspired by socio-constructivist scholars (e.g., Jha & Devi, 2014; Nanjappa & Grant, 2003; Sandoval et al., 2022; Vygotsky, 1978) who view learning as a meaning-making process in which stakeholders actively participate in the creation and recreation of knowledge. In a socio-constructivist learning context, no single person has the 'best' knowledge

or expertise; each member of the learning environment brings an array of skills, knowledge as tools for collective knowledge building. We learn when we allow ourselves to be supported and challenged by others we trust, and when others trust us to do the same.

As at the Club, all visits to the school stopped on March 17, 2020. Our undergraduate co-learners were limited to Zoom sessions with their young colleagues for the remainder of the year. We lost touch with sixth-grade co-learners after their teachers decided to exit the authorship program because of the demands on them during that time. For the first two months, most of the remaining fourth- and fifth-grade co-learners (50 in total) Zoomed in from their homes. Wi-Fi connections were intermittent at best, mirroring reports across our country; half of working-class families reported the dependence of a single mobile phone for their entire family, including children, for connecting with work- and school-related activities (Schaeffer, 2021; Tackie, 2022). A number of young co-learners were limited to using their caregivers' mobile phones, their families' sole connection to the Internet, to attend CBL sessions. Absenteeism became an issue, further debilitating our efforts to engage young co-learners who were either sick from the virus or sick and tired of trying to log into sessions that resulted in little more than being disconnected from the Internet. Small victories were achieved during this challenging time; undergraduate co-learners applied every possible tool for connecting with and learning from their young colleagues, including the use of emoji reaction options in Zoom for checking to see how group members were feeling. The Google Jamboard application was useful for collective brainstorming ideas and reactions during reading discussions, collaborative art projects, and impromptu games like Pictionary.

We believe that a saving grace was the foundation we established with our young co-learners prior to the shuttering of in-person programming. Absences became, according to school leadership, far less frequent compared with other grades at the school. Cooperating teachers noted near-perfect attendance on days that we met online. We attribute this to the fact that our co-learners had gotten to know and appreciate one another during in-person gatherings. They knew who was the oldest and youngest in their family. They shared stories about losing beloved pets and family members (Fig. 10.11). They had compared scars from climbing trees and biking accidents. They had become a kind of family, one in which members appreciated each other just as they were. Hence, we maintained our efforts to learn from each other.

Fig. 10.11 Cover of anthology written by young co-learners at the school

We invited our young co-learners to continue their free associations with various textual phenomena that we displayed through the Zoom-enabled screen-sharing tools. One young co-learner spoke through his mariachi puppet to report on video footage of a deep-sea exploration. Younger siblings and pets offered welcome segues for synthesizing ideas discussed during the session. A cat could serve as an innocent bystander to breaking news about our dying coral reef. A two-year-old sibling provided young co-learners with the challenge of engaging the younger visitor long enough to count dolphins leaping along a motorboat. We grasped at every opportunity to engage, connect, and weave in contributions from co-learners to maintain progress on drafts for the anthology of written work

that would be due in June. We were one of only two schools awarded by the library association that year that successfully completed the authorship program.

In-person programming resumed in May 2020, during the final few weeks of the school year. All sessions took place outside at the school; our university remained closed to all in-person activities. Half of the undergraduates attended in person; the other half attended online. This hybrid design was a challenge due to unstable Wi-Fi connections. The school set up large tents along the perimeter of the campus, providing shade for students who sat at makeshift tables from large plastic bins filled with notebooks, pencils, and basic craft supplies. Students were prohibited from using playground equipment, which soon became a foundation for fashioning messages of hope that swayed in the breeze (Fig. 10.12).

Site-based attendees were required to wear masks at all times, necessitating co-learners to project their voices. Yet, we managed to complete our first anthology, thanks to the relationships that we fostered with our young co-learners and the tireless commitment of our partnering teachers who kept in touch with the program (Fig. 10.13).

Fig. 10.12 Wishes from young co-learners written and hung on playground structure
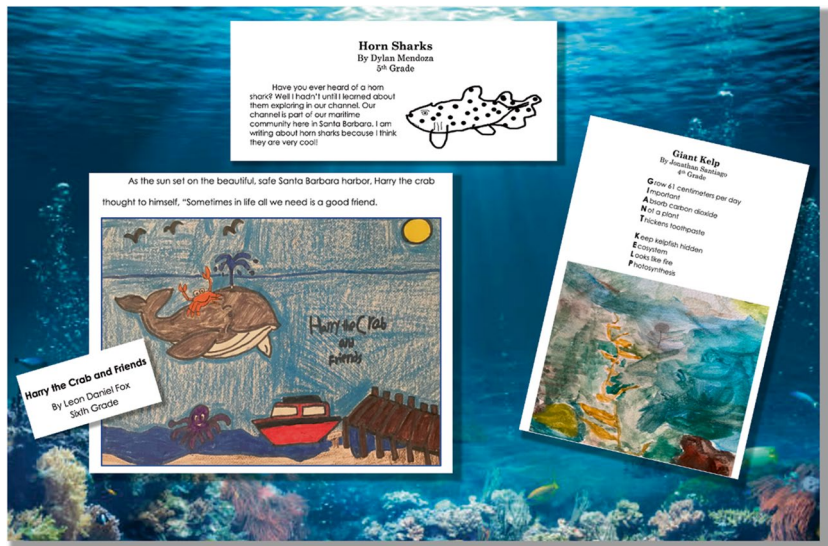
Fig. 10.13   Excerpts from the student anthology

Revolutionizing our Curie-osity (Perteneciente a Nuestra Comunidad)

Devon M. Christman
Alexandria Muller

The Curie-osity Project was a thriving, locally renowned university partnership program with two local Girls Inc. chapters, one within a few miles of the university and the other more than 10 miles away in the center of the city. The program during 2019–2020 involved 26 Girls Inc. members in Grades 4-6 as well as eight members of a new teen branch. The demographic landscape of original and teen programs matched those of the previously featured CBL programs; more than half of our young colleagues identified as Latinx/Chicanx. During this eventful year, we sought to continue our award-winning work in connecting our young co-learners, who we often refer to as *Curie-ositers*, with university scholars, STEM professionals, artists, and community leaders. We planned to engage our 26 elementary Curie-ositers in another co-authoring, bilingual project eventually published under the title, *STEMinists in the Wild*: *Exploring life*

on a changing planet (https://www.cbleducation.org/work-by-youth).
This book publication was a culmination of a year-long research and writing effort of six women and nonbinary scientists and engineers within our university community who were studying the impacts of climate change. The 26 elementary Curie-ositers were the co-authors while the eight near-peer teens acted as research mentors, editors, and illustrators (Fig. 10.14). All partnering co-learners visited laboratories on campus weekly to interview professionals and explore what it is like to be part of a university community. We encouraged young colleagues to ask questions about everything they wondered or noticed during their visits: *How many people*

Fig. 10.14   Cover of book co-authored by Curie-ositers

work here? When did you know that you wanted to be a scientist? Did anyone ever doubt you? What do you like most about your job? Hence, we encouraged our Curie-ositers to be, well, curious about our professional community. Our participating STEM professionals with diverse expertise (marine biology, microbiology, chemistry, and engineering) expressed glee in seeing their younger selves exploring data and looking through microscopes while asking endless lists of questions.
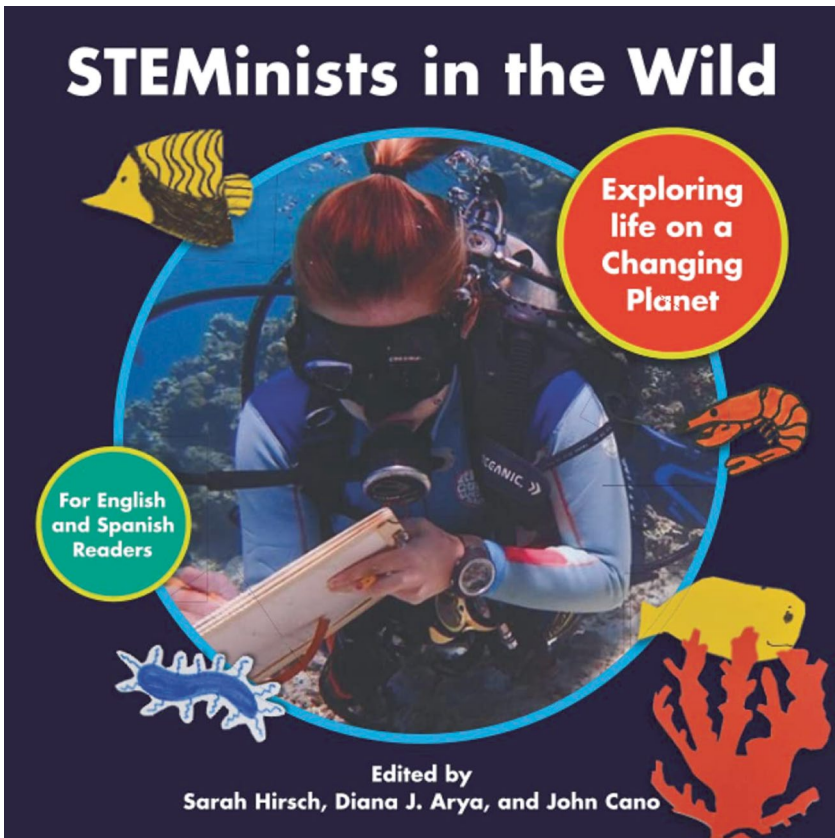
Our program activities were centered around the CBL principle of belonging. The more young co-learners feel like important, contributing members of a community, the greater their sense of belonging, in our case to the STEM community on our campus. Our thinking about notions of belonging was informed by research on supporting marginalized groups such as LGBTQIA youth and students of color (e.g., Ezikwelu, 2020; Ratts et al., 2013); combating stereotypes that inhibit cultural and gender inclusivity in STEM learning (Master et al., 2016; Nation et al., 2019); and fostering a sense of belonging in online learning communities (Lowenhaupt & Hopkins, 2020; Xie et al., 2020). A typically expected outcome across such studies is academic achievement and the value of inclusive efforts to ensure postsecondary success (e.g., DeNicolo, 2019; Greenwood & Kelly, 2019). However, for CBL programs like the Curie-osity Project, intellectual growth is secondary to our goal of embracing and appreciating our young co-learners as they are. While programmatic activities are collaborative, each individual plays a valuable role. If they were absent during a particular session, we let our younger Curie-ositers know that we missed them.

During Fall 2019 and Winter 2020, we designed activities with the intention to foster a sense of membership within the university's scientific community. We started with initial introductory meetings at the partnering sites in order to clarify interests and experiential knowledge. We used this information to organize our Curie-ositers into small-group configurations, matching them with undergraduate co-learners with similar interests and backgrounds (Fig. 10.15). Our weekly sessions began with team-building activities; each of the Curie-osity groups, for example, created a flag that reflected the shared interests and identities of group members. Each team crafted a set of interview questions for their assigned featured STEM professional that approximated their interests, hence increasing a sense of affinity and sense of belonging. Young co-learners assumed the role of lead researchers, helping to equalize the balance of power and experience during the weekly visits by becoming important

Fig. 10.15   The Curie-osity project

members of a STEM community that were largely invisible to public audiences (Nation et al., 2019).

During this period, CBL program leaders and teen co-learners were also developing a new initiative called the *Youth Summit*, which was funded by UC Links to take place in May 2020. The purpose of the Youth Summit (YS) was to provide a culminating event for members across all

CBL programs to learn from one another and collectively celebrate all that was accomplished during the year. In between tours with STEM professionals, teen colleagues worked together to develop marketing materials for the YS event, including logo and T-shirts designs. Figure 10.16 features the logo designed by our organizers.

Program closures due to the COVID-19 pandemic in March 2020 prompted us to strategize next steps for maintaining the Curie-osity program and alternatives for our YS gathering. As it became clear that we would not be returning to campus anytime soon, leaders from Girls Inc. and Curie-osity agreed to cancel the program for the remainder of the academic year. While Girls Inc. transitioned to serve as a food distribution center for the broader community, our university team worked on the completed initial drafts for our book publication. We also used the additional time and space to think about the inaugural YS gathering scheduled to take place in May 2020.

Similar to the previously mentioned CBL programs, our efforts to connect entered virtual territory; Girls Inc. leadership asked the Curie-osity team for support in providing asynchronous science and art activities for the younger girls as well as virtual activities for teens and undergraduate
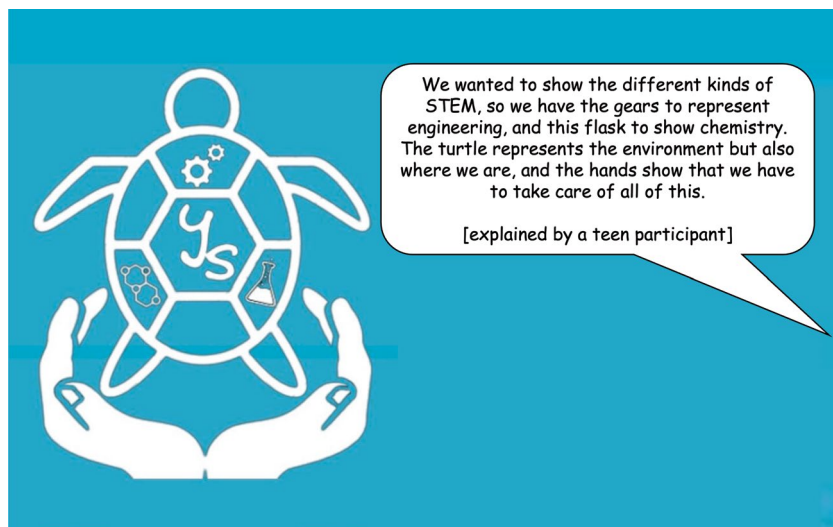
Fig. 10.16 Creating the youth summit logo

co-learners. We set up blog sites and shared various home-grown tasks (e.g., coloring book pages and video guides for home experiments) through the CBL newsletter (Fig. 10.17). Girls Inc. leadership expressed appreciation for our efforts to connect with their young members. However, we soon learned from the regional program director that the organization was facing significant economic challenges, prompting a downsizing of operations and staff. This director soon left the organization along with other key program leaders and staff members. In losing such leadership, our university team essentially lost contact with Girls Inc. and our Curie-ositers.

We learned a few valuable lessons from the loss of our partnership. First, we learned that a program can end at a moment's notice regardless of previous successes or how much the broader community may benefit from it. We also learned that a sense of belonging *must* sustain institutional shifts and as such, we became aware of the importance of conveying through all programmatic actions that all youth are important members of our community, that the university can be a place for all who are curious, creative, and passionate about protecting our Earth. Such a beacon must be able to withstand the shifting of partners and programs. And finally, as other CBL coordinating teams learned, a sustainable community-based
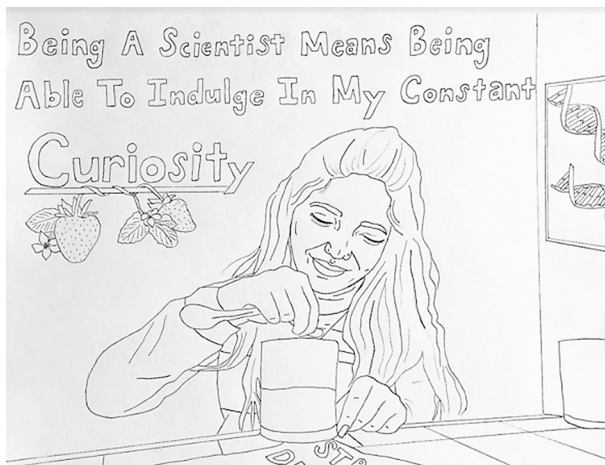
Fig. 10.17   Coloring page from a CBL newsletter issue

program must effectively translate across modalities and spaces, particularly when we are limited to remote (virtual) connections.

We reconfigured our team of undergraduate mentors into two complementary efforts: research and community outreach. Having a cohort of up to nine undergraduates focused mainly on research enabled us to dig into data records (survey responses, creative works, recorded interviews, etc.) spanning 4 years of programming. The pause in our partnership opened an opportunity to engage in a comprehensive retrospective with our undergraduate colleagues that was not previously feasible due to the demands of ongoing programming. Prior to the onset of the pandemic, undergraduates took part in various research-related tasks, but now we had the time and space to engage our team from the very beginning. The program leader (Diana) led a series of virtual discussions about the development of research questions, theoretical frameworks that celebrate the experiential knowledge of youth, and analytic approaches that align with such frames. What transpired was 15 conference presentations about a range of topics, such as the benefits of STEM-related programming for youth (e.g., Clemens et al., 2020), and particularly for girls and nonbinary students (Chen et al., 2020). We believe that such deep involvement in research fostered a stronger sense of belonging among our undergraduate team members who are often relegated to isolated research tasks without mentoring support (Chamely-Wiik et al., 2020). Team members expressed appreciation for such research mentorship that inspired four to pursue graduate studies after graduation.

Our community outreach team involved 19 undergraduates over the course of three academic quarters who joined brainstorming sessions on how we could resurrect the Youth Summit event that was canceled in Spring 2020. We had a new goal: designing a meaningful, virtual experience for youth to share their knowledge and experiences, learn from others, and have fun (Fig. 10.18). These brainstorming sessions led to the creation of the first University-Community Links Youth Summit, an online space for global youth to interact with their community and learn about how others are making change in their communities. The inaugural UC Links-sponsored Youth Summit on May 20, 2021, hosted 50 participating youth and community partners from across the United States, South Korea, and Japan over a virtual platform. (Watch the Youth Summit 2021 video here: https://uclinks.berkeley.edu/chapter10.) Over the course of 2 hours, youth shared community values in their native languages, played online drawing and guessing games, discussed stewardship
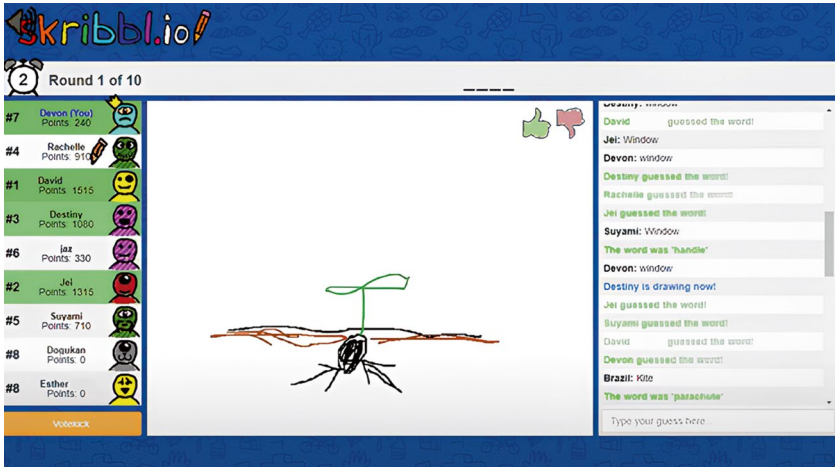
Fig. 10.18 Taking turns drawing and guessing images during the 2021 Youth Summit

efforts in the local environment, explored the ocean in a *Nature Near You* session, and let loose at a virtual dance party. We also built an online platform (https://uclinksyouthsummit.carrd.co) for UC Links partners living in time zones that precluded real-time participation. The community response to the Youth Summit affirmed our hopes for making the Youth Summit a yearly event for youth affiliated with all our University Community Links partners.

The efforts we made to offer a meaningful experience for virtual attendees in 2021 were helpful in developing a hybrid Youth Summit event on May 27, 2022. Local youth members and their families were invited to a three-hour, in-person celebration featuring arts and crafts, aquatic touch tanks from our campus-housed aquarium, presentations from young co-learners, a catered dinner, and a dance party. During this in-person event, participants from across California and beyond participated virtually in events. In-person attendees acted as youth ambassadors for virtual attendees, managing live-streaming portals (i.e., operating Zoom rooms via iPads) to the opening ceremony, which involved introductions, a smudging and blessing from two graduate students with native roots. Ambassadors also provided virtual tours of the in-person presentations, craft room, and touch tanks. (Watch the Youth Summit 2022 video here: https://uclinks.

berkeley.edu/chapter10.) The life and energy brought to the Youth Summit through participating youth and UC Links partners created a feeling of community and sense of belonging that all CBL programs strive to achieve. This sense of belonging was aptly described by a caregiver of a youth attendee:

> it was a wonderful sight to see the kids so excited and so proud, running around with smiles on their faces. I had the pleasure of witnessing their presentations, and was in awe of these young children standing up in front of a crowd, talking about their research. What an incredible opportunity they were given.

While the evolution of our work was unanticipated, our journey was nevertheless a priceless experience, learning what we can accomplish as a community that values all its members. What started as the Curie-osity Project for young elementary students expanded to involve leadership roles from teens as well as near-peer undergraduates. Our consolation for losing our connections with the local Girls Inc. chapter turned out to be an even greater prize—we found a way to make visible and celebrate the accomplishments of youth who were previously unaware what peers from other programs were learning and creating. We redirected our efforts to develop the Youth Summit, an all-inclusive celebration of belonging. Moving forward, we hope that the Youth Summit only grows to include more of our local community and UC Links family around the world.

DISCUSSION

Each programmatic story in this chapter contributes to our shared account on how we not only merely sustained but actually strengthened our ability to develop community-based programs that celebrate our young co-learners as equitable, valuable, and knowledgeable members of our community. The stories show our efforts to remain connected with young co-learners during the height of the pandemic, which challenged us to imagine how our principles of agency, co-learning and belonging would look like in virtual spaces. We took stock of what we had–Wi-Fi, Zoom, district-approved email accounts, digital applications, our backyards, and our creativity–and we made use of each resource. Emojis quickly became a communicative lifeline for co-learners featured as black boxes, yet eager to share their understanding. Across three interrelated programs, teams of

co-learners sought ways to use their knowledge and expertise, applying tools (Jamboard, Google Forms, 3-D recording equipment, etc.) to create experiences that are in turn shared with the broader community through our CBL newsletter.

A predominant takeaway from all programming efforts was the importance of working with and learning from each other. The Youth Summit served a similar purpose for young co-learners. Fourth-graders from our partnering school listened to digital presentations by co-learners at our Club, asking questions about creatures both mystical and real and ways to know the difference. Sixth-grade co-learners from the school presented their year-long projects to attendees that included university students and faculty. One of the intentions behind the Youth Summit was to foster a sense of belonging for all attendees that was not defined by a single organization or institution. Our community is shaped by our shared purpose and values that center on our young co-learners and the near-peer undergraduate co-learners who are encouraged to explore interests and passions and to collaboratively build new knowledge and innovations that in turn are shared with the broader community.

Each program tour we offer in this chapter demonstrates how a program can be shaped by particular community site interests and ways of being, learning, and creating together while also contributing to a shared vision with other program sites. We banded together during turbulent times of intense isolation and socioemotional/economic instability. Hence, to be sensitive to and inclusive of community interests and values doesn't mean that a university team led and facilitated by a single faculty member has to stretch themselves to uncomfortable degrees. Youth-based programming that is designed to involve community input in planning and shaping goals and activities can be challenging, but such efforts are also life-giving. Warmth seeped into Zoom rooms, displaying heart emojis, fantastical backgrounds (when bandwidth allowed), and chat messages sharing gratitude in multiple languages. Belonging is the cornerstone of CBL; before any efforts to explore, research, create, and so on, we connect. We listen. We *see* our younger selves and we celebrate how lucky we are to be learning from and with our co-learners. We show our appreciation by listening, encouraging, and building on their thoughts, which in turn strengthen the mutual trust needed for a thriving, active community. This is how we navigate the turbulent waters that will continue to surround us.

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Transforming Learning and Transforming Lives

Transforming Learning: First-Person Reflections from UC Links Participants

John Cano and Mara Welsh Mahmood

In this chapter we hear from differently positioned participants from a number of University-Community Links (UC Links) programs, both ones that are described in this book, and a few that are not. (See https://uclinks. berkeley.edu/ for more information about UC Links programs and the global UC Links network.) These participants responded to an invitation to share their experiences, in their own voices, in any way they chose. The nine testimonies that we cluster in this chapter illuminate how the UC Links experience transformed participants' views of teaching, learning, and research.

This chapter opens with two testimonials from a UC Links program that isn't otherwise represented in the volume: the Santa Cruz County Youth Action Network (YAN). YAN is another program that includes faculty from the University of California, Santa Cruz (UCSC): Saskias Casanova and Regina (Gina) Langhout (Psychology), Steve McKay (Sociology) and Jessica Taft (Latino and Latin American Studies). UCSC faculty partner with the United Way of Santa Cruz County as well as many other partner organizations (such as Jóvenes SANOS—"Healthy Youth"—highlighted in the

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testimonial below) to support youth in conducting participatory action research (YPAR). Through this work, young people throughout Santa Cruz County and UCSC undergraduate and graduate students engage in Community Initiated Student Engaged Research (CISER), which brings together students, researchers, and community partners to generate new knowledge, initiate community and policy-related dialog, and improve community wellbeing. YAN's work is currently focused on mental health.

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ADRIAN RAMIREZ
(UNIVERSITY OF CALIFORNIA, SANTA CRUZ,
YOUTH ACTION NETWORK)

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Adrian Ramirez
(High school student in Watsonville, California, participating in the Youth Action Network UC Links program (http://www.sccyan.org/)).

The first time I saw Jóvenes SANOS was at a youth fair. I joined in 2022. At the time I thought it would be good to try something out because I didn't have any other extracurricular activities lined up. My joining was on a whim. Jóvenes SANOS was the bridge to my experiences in the Youth Participatory Action Research (YPAR) program. Part of what kept me coming back were the things we were talking about that have importance, such as spreading awareness about mental health and being involved in activities I would not normally have the chance to do on such a scale. I think the YPAR program is an exceptional opportunity for middle and high school students to gain practical experience and make a difference in the community. Getting to communicate and work alongside UCSC students felt really special, even as the work was weighted more so toward the college students since YPAR met only once a month. Still, youth made the most important decisions, like picking the topic, how to collect information, and now, how we understand the survey results. Talking to UCSC students was not only interesting, but it also helped me understand why someone would be interested in the paths that they chose. I enjoyed handing out the survey and looking over the results. It was quite the experience learning how infuriating the process is of walking around the same place for a few hours, hoping that the survey takers actually read the questions. It was especially annoying when a Santa Cruz city council member said we could not approach possible participants, due to a "no soliciting" city policy, but we could talk with them if they came up to us. I learned that to sway decision-makers, we need to collect a lot of surveys and we need to carefully consider the results. It's not enough to talk to five

or 10 people to make a persuasive argument to city or county decision-makers. Understanding the process allows me to appreciate qualitative and quantitative data beyond numbers and statistics, and understand the effort it takes to get enough responses. YPAR was a lot cooler than many other after-school activities that I could've chosen. We are actually doing something, like creating our own survey and handing it out countywide, and going to events to ask people to take the survey. I felt like the YPAR program was worth attending and I actually felt fulfilled in my efforts after all was said and done.

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Gabriella Garcia
(University of California, Santa Cruz,
Youth Action Network)

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Gabriella Garcia is an undergraduate at UC Santa Cruz participating in the Youth Action Network UC Links program (http://www.sccyan.org/).

Going into the 2022–2023 academic year, I had very little understanding of what "community" meant in an academic context, and, beyond that, what it meant in a social justice context. I had heard it thrown around as a buzzword in various papers, books, and news reports, but my own conceptualization of "community" was a vague, person-shaped blur. I found myself in Dr. Regina Langhout's community psychology class at the University of California, Santa Cruz (UCSC), where we discussed and described community in ways I had never considered: community as co-constructed, community as a place of discourse, community as a source of strength and vision, as resistance. I was especially moved by community as a source of resistance—as a Queer woman of color who grew up in a predominantly White, cis-heterosexual context, I grew up *without* community in many ways.

This reframing of community was transformative as I became involved as a co-researcher with the UCSC Youth Participatory Action Research (YPAR)-Community Initiated Student Engaged Research (CISER) UC Links project led by Drs. Regina Langhout and Steve McKay. In the student-engaged classes that I took, I found an academic community that I had never experienced in my three years at UCSC. I was surrounded by other Queer academics, academics of color, academics with disabilities, and many, many more people and peers that I quickly grew close to, and grew alongside. This community helped support me during a time of personal struggle and turmoil, and helped me stay afloat in many ways. They

became people close to my heart, and my experiences with them, and with the youth, non-profit organizations, professors, graduate students, and others cultivated a desire to dedicate my life to this kind of community-based work. I saw in this project a future that I had never considered as possible for myself: I could be a teacher, a student, an organizer, and so much more, all at once. It was a powerful vision, and has motivated me to seriously pursue graduate studies in community psychology programs across the United States. I remain involved in the UCSC YPAR-CISER project to this day, and am incredibly thankful for the opportunities for learning, growth, and change that I have experienced since joining the project.

J.C. LEAPMAN
(UNIVERSITY OF CALIFORNIA, DAVIS, BETA LAB)

J.C. Leapman is a graduate student researcher and facilitator at the UC Davis Beta Lab makerspace UC Links program (Chap. 9).

My experience with UC Links has been wonderful, providing a vital source of community and inspiration throughout my academic journey. Entering my PhD program amidst the challenging backdrop of the COVID-19 lockdowns left me searching for a sense of support and belonging during my first year. Midway through my second year, I entered the UC Links community through my involvement with the UC Davis Beta Lab makerspace (Chap. 9). What immediately struck me was the genuine warmth, camaraderie, and support from the brilliant, compassionate members of this network.

I am grateful for the diverse array of opportunities that UC Links offers for connection, collaboration, and support. The regular Zoom meetings and the annual conference have led to many interesting conversations about working with communities, undergraduates, and youth in more caring, equitable, and engaging ways. The UC Links conferences have been particularly inspiring. The fun-filled, multimodal, interdisciplinary sessions always rejuvenate my passion for what I do. The theme for the 2023 conference, "Co-constructing Sustainable Futures" centered on sustainability in all its facets (environmental, economic, retention, and wellbeing), inspired me to rethink and revamp Beta Lab's makerspace sessions. It spurred me to explore innovative ways to minimize resource waste and prioritize the wellbeing of our community partners, undergraduate

mentors, and youth participants. Embracing the concept of holistic sustainability has added a new layer of depth and purpose to our endeavors.

In summary, UC Links has not only provided me with a sense of belonging and a supportive community but has also inspired me to approach my work with a fresh perspective, emphasizing holistic sustainability and wellbeing. Participating in UC Links has been instrumental in shaping my commitment to creating meaningful, inclusive, and sustainable educational experiences within Beta Lab and beyond.

The next three testimonials are from a UC Links program that isn't otherwise represented in this volume. The Brigham Young University (BYU) UC Links program located in Provo, Utah engages university faculty and staff in the Department of Anthropology (Greg Thompson, Katherine Watkins, Elizabeth Schulte) and undergraduate students from a range of other majors (e.g., sociology, education, physics, psychology, etc.) with community partners from a United Way sponsored neighborhood center in a nearby subsidized housing community. University undergraduates spend 2 days a week in an undergraduate course learning about community-university partnerships and spend 1–2 days a week collaborating with community members at the community center. Together, they undertake a co-designed research project of interest and value to the local community.

Jonathan Segura
(Brigham Young University)

Jonathan Segura participated in the Brigham Young University UC Links program as an undergraduate student.

As a student, I had the opportunity through Brigham Young University and UC Links to take a class whose purpose was to get experience doing qualitative research at a local community center. As part of our class, we were required to spend at least 2 hours each week at the community center and in the community. My class split up into three groups, each focusing on a different research question. Throughout the semester we moved through the entire research process beginning with creating a research question and ending with presenting a solution to that question to the center leadership. Our first step of the research process was to meet with center leaders to discuss major problems that they believed would require more data and focus to create a solution that would benefit the center. We then identified research questions for each group to focus on. We then created a plan to utilize mixed research methods to gather data to address our research question. Finally, we presented our data along with our

solution at the end of the semester. We completed surveys, interviews, took notes while doing participant observation, and participated in events, activities, and work to get data from several sources and perspectives. Collecting this data required close collaboration with all people involved in the community, including community members, center visitors, center volunteers, and center employees.

Participating in this class was a special opportunity because it allowed us the opportunity to learn and then apply our learning in a real-world setting. Most university classes involve only lectures and tests, but this class went way beyond that by applying that knowledge. After normal classroom time where we were instructed on research methods, tools, and approaches to both community development and design, we then had the required time in the community practicing what we learned in the classroom and applying it to a real project. Learning and then applying what I learned in a real-life project gave me a greater educational experience than just learning ever did, and it prepared me for life-after-college better than any purely classroom experience ever did. In addition to this personal benefit, I was also able to serve a community and present a solution to them that, I was told, would have an immediate impact in the work of the community center. Brigham Young University's slogan is "Enter to learn; Go forth to serve." This course helped to achieve both parts of the slogan while I was still a student instead of only achieving it after graduation.

EMILY HELMS
(BRIGHAM YOUNG UNIVERSITY)

Emily Helms participated in the Brigham Young University UC Links program as an undergraduate student.

Before my experience with Designing Community-Based Interventions (DCBI), Brigham Young University's UC Links course, I thought I knew what Provo was: a college town full of college students. My college was, of course, the epicenter of this town and everything orbited around it. I knew non-college students lived in the area but assumed they all worked with the college somehow or catered to its students. This was a narrow view and it wasn't challenged by my college education, until my DCBI class. I could have lived in Provo for my entire college education without interacting with the wider community. DCBI helped me recognize the huge swaths of my local community of which I was unaware.

This experience greatly humbled me and has entirely reshaped how I think about communities and building community. People in the

community around my university had always existed but the university offered little to no opportunity for engagement.

The people I met in the Boulders, a subsidized housing community in Provo, were unsure of my presence and I was not readily welcomed. In a mirror image to my ignorance of them, they seemed to feel invisible. Even though they were contributing in many ways to the community and economy of the area, these often first-generation immigrants had basic needs that were not acknowledged or even noticed by the larger community of Provo. In turn, they felt disconnected from the community of which they were an essential part. The DCBI class helped me to have a small part in changing that.

I and some of my classmates were so inspired by our experiences in the class that we continued working with the community center to develop an after-school program for adolescent youth—a glaring omission from the services provided by the community center we had been partnering with.

I now work in Community Development for a small city near BYU that has undergone rapid growth. In this community I see the same thinking that I held as a student: long-term residents in the community seem ignorant and unaware of new members to the community (and perhaps older ones, i.e., Indigenous people, too). In turn, these newer and non-dominant members of the community are made to feel invisible. I regularly draw upon my experience with DCBI in my job as I work to help the established community members to see these others in their community so that they can build community together.

My experience in DCBI, both successes and failures, provided me with a foundation in community outreach that I now build on daily. If it wasn't for my experience with UC Links I may not have had my own shift in perceptions that I rely so heavily on in my work.

Gregory A. Thompson
(Brigham Young University)

Greg Thompson is an Anthropology professor at BYU. He was the original designer and instructor for the UC Links undergraduate course and has since supervised the teaching of the course.

Teaching the UC Links undergrad course was both inspiring and revealing. The inspiration came from the students who brought a genuine desire to be of service. This, along with the opportunity to (hopefully) participate in a form of expansive learning by collaborating with a nearby community center in Provo, Utah, made this class a joy to teach. (See

Chap. 2 for a discussion of expansive learning.) Yet, teaching the class was not without its challenges, most of which arose from and revealed the perhaps unwitting but nonetheless troubling logic of the modern university, even at institutions that value "experiential learning."

As I have experienced it, the modern university encourages a closed-off and encapsulated form of education in which some predetermined content that has been developed by the "elite" thinkers in a given field is delivered to individual students. The "learning" of that content is then assessed in a fashion that is supposed to be standardized across all students thus allowing for accurate comparisons of *individual* student learning—which are most typically assessed by regurgitative examinations. This logic tends to result in courses that are self-contained modules in which the content is decontextualized and disconnected from everyday life. Indeed, just as there is encapsulation of content, as former BYU undergraduate Emily Helms noted above, a student's entire college experience can be physically encapsulated by the boundaries of the college campus.

Yet by its very nature, BYU's UC Links course cuts against every one of these characteristics of the modern university. In contrast to the closed and encapsulated nature of the university's educational logic, this course involved opening the college classroom to the community (and to the world).

First, since our task was to work with the community center to identify what they needed and then design something useful, it was impossible to determine the content of the course ahead of time. Even after student groups defined their topics (in collaboration with the community), the academic knowledge typically taught in university classrooms was useless without a rich understanding of the on-the-ground realities in the community. The knowledge that we, as a class, needed was radically emergent and could only be known by getting to know the community. This meant, first and foremost, listening to and learning from community members. In contrast to the university's decontextualized and disconnected knowledge, this was a different *kind* of knowledge. We needed highly contextual first-hand practical knowledge about specific people's experiences in *this* community. No textbook or academic article could provide that. Instead, students learned by doing participant observation, a practice where undergraduates spent time in the community and in conversation with community members and wrote weekly reflections of their observations and experiences in the community. Students also took rich and detailed ethnographic field notes documenting what they were learning in and from the

community. Finally, in contrast to the individualism presumed by the university logic of education, relationships were essential. Students needed to develop relationships with other students with whom they were collaborating and, most importantly, they needed to cultivate relationships of mutual trust with those living in this community so that they could learn from and with them.

My experience revealed to me the troubling logics of the model of education that is implicitly favored by many universities today. The success of this course required a break with those logics and a move toward the logic of expansive learning. This is no easy task but is well worth it since, to my mind, learning that is relevant and useful is the best kind of learning that we can undertake.

Armando Olea Romero
(University of California, Los Angeles, B-Club)

Armando Olea Romero participated in B-Club UC Links program (Chap. 6) as an undergraduate student.

As an undergraduate student at the University of California, Los Angeles (UCLA), I had the privilege of participating in an undergraduate course in partnership with UC Links that allowed me to learn more about qualitative research through meaningful and intentional experiences at B-Club. Participating in B-Club was a unique opportunity as a student because it reaffirmed that academic experiences are not just tied to the classroom—at B-Club, students learn through play.

B-Club was a unique and multicultural space to learn about research, teaching, and service by applying theory to practice not found in any other course. We engaged with youth in an after-school setting to create learning opportunities while deepening our understanding of theories and readings in our course. At B-Club, undergraduates like myself learned from the youth and worked closely to develop activities around their interests. These activities embodied a focus on culture, communication, and play. Many of the youth were surprised that play was encouraged. It challenged the notion that play was a reward rather than a way of learning. I appreciated the value we placed on listening and the interests of the youth in creating this communal space. We brought our authenticity and knowledge to bring joy and knowledge outside of the university.

Throughout this course, I collaborated with the youth to create the video about B-Club that is described in the opening vignette to Chap. 6. (Watch B-Club video here: https://uclinks.berkeley.edu/chapter11). The youth took on the director role to describe the story and the videos they wanted to capture. The B-Club video showcased favorite moments, experiences, and various activities while keeping everybody engaged in any language they felt comfortable with. This video was a meaningful moment to bridge our knowledge as undergraduates and bring awareness to the interests and narratives at B-Club. When we started the project, I informed the youth that they would be in charge and I would support their vision. Their faces looked perplexed. I remember the curiosity and excitement when we captured different clips for this video. They learned about interviewing and how a drone operated. The final shot demonstrated what a community of learners looked like. We learned as much from the youth as they did from us.

B-Club broadened my understanding of qualitative research, teaching, and service and inspired me to explore new ways of engaging and learning from youth. I am incredibly grateful for the opportunity to participate in this course across various quarters because it allowed me to engage in various projects and share my positive experience with future participants. This course made the learning experiences beyond meaningful and impactful by providing a space to create, engage, and learn outside of the university and into the community. It fostered a strong sense of belonging among all the undergraduates and youth at B-Club.

Yasmeen Ramos
(San José State University, Y-PLAN)

Yasmeen Ramos participated in the Youth-Plan, Learn, Act Now! (Y-PLAN) UC Links program (Chap. 14) as a graduate student.

Making a difference in my community has always been a passion of mine. Especially when it involves helping youth. I am infatuated with guiding youth through life skills that can be applicable to their future education and development. Before Y-PLAN, I was blind to the benefits that the organization offers to the youth in our community. Consequently, Y-PLAN provides students with the tools to be involved and make a difference in their community. Students are able to engage with their peers, teachers, and mentors. The majority of the students like myself had never had the opportunity to advocate for change in their community.

As a first-generation student, entering a community that aligns with my values and cultural upbringing has allowed me to work better and fully

understand every student. Coming from an immigrant and Spanish-speaking household can be challenging for many students. Especially when they are asked to make a change in their community, because we often do not have role models or see little to no effort in the community. Nonetheless, I reassured every student that they would see a difference if we incorporated a sense of unity within the community. As mentioned before, working with youth has always been my population of interest. Primarily because ever since elementary school, I wanted to vocalize change in my community while simultaneously motivating grade school students to participate in their community. Although can be a barrier for many individuals, one can always come together and overcome any obstacle as a community. Moreover, learning originates through a sense of unity and community. For instance, in planning, creating surveys, and giving ideas, everyone was welcome to express their thoughts or suggestions through their native language, pictures, videos, and more. This provided Y-PLAN students with a safe environment where all their thoughts and ideas were considered.

Y-PLAN provides students with the opportunity to fully immerse themselves in the community. Moreover, during my time working with Y-PLAN, I gained insight into urban planning. Through this experience, I learned how our infrastructure maneuvers society, and dictates how we can further aid our youth with the necessary resources. More importantly, I became cognizant of how crucial it is to allow school-aged students to be involved in our community. Y-PLAN allowed me to understand that there can be change in our community. However, this can only be accomplished if we unite and voice our opinions.

Amrita Deo MA
(San José State University, Y-PLAN)

Amrita Deo participated in the Youth-Plan, Learn, Act Now! (Y-PLAN) UC Links program (Chap. 14) as a graduate student.

As a first-generation student from East Palo Alto (EPA), one of the communities Y-PLAN has worked with in the San Francisco Bay Area (Chap. 14), youth have minimal access to leadership and team-oriented activities outside of participating in sports. Students living in historically marginalized communities, such as EPA, are often exposed to negative experiences in their neighborhoods, whether it is violence, substance use, or even something as simple as not having a safe or proper park to play or hang out. Having a Y-PLAN curriculum in classrooms is a way to ensure

that all students are positively engaging with their community, while also building leadership and technical skills to address social justice issues that exist in historically marginalized communities. Y-PLAN addresses gaps in education and leadership opportunities for low-income students, which creates a protective factor for youth living in these communities and are exposed to risk factors more often than youth living in more affluent neighborhoods.

As one of the first San José State University (SJSU) Y-PLAN Fellows, participating in Y-PLAN blended my values and the work I am passionate about, while being able to practice real-life application of being a civic partner as a SJSU student and supporting students from the San José community. As with any California State University, practical application is essential to SJSU and gives students the opportunity to go into the field and apply what they learn in the classroom to an environment they might work in after graduation. However, what is unique about SJSU is it is centrally located, an open campus to the San José community, and a resource as needed to the city, school districts, and organizations in the area. With Y-PLAN having a hub at San José State, this can open many doors for San José youth to have the opportunity to help transform their neighborhoods by having support from an institution with strong community ties. Additionally, having San José State students supporting teachers and students with the work brings the program full circle as a large number of SJSU's students are first-generation and grew up near the area. Through this experience, I have learned that having representation is critical for youth, and when they see representation, they know their ideas and opinions will be heard and understood.

Transforming Lives: First-Person Reflections from UC Links Participants

John Cano and Marjorie Elaine

In this chapter we hear from eight additional participants in the University-Community Links (UC Links) network. (See https://uclinks.berkeley.edu/ for more information about UC Links programs and the global UC Links network.) These testimonies point to how the UC Links experience transformed individual lives. These contributions describe ways that UC Links participants have taken on different roles and identities in the network over time and how participation in these programs has inspired and opened new pathways toward college, careers, and life.

N. Karla G. Trujillo
(University of Colorado, Boulder)

N. Karla G. Trujillo has worn many hats in her participation throughout the UC Links network including: community *partner and undergraduate participant in the La Clase Mágica UC Links program in San Diego (see Chap. 1), student assistant in the UC Links Office (Chap. 2), and graduate student.*

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Learning ecologies where community and university come together to co-create better futures for one another have a special place in my heart. I've worn many hats within UC Links including as a community member, artist, dancer, storyteller, activist, public speaker, community college student, and an undergraduate participant in La Clase Mágica. I first came to UC Links as an undocumented community member who was born in the culturally rich state of Oaxaca, Mexico. When I was the Program and Marketing Director at La Colonia de Eden Gardens, a community-based organization that partners with UC San Diego (UCSD) to sustain La Clase Mágica (see Chap. 1) and Teenology Rangers learning ecologies, I remember standing next to UC San Diego Professor Olga Vásquez as she advocated for the unique partnership between the La Colonia community and the university. Hearing Olga speak on behalf of this collaborative work showed me how much she believed in the partnership. Her belief was contagious and I was called to action in reciprocating her sentiment. Her support inspired me and I took the opportunity to cross-enroll in university coursework via the collaboration between my local community college and UCSD. This brought me to Professor Amy Bintliff's UC Links practicum course (Chap. 19), earning university credits that counted toward my educational journey. Professor Bintliff encouraged me to take on the role of a university student and to participate in community-university partnership in a new way. The practicum course provided me with the tools to make links to educational concepts, frameworks, theories, and pedagogies that complimented and informed the work that I was already doing within my community.

While I was living through all these new experiences I was also waiting to be granted permanent resident status. Once my undocumented status changed and I had a visa in my pocket, doors that had been previously locked to me were thrown wide open. It finally became possible for me to access every major university. One of my acceptance letters came from the top public university in the country—UC Berkeley—my dream school, the place my heart always knew it belonged. Once I made everyone aware of my decision to become a UC Berkeley Golden Bear, I received an email from (now retired) UC Links Executive Director Charles Underwood

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congratulating me on my new journey and assuring me that the UC Links Office, located in UC Berkeley's School of Education, would do everything possible to support me—including giving me a job. It was time to change my hat once more, as I took on the role of Student Assistant for the UC Links Office working simultaneously to complete my undergraduate coursework and assist the UC Links network with the various tasks, responsibilities, and collaborations that take place within UC Links university-community partnerships.

My first year as a Cal transfer student happened to coincide with the COVID-19 pandemic (and forced me to physically stay in San Diego instead of Berkeley). I worked with La Colonia and UCSD partners to design, organize, and implement the COVID-19 Hunger Response Team, where I assisted in carrying out food drives that fed over 80 families bi-weekly during the intense course of the pandemic. I helped facilitate Pop-Up Art On the Go, installations of community-created art pieces displayed in a central location for families to drive-by and experience imaginative, holistic, stress-relieving activities as a collective. This is one of the many reasons that regardless of what hat I wear, either community or university—I always feel part of La Clase Mágica. This connection is one of the reasons I love to go home to San Diego: stopping by to see the beautiful familiar faces of the youth; being in awe of their transformation, as they grow into young adults; observing fathers as they put in the effort to draw, color, and write poetry and expand their learning alongside their children. At this year's La Clase Mágica/Teenology Ranger Family Beach Reunion, I got to see parents and caregivers singing and dancing to cumbia beats, expressing themselves and showing support for the growth and development of their families. Undergrads also showed their commitment to their community, by being present despite being on summer break.

Wearing my UC Links Office hat allowed me to work alongside the current UC Link Executive Director Dr. Mara Welsh Mahmood and other UC Links faculty in building community across the UC Links network (Chap. 2). For example, during the pandemic we worked together with UC Santa Barbara Professor Diana Arya and colleagues to bring co-learners from across the world to the 2021 UC Links Virtual Youth Summit (Chap. 10), a place where we got to share our talents in community as we co-explored and co-constructed sustainable futures. The Youth Summit is now an annual hybrid event. The learning ecology co-created by the Youth Summit coordinators and participants is an example of what it means to be authentically appreciated for who you are. The love and joy

I feel when among these scholars motivates me—graduate and undergraduate co-creators working together to make the annual Youth Summit a success, by working to make sure everyone engages in and enjoys the celebratory activities.

Belonging to the UC Links network has allowed me to tap into the transformation of diverse learning ecologies and experience the co-construction of equitable learning environments with community leaders and scholars from multiple universities and co-creators of all ages, inspiring one another across the nation and the world. It also energized me to continue my education and pursue my PhD I'm currently a graduate student in the Learning Sciences and Human Development program at University of Colorado, Boulder (CU Boulder) where I continue to make connections between community and university through my position as a research assistant for the Ritual Arts & Pedagogy Lab (RAP Lab)—working with local high school students. I've also been recognized for my engaged scholarship and have been awarded the Miramontes Doctoral Fellowship that recognizes my commitment to, justice, and cultural diversity, and named an Engaged Arts and Humanities Scholar through the Office of Outreach and Engagement. Additionally, I have been a lecturer for CU Engage (CU Boulder's Center for Community-Based Learning and Research), and I am currently a facilitator for the CU Dialogues program where I use my bilingual and translanguaging abilities—fluent in Spanish as well as the languages of both the community and the university. Most recently, I have been named a Senator within the student government representing the School of Education.

I am forever grateful to the UC Links network, because community and university partners around the world continue to make space for me, and it is inspiring, grounding, and contributing to my personal and academic growth. Their ongoing guidance, through the difficult parts of navigating the academic world, plays a major role in the transformation of my participation across the network—allowing me to wear multiple hats in the sustainment of community and university partnerships at many levels.

FATIMA DEL ROCIO ROBLES
(UNIVERSITY OF CALIFORNIA, IRVINE, MATH CEO)

Fatima Del Rocio Robles participated in Math CEO at UC Irvine as both a middle school participant and later an undergraduate mentor (Chap. 8).

My name is Fatima and I am a proud alumna of Math CEO at UCI (Chap. 8.) My journey with Math CEO began in eighth-grade at Lathrop

Intermediate School in the 2014–2015 school year. Although it has been quite a long time, I vividly remember the excitement of boarding a school bus to UC Irvine (UCI), where we would be welcomed with open arms. Math CEO is memorable to me because I was challenged in multiple ways: to explain my thinking and reasoning, collaborate with peers, and persevere through problem solving. I hold Math CEO in high esteem for giving me a glimpse into university life and instilling in me a sense of belonging in college.

In 2019, I became a student at UCI. My first year at UCI posed many challenges; I was fighting imposter syndrome, the COVID-19 pandemic was at its highest point, and I was coping with the loss of my grandfather and uncle. It wasn't until Spring 2021 that I decided to seek a club or an activity that would bring me joy after such unprecedented times. Once again, Math CEO accepted me and provided lessons on how to be an effective mentor. I acquired the skills to collaborate with fellow undergraduate mentors in cultivating the same challenging, safe, and fun environment that I once experienced as a mentee.

After serving as a mentor for three quarters, I assumed the role of being a classroom leader. While I initially lacked confidence, getting to know the middle school students and forming connections with them motivated me. As classroom leaders, we were tasked with observing the mentors and offering guidance to enhance their mentoring skills. We facilitated culturally responsive discussions, shared personal experiences, and provided a positive learning environment.

Throughout these experiences, it became evident that Math CEO provides both undergraduate mentors and middle school mentees with opportunities for growth and improvement. At Math CEO, we support each other, we empathize, we see students as unique individuals, and we respect and incorporate their cultural upbringing. I have no doubt that I will continue to use the skills that I learned at Math CEO as I pursue a career as an elementary school teacher.

Mercedes Soledad Barriga
(University of California, Irvine, Math CEO)

Mercedes Soledad Barriga participated in Math CEO at UC Irvine as both a middle school participant and later an undergraduate mentor (Chap. 8).

I first learned about Math CEO (Chap. 8) as a middle school student in 2016. When my friends told me there was a program where you were able to go on a college campus every Wednesday, I was curious and excited.

I had never actually stepped foot in a college even though the idea of going to college had always been promoted by my teachers and my school. When you're a child, especially a turbulent middle school student, college seems so far away. Being on campus allowed me to imagine myself as a college student walking around Aldrich Park in the center of UC Irvine's (UCI) campus and studying in the library. The undergraduate mentors in the program were reflections of what I could be in a few years. Math CEO's math activities challenged me to think beyond what I learned in school and to try new strategies to solve problems. I learned math in new contexts. The activities didn't solely focus on the numbers like they do in school. Everything had a setup and a story, and it kept me engaged. I wasn't always able to understand the math right away, but my peers, the mentors, and the professors were always there to help. They had high expectations of me and believed I could solve the problems even when I didn't believe in myself.

Math CEO found its way to me again during my second year of college at UCI.

Instead of being a mentee, I was now joining as a mentor. The program has evolved greatly since I was in middle school, and I'm proud to see how much it has grown since then. At first, I was very nervous to become an undergraduate mentor because although I knew what to expect, I wasn't sure if I would be prepared. My worries were unfounded as the Math CEO team made sure we had enough training and preparation. We mentors support one another through co-mentoring and Math CEO learning assistants (LAs) provide us with feedback to improve.

One of the things I admire about the program is the learning philosophy. We teach students that math isn't just about numbers; it can be related back to their own communities and the real world. We also emphasize the *process* of getting to an answer over the answer itself. Encouraging students to struggle and work through a problem is important, as it reveals their thinking and allows them to reflect. While working as a mentor, my own philosophy toward learning changed as I understood the significance of having students engaged and involved in their own learning. Through Math CEO, I also found a community on campus where I was able to make friends and feel like I belonged. Once, I had sat in those chairs learning about math and now here I was teaching students from my own middle school. It felt good to be able to give back.

Wesley Veiga
(University of California, Berkeley)

Wesley Veiga is a UC Berkeley graduate and participated as a Student Assistant in the UC Links Office.

University-Community Links means more to me than just university and community member stakeholders. UC Links is a value and a community. It is a space where I feel safe, challenged, and accepted. The first time I worked with UC Links, I supported the annual conference in 2021. I was incredibly nervous because my idea of a conference meant something strict and rather performative. The UC Links conference could not have resembled anything further from this assumption. The network works together like a family: a cohort of people all passionate about education and justice. With these two attributes at the focal point of my studies and work at UC Berkeley, UC Links offered me a space to grow and achieve more than I could have ever imagined.

UC Links shaped the trajectory of my life since my time began in the network. Being a student assistant at the UC Links Office in the Berkeley School of Education was my first campus job and it felt quite official and scary. I didn't know how keeping a timesheet worked, what cubicle etiquette was like, or even how to create different headings in Google Docs. But none of this was an issue. The UC Links Office team took me in and wanted to support me in any and every way imaginable. At our very first meeting, we all sat down and talked about what I wanted to accomplish. They asked how I wanted to learn and where my interests and passions lay. They prioritized making me feel human and truly wanted to get to know me as a person, before supporting me as a worker.

This humanization of the work we do has always stayed a top priority and I am consistently met with empathy and flexibility with the work I do. This has taught me what it looks like to live and work in a healthy environment. UC Links has also taught me so much about the world of education and what it means to strive for in practice. Having worked with education leaders in the past, I noticed far too often how disconnected they were from the realities of our most vulnerable students. Instead, UC Links had taken me on their journey through site visits at schools across California, welcoming local elementary and middle school students to the UC Berkeley campus, and virtual office hours connecting learners around the globe. I have learned so much about higher education and accumulated priceless knowledge about how I can further my education as a student

myself. I never would have had such insight and introspection if it weren't for UC Links taking the time to foster my curiosities. Most importantly, I was able to work *with* them rather than just *for* them and this feeling alone has inspired me to take all that I have learned and pass it on to our next generation of learners and UC Linkers. As the next step in my educational journey, I've been offered early acceptance to Teach for America and after I graduate in Spring 2024, I will begin teaching elementary school in Los Angeles, California.

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JANELLE FRANCO

(UNIVERSITY OF CALIFORNIA, LOS ANGELES, B-CLUB)

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Janelle Franco participated in B-Club (Chap. 6) as both a parent and graduate student.

As an elementary school teacher, I was initially hesitant to apply to doctoral programs because I was concerned that I would feel too removed from children. Reading about B-Club (Chap. 6), where researchers, university students, and children came together in a playful learning environment, is one of the things that drew me to UCLA (University of California, Los Angeles) in the first place.

I spent 5 years at B-Club, as a researcher and facilitator, helping with the logistics, theories, and pedagogical practices that guided the club. I was also part of the instructional team that led the UCLA courses that were connected to the after-school program, and completed my dissertation research there. At first, B-Club felt very different from the context I was used to as a classroom teacher. But I slowly began to shift my attention to the dynamic ways children were interacting with one another, and with the university students, and noticed learning in ways that I didn't necessarily notice initially.

During my time at B-Club I also became a mother. I found that my time observing kids' playful interactions at B-Club carried over to how I observed the ways my own kids were exploring the world. In line with the multigenerational and inclusive nature of B-Club, I felt supported to bring my kids with me sometimes. When I did, I observed the younger children take on the role of being the older kids, helping my toddler, and even baby, join in the activities.

My experiences with B-Club and the larger UC Links community not only shape my current work with teachers and teacher candidates, but also how I interact and support my own children as a parent. In both cases I

recognize the importance of following kids' interests and creating opportunities for agency and creativity, while valuing their curiosity and questions.

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LUCINDA PEASE-ALVAREZ
(UNIVERSITY OF CALIFORNIA, SANTA CRUZ)

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Lucinda Pease-Alvarez is a Professor Emerita of Education and teacher educator at UC Santa Cruz. She taught undergraduate courses and directed the UCSC UC Links program in collaboration with community and university partners from 1996 to 2002.

During my graduate school years, I had the good fortune of becoming friends with Olga Vásquez, one of the co-founders of UC Links. Drawing on our dissertation research, we worked together on a book focused on the linguistic and cultural resources that were part of the everyday lives of families living in a Mexican immigrant community in the San Francisco Bay Area. After we left graduate school, our friendship blossomed, and I visited Olga and La Clase Mágica (LCM) on several occasions. As a teacher educator, I was particularly interested in how LCM and similar projects contributed to the learning of prospective teachers. At the time, I was convinced that their involvement with children from minoritized communities in informal settings would contribute to their development of asset-oriented and critical pedagogical perspectives. However, just how this could occur was more or less a mystery to me. Thanks to my involvement in UC Links while I was a professor in the Education Department at UC Santa Cruz (UCSC), I gained a much deeper understanding of how to support the learning opportunities available to UCSC undergraduates, the majority of whom were interested in pursuing careers as teachers in formal or informal settings.

From 1996 to 2002, undergraduates participating in UCSC links were involved in after-school programs linked to courses in psychology and education that were informed by sociocultural perspectives on learning, teaching, and knowing. In these courses, undergraduates and instructors examined how the scholarly work that was the focus of course readings related to the learning/teaching experiences in the after-school programs. While the children (from 3–13 years in age) participating in the after-school programs were mostly of Mexican-descent and from minoritized communities in the Santa Cruz region, the majority of undergraduates

were of European American backgrounds. During their time together, undergraduates and youth were involved in a variety of activities, including, for example, computer games and projects, arts and crafts, drama, writing projects, and field trips to various sites, including the university. As a teacher educator, I have found the following insights based on my experiences with UCSC Links to be particularly noteworthy.

Engaging as a community of learners in out-of-school *settings.* From the beginning of my involvement in UCSC Links, I wanted to be sure that what we did with children in the after-school programs was *not* a mirror image of what they did at school. Like others involved in UC Links, I was convinced that the hierarchical arrangements and prescribed curricula of traditional schooling missed the mark when it came to providing children, particularly those from minoritized communities, with opportunities to learn in ways that build on their needs, interests, and cultural resources. This, in part, compelled us to draw on a community of learners' perspective that emphasized shared engagement and mutual ownership and involvement. For us, this meant that children, undergraduates, after-school staff, family members, and UCSC instructors considered one another as resources in generating and engaging in after-school activities. My commitment to this perspective became even stronger as I observed children disengaging with and ignoring those undergraduates who attempted to direct their involvement in program activities while they participated enthusiastically when the undergraduates did not take up those traditional teacher-like roles.

Grappling with dilemmas. From the very beginning of each quarter, much of the discussion in class and on the course's internet discussion forum was focused on the dilemmas and issues undergraduates were having in the after-school programs. Sometimes a dilemma or concern would compel undergraduates to jump to a solution, including establishing a rule about what should go in the after-school program. When program participants focused on what youngsters and others were doing in the programs instead of coming up with immediate solutions to perceived problems, we gained a better understanding of the significance of a particular action or practice. For example, when undergraduates raised concerns about youngsters' teasing, several immediately suggested that teasing be banned in the after-school programs while others disagreed. Course instructors responded by asking students to read literature on the role teasing played in diverse cultural communities and to share their observations of teasing in field note entries that they posted on our class website. Through their

inquiry, undergraduates revealed a wide variety of purposes for children's teasing, such as expressing humor, getting and maintaining someone's attention, and signaling close relationships. This provided us with a window into the children's remarkable capabilities and rich social worlds. Instead of banning teasing, undergraduates became interested in learning more about this practice.

Engaging multiple perspectives. We were not of one mind regarding how to address the issues or concerns that emerged in our work with children. Many undergraduates who had strong views about learning/teaching that reflected their schooling experiences expected to direct children's engagement in specific activities. Others were critical of what they had experienced in traditional school settings and tended to follow the children's lead. Undergraduates also tried to enact other approaches and practices that were presented in the course readings when interacting with children. The children's caregivers and undergraduates from minoritized communities sometimes shared stances and opinions that differed from many of the undergraduates. As participants shared and grappled with these diverse views and practices, we entered a space that operated within the complex multicultural milieu in which program participants lived and learned. Through our involvement in this space, many of our views and ways of engaging with children transformed. It's important to acknowledge that we sometimes had heated conversations during which we shared our differing views and disagreed on what we thought should go on in the after-school program. Because I witnessed many occasions when discord led to transformations in our thinking—like, for example, our debates about the role teasing should play in the after-school program—I knew that these conversations were important.

During my time with UCSC Links, undergraduates interested in careers as educators gained insights into perspectives and practices that often contrasted with those associated with traditional school settings. This often entailed negotiating and gaining awareness of the cultural differences that circulated among participants in the program as well as the institutional and societal forces that impacted their lives. When it comes to the learning of prospective teachers, I can't help but wonder how the UCSC Links program in which I participated compares to that of the current UCSC programs given differences in the focus of the programs and the undergraduates participating in them. For example, almost all of the undergraduates participating in Corre la Voz, a UCSC Links program established in 2009 (Chap. 3), identify as Chicana/Latinx while 20 years ago the

majority of undergraduates were of European American backgrounds. Further, the majority if not all of these more recent undergraduates, like the children participating in the programs, are members of minoritized communities.

In closing, I would like to express my appreciation to UCSC undergraduates, children and their families, project staff as well as to members of the UC Links team, Michael Cole, Mara Mahmood, Charles Underwood, and Olga Váquez. I am particularly grateful to Cathy Angelillo, Pablo Chavajay, Eugene Matusov, and Esperanza Zamora. Their involvement in the UCSC program led to important transformations in my learning as well as that of other program participants.

Lynda Stone
(California State University, Sacramento)

Lynda Stone is a Professor Emerita of Child and Adolescent Development at CSU Sacramento and has worn many hats in her participation throughout the UC Links network: a postdoctoral scholar at UCLA and later as the faculty Principal Investigator for the Magical Web UC Links program from 1999 to 2017.

My 20-year involvement in the UC Links network began in 1996 as a postdoctoral scholar and later as a faculty Principal Investigator (PI) of an after-school program I started in northern California, referred to as the Magical Web or simply, the Web. I was genuinely delighted to start my own program because of my postdoctoral experiences.

In fact, in 1996, I was honored to attend the very first meeting at UC Berkeley where UC Links co-founders Michael Cole and Olga Vásquez along with founding Executive Director Charles Underwood invited scholars from across the UC system to join them in creating a new form of learning activity in which play became the animator of learning and developmental processes. The room was filled with excitement, questions, and hopefulness. Could something this extraordinary be implemented? Collaboration across so many campuses was unusual. And, yet, as the meeting came to an end, there was a shared positive sense of commitment among participants to create a community of informal learning settings, that is, after-school clubs. Across the UC campuses, these after-school clubs became places where teaching-learning practices and sociocultural theory were intertwined through the combination of practical field

experiences with children and university course work. Although a sense of community support for the work conducted at local programs was not highlighted at this meeting, it became an essential component of the UC Links network. It was this support and connections to others beautifully organized by Charles Underwood (see Chap. 2) that became the reason I so looked forward to being a part of this truly wonderful community as a professor.

Over these years, I came to appreciate how UC Links' seemingly practical approach to informal learning had a profound and beautiful influence on the teaching-learning processes for both children and undergraduate/graduate students. The influence on children emerged from collaborative engagement during in situ learning activities with university students. Of course, engagement in this setting influenced all participants. But, the more far-reaching influence on university students' learning emerged during the undergraduate courses I taught on cognitive and social-emotional development and cultural psychology where students analyzed data collected from the after-school site and linked these data to theoretical constructs. In what follows, I will share more details about how the UC Links after-school program affected the learning and developmental processes of children and university students.

In order to gain a deeper understanding of children's learning processes organized through play activities at the Web, I conducted yearly video ethnographies. These data revealed something quite different from more formal learning settings where teacher-directed activities were common: the UC Links Magical Web program became an incubator for children's agency and children's responsibility for contributing to the content and direction of learning processes. In other words, these data captured an intriguing process—the fundamental and bi-directional relationship between teaching and learning could be shifted as university students gained more sophisticated understandings about learning and development. At the Web, these understandings helped students appreciate the different ways learning processes could be manipulated or structured. In effect, as university students developed more competent understandings of cultural psychology, they helped children take on a more central role in their own learning thereby co-creating their developmental futures. In my view, this fascinating process occurred from the creative ways in which undergraduates continually socialized children into taking on an agential role in the learning process. The children then assisted each other in this process.

The profound influence of this UC Links after-school program on large numbers of undergraduate and graduate students occurred at the university because I used the data collected at the Web in all of my classes. In these classes, students transcribed video data with Transana and used these data to discuss such concepts as semiotic mediation, cultural practices, relational habitus, etc. in relation to learning and developmental processes. These collaborative discussions were in effect challenging sense-making attempts to repeatedly tie theory to practice. The end result, to my delight, were students with more robust understandings of sociocultural theory as well as a growing desire and commitment to implement this new knowledge in real-life learning settings. Students also developed an optimistic view toward their emerging capacity to create productive learning settings for children. This optimism was evidenced when, in class, they repeatedly shared how they used their new knowledge in their current work settings, such as schools, preschools, and hospitals. Interestingly, many of these university students also reported seeing themselves differently. That is, engagement in research discussions utilizing video and transcript data had the effect of nurturing a different learner and practitioner identity, one that affected how these students expected to learn about and structure teaching-learning activities in their own practical world.

In sum, the UC Links network of after-school programs offers a treasure of benefits to children and adult members.

Sayra Martinez
(La Colonia de Eden Gardens Inc.,
University of California, San Diego)

Sayra Martinez es la Especialista de Alcance Comunitario de la Colonia de Eden Gardens Inc., la organización que colabora con UC San Diego en el programa "La Clase Mágica" de UC Links (Cap. 1).

¡Hola! Antes de comenzar y decir cómo llegué hasta donde estoy hoy en día, quiero agradecer a unas personas en especial: Manny y Mary Ann Aguilar, la Profesora Amy Bintliff, Mara Mahmood, John Cano, y Karla Trujillo, por darme la oportunidad de ser parte de UC Links, una red que considero importante, especial y parte de un logro personal. Mi nombre es Sayra Martínez, tengo 37 años, soy de nacionalidad mexicana, y nacida en el hermoso estado de Chiapas. La experiencia de migración a los Estados Unidos (EEUU) fue traumática, recuerdo que aparecieron hombres armados, uno de ellos apuntando su pistola en mi sien mientras, al mismo

tiempo, me tomaba del brazo con la otra mano pidiendo pertenecías, dinero, tarjetas para hablar por teléfono, o cualquier cosa que ellos pensaran era de valor. Luego nos pidieron separarnos en dos grupos (uno de mujeres y el otro de hombres), nos hicieron desvestirnos para revisar nuestras ropas y confirmar que no estábamos escondiendo nada.

Al estar dentro de Estados Unidos, no conocía a nadie, no hablaba inglés, y como si eso fuese poco, comencé a experimentar violencia doméstica por parte de mi hoy ex-esposo. Unos años después, en 2003, quedé embarazada y tuve a mi hijo. Agradezco mi tiempo vivido en los refugios, a donde fuí en más de una ocasión. Me hubiese gustado que en lugar de decirme "ve y aplica por ayuda aquí" me hubieran ayudado con educación y en cómo buscar trabajo. En ese tiempo era una adolescente de 17 años, con un bebé, y tratando de sobrevivir en un país diferente, sin hablar inglés, y sin apoyo de nadie, así que opté por regresar a mi país.

De regreso en México, comencé a trabajar, terminé mi preparatoria e ingresé a la universidad a estudiar leyes. Sin embargo, tuve que dejar mis estudios universitarios porque la educación no es pública y mi hijo iba a comenzar preescolar. Viviendo en la casa de mis padres y al ver que no había un avance en mi vida para crear un patrimonio para mi hijo, pensé en emigrar nuevamente a los Estados Unidos, pero a otro estado. Es ahí cuando tomó la decisión, en 2009, de regresar a los Estados Unidos. Con el corazón roto, dejé a mi hijo con mis padres porque no sabía a dónde iría. Cuando regresé a los EEUU, me volví a encontrar con el problema del idioma, pero agradezco a Danny, dueño de un 7-Eleven que me ofreció mi primer trabajo cuando llegué, quien junto a los otros cajeros trataron de enseñarme el idioma. Mi siguiente trabajo fue de niñera, donde una niña de tres años me enseñó cómo leer sus libros para tomar su siesta. Así, fueron sumando más experiencias de trabajo hasta que pude ingresar a una escuela para aprender inglés formalmente. La primera recomendación de la maestra fue que dejáramos de ver y escuchar todo en nuestra lengua nativa y que intentáramos hacerlo en inglés y, desde entonces, así lo he hecho.

Años más adelante obtuve mi certificado como instructora de Zumba, y fue a través de este medio que tuve la gran oportunidad de conocer a Karla Trujillo (Chap. 11) durante un evento para recolectar fondos sin fines de lucro. Luego, en 2014, finalmente tuve la oportunidad que mi hijo regresara a su país de nacimiento, y es entonces cuando—a través de una publicidad acerca de un campamento de verano para jóvenes liderado por Karla (Teenology Rangers)—comienza mi historia con La Colonia de Eden Garden (LCEG), Inc.

Decidí contactar a Karla para conocer cuáles eran los requisitos para inscribir a mi hijo en el campamento de verano. Una vez lo registré, le comenté que se iría de campamento—vale la pena aclarar que mi hijo tenía pocas semanas de haber llegado al país y aún no hablaba el idioma. Sin embargo, para mi hijo, la idea de irse de campamento era extraña, ya que no es algo común en mi país, y su reacción fue de mejor no participar (porque no conocía a nadie). Mi respuesta fue sencilla: "No te preocupes, cuando regreses de campamento ya tendrás amigos."

Así fue, después de regresar del campamento, la actitud de mi hijo era más enérgica y muy positiva. Sus palabras fueron "Mamá el próximo año quiero regresar como uno de los jóvenes líderes." Sentí mi corazón feliz, después de eso me pidió que lo llevara todos los domingos al programa de cultura y arte con los adolescentes que Karla lideraba. Así en un evento del Día de los Muertos, una de las mamás me comentó sobre La Clase Mágica (programa después de la escuela) donde ayudaban a los niños y adolescentes con sus tareas. Ese mismo día decidí hablar con quién es hoy directora del programa, Susanna Romero, para registrar a mi hijo. Así, cada lunes y miércoles, luego de trabajar, pasaba por mi hijo a la escuela, y lo llevaba al programa (debía conducir desde la ciudad de Oceanside hasta Solana Beach, un trayecto de aproximadamente, 40 minutos). Los domingos lo llevaba al otro programa con Karla.

Durante la pandemia, LCEG, Inc. estuvo haciendo distribuciones de comida. Llevé a mi hijo conmigo y, poco a poco, comencé a dirigir la distribución de comida, actividad en la cual otras familias también comenzaron a participar como voluntarios. Cuando el año escolar se aproximaba, se me presentó la oportunidad de ser una asistente en La Clase Mágica. Durante la pandemia tratamos de crear actividades para la salud mental y brindar apoyo a las familias. Durante esa etapa, orientamos a nuestras familias para que crearan arte y que, por medio del arte, describieran cómo se sentían en casa. ¿Cómo hicimos eso posible? Hacíamos entrega de canvas, pinceles y pintura a cada familia. Cada semana nos compartían lo que pintaban y, posteriormente, hacíamos exhibición de cada uno de ellos en un estacionamiento en el cual las familias conducían mientras admiraban cada una de las piezas de arte.

Hoy en día soy Especialista de Alcance Comunitario, donde me dedico a coordinar cada uno de los programas de LCEG, Inc. Creamos

actividades en donde integramos a los padres, las madres y cuidadores, también pedimos su participación y retroalimentación. Tener este trabajo es algo que creí que no merecía porque en este país mi educación no es válida. Gracias, Karla, Manny y Mary Ann por creer en mí, cuando ni siquiera yo era capaz de ver mi capacidad en ese momento. Actualmente, en La Clase Mágica contamos con padres, madres y cuidadores que nos ayudan durante las actividades del programa:

- El campamento, que anteriormente era para jóvenes, hoy es un campamento familiar donde—con ayuda de la profesora Amy Bintliff (Chap. 20)—se realizan actividades para la salud mental y reforzar la unión familiar
- Yoga y meditación
- Jardín comunitario donde las familias pueden cultivar sus propios vegetales
- Grupo de salud mental y crecimiento personal de las madres llamado "pláticas de mujeres," donde ellas pueden tomar un tiempo personal de descanso, e incluso, aprender a nadar
- Escuela de yoga, donde se dan clases gratuitas a la comunidad.

En mi rol actual, también me dedico a hacer investigación sobre programas para nuestros padres, madres y cuidadores, por ejemplo: clases de inglés gratuitas o a bajo costo; preparación para obtener el diploma de educación general (GED) o el diploma de equivalencia de la escuela secundaria (a través del examen HiSET); servicios de cuidadores; servicios de enfermería en español.

Quiero que nuestra comunidad vea que hay opciones, que pueden tener acceso a la educación, y realizar sus sueños. También buscamos otros recursos y ayudas para el beneficio de las familias, por ejemplo: ayudas y apoyos gubernamentales, ya sean estatales o federales, también existen ciertos apoyos locales, así como migratorios.

Nuestras familias también son partícipes de investigaciones y actividades realizadas enUCSD a través de la profesora Amy. Cada una de estas actividades han sido muy importantes y significativas para las familias, y han generado mucha alegría y satisfacción cada vez que las familias participan en estas.

¡Muchas gracias a Mara y a John por visitar La Clase Mágica, por presenciar la magia de nuestro campamento familiar, por el apoyo que nos han brindado y por impactar, de manera positiva, nuestra comunidad y familias!

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SAYRA MARTINEZ

(LA COLONIA DE EDEN GARDENS INC., UNIVERSITY
OF CALIFORNIA, SAN DIEGO [ENGLISH VERSION])

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Sayra Martinez is the Specialist in Community Outreach for La Colonia de Eden Gardens Inc, the community partner collaborating with UC San Diego in sustaining long-time UC Links program, La Clase Mágica (Chap. 1).

Hello! Before I begin and tell how I got to where I am today, I want to thank some special people: Manny and Mary Ann Aguilar, Professor Amy Bintliff, Mara Mahmood, John Cano, and Karla Trujillo, for giving me the opportunity to be part of UC Links, a network that I consider important, special, and part of a personal achievement. My name is Sayra Martínez, I am 37 years old, of Mexican nationality, and was born in the beautiful state of Chiapas. The experience of migrating to the United States (US) was traumatic. I remember armed men appearing, one of them pointing his gun at my temple while at the same time, he grabbed my arm with the other hand asking for belongings, money, phone cards, or anything they thought was of value. Then they asked us to separate into two groups (one of women and the other of men), they made us undress to check our clothes and confirm that we were not hiding anything.

Once in the United States, I didn't know anyone, I didn't speak English, and as if that wasn't enough, I began to experience domestic violence from my now ex-husband. A few years later, in 2003, I became pregnant and had my son. I appreciate my time spent in shelters, where I went on more than one occasion. I wish that instead of telling me "go and apply for help here" they could have helped me with education and how to look for work. At that time I was a 17-year-old teenager, with a baby, and trying to survive in a different country, without speaking English, and without anyone's support, so I chose to return to my country.

Back in Mexico, I started working. I finished my high school and entered university to study law. However, I had to leave my university studies because education is not public and my son was going to start preschool. Living in my parents' house and seeing that there was no progress in my life to create a heritage for my son, I thought about emigrating again to the United States, but to another state. That's when I made the

decision, in 2009, to return to the United States. With a broken heart, I left my son with my parents because I didn't know where I would go. When I returned to the United States, I encountered the language problem again, but I am grateful to Danny, owner of a 7-Eleven who offered me my first job when I arrived, who along with the other cashiers tried to teach me the language. My next job was as a nanny, where a three-year-old girl taught me how to read her books to take her nap. Thus, more work experiences were added until I was able to enter a school to formally learn English. The first recommendation from the teacher was that we stop watching and listening to everything in our native language and try to do it in English and, since then, that's what I have done.

Years later I obtained my certificate as a Zumba instructor, and it was through this medium that I had the great opportunity to meet Karla Trujillo (Chap. 11) during a non-profit fundraising event. Then, in 2014, I finally had the opportunity for my son to return to his country of birth, and it is then when—through an advertisement about a summer camp for young people led by Karla (Teenology Rangers)—my story with La Colonia de Eden Garden (LCEG), Inc. begins.

I decided to contact Karla to find out what the requirements were to enroll my son in the summer camp. Once I registered him, I told him that he was going to camp—it's worth clarifying that my son had only been in the country for a few weeks and still didn't speak the language. However, for my son, the idea of going to camp was strange, as it is not something common in my country, and his reaction was better not to participate (because he didn't know anyone). My response was simple: "Don't worry, when you come back from camp you will already have friends."

So it was, after returning from camp, my son's attitude was more energetic and very positive. His words were "Mom next year I want to return as one of the young leaders." I felt my heart happy, after that he asked me to take him every Sunday to the culture and art program with the teenagers that Karla led. Thus, at a Day of the Dead event, one of the moms told me about La Clase Mágica (after-school program) where they helped children and teenagers with their homework. That same day I decided to speak with the person who is now the program director, Susanna Romero, to register my son. So, every Monday and Wednesday, after work, I would pick up my son from school, and take him to the program (I had to drive from the city of Oceanside to Solana Beach, a journey of approximately 40 min). On Sundays I would take him to the other program with Karla.

During the pandemic, LCEG, Inc. was doing food distributions. I took my son with me and, little by little, I began to direct the food distribution,

an activity in which other families also began to participate as volunteers. When the school year was approaching, I was given the opportunity to be an assistant at La Clase Mágica. During the pandemic we tried to create activities for mental health and provide support to families. During that stage, we guided our families to create art and, through art, describe how they felt at home. How did we make this possible? We delivered canvas, brushes, and paint to each family. Each week they shared with us what they painted and, later, we exhibited each one of them in a parking lot where families drove while admiring each of the pieces of art.

Today, I am a Community Outreach Specialist, where I dedicate myself to coordinating each of the LCEG, Inc. programs; we create activities where we integrate parents and caregivers, and we also ask for their participation and feedback. Having this job is something I thought I didn't deserve because in this country my education is not valid. Thank you, Karla, Manny, and Mary Ann for believing in me, when I wasn't even able to see my ability at that time. Currently, at La Clase Mágica we have parents and caregivers who help us during the program activities:

- The camp, which was previously for young people, today is a family camp where—with the help of Professor Amy Bintliff (Chap. 20)— activities are carried out for mental health and to strengthen family unity.
- Yoga and meditation.
- Community garden where families can grow their own vegetables.
- Mental health and personal growth group for mothers called "pláticas de mujeres" or "women's talks," where they can take personal time, rest, and even learn to swim.
- Yoga school, where free classes are given to the community.

In my current role, I also dedicate myself to researching programs for our parents and caregivers, for example: free or low-cost English classes; preparation to obtain the General Education Diploma (GED) or the High School Equivalency Diploma (through HiSET exam); caregiver services; Spanish nursing services.

I want our community to see that there are options, that they can have access to education, and realize their dreams. We also look for other resources and aids for the benefit of families, for example: governmental aids and supports, whether state or federal; there are also certain local supports, as well as migratory ones.

Our families also participate in research and activities carried out by UCSD, through Professor Amy. Each of these activities has been very important and meaningful for the families, and has generated much joy and satisfaction every time families participate in these.

Many thanks to Mara and John for visiting La Clase Mágica, for witnessing the magic of our family camp, and for the support they have given us and for positively impacting our community and families!

Transforming Learning Ecologies: Growing Seeds of Renewal

University-Community Partnerships as "Hybrid Contexts of Activity": Learnings from Two Projects with Roma Children in Spain

José Luis Lalueza, Virginia Martínez-Lozano, and Beatriz Macías-Gómez-Estern

Nina is a psychology undergraduate student aged 22 who participated one day a week during a semester in one of the sites of the Shere Rom Project. This is a translation of her field note (originally written in Spanish)[1] for the last

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[1] One of the undergraduates' requirements for the class taken at the university was to submit ethnographic fieldnotes after each visit to the project. This vignette is an extract one of these fieldnotes.

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day of activity. Undergraduate students participated as "helpers" or mentors in an activity where they collaborated with the kids attending Shere Rom to create videos:

"It is the last session in the computer lab and the children's faces express a mixture of feelings. It's a strange feeling—after having gotten used to going to school once a week—to know that coming here will no longer be part of my routine. Even though the time we have shared with the children has been short, it has been enough to create a powerful connection—all the other undergraduates share the same feeling. We can see the sad faces in the kids as they arrive. Each of us [undergraduate students] makes a group and invites the kids to sit next to us, as if we were asking them to be together on that day of farewell.

I notice Anna is a little distant, like she was lost in her thoughts, and I get closer to her. She tells me that she and her family have moved, that she used to sleep in the same bed with her brother, and that three family members used to share one small room. She tells me that she feels lonely and that she finds it difficult to sleep at night due to lack of habit. I comfort her by sharing similar experiences I had when I was around her age and get her to smile a little.

We all talk while other members of the group write the letters to @Mac[2] and Anna tells me that at some point in the session we will have to leave the room because she has a surprise for me. After assuring her that I will see the surprise—I focus on the kids who are engrossed in the task of writing (many of them trying to do it simultaneously on the same keyboard). I'm a little disappointed that Iván and Gisella fight over typing, and propose that they split up and take turns on the task [but this] doesn't seem to work. They snatch it out of each other's hands and I ask Anna to help them calm down. However, Anna doesn't seem too keen to intervene or take part in the discussion either. Finally, after insisting that both of them tell the other what they are going to do during their holidays, they both give up fighting and calm is established.

Once the recorded scenes and those that are pending to be recorded have been written, it is time for the kids to take turns using the computers to write a letter to @Mac. My group takes a little longer to finish their writing so by the time they are done there are no more computers available. I ask one of the children from another group if she can get together with someone else and share the computer with my group, but she refuses. I don't know how to react—as I was expecting a positive response—but then the girl sitting next to her

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[2] @Mac is a magical entity with whom the children participating in the project might interact through IT mediated technology. It's equivalent to La Maga (La Clase Mágica) or The Wizard (5D).

stands up, offering hers. I really appreciate the gesture and the four of us sit in front of a screen.

Gisella and Iván surprise me a bit because of the difficulties that I face in getting them to collaborate together, not knowing the real origin of their argument. However, the fact that Iván is more willing to participate in the activity than on other days makes me happy. It is even more significant that I did not have to encourage him to do so, but rather he took the initiative. I hope that he will continue to show interest and initiative in participating actively going forward. I do not know definitively which aspects have improved and which have not after the course of the sessions, but this seemed to me one of the most important and if it has been achieved it would be much more than an achievement.

The moment when the children announce that they have a surprise for the undergraduate students—and give us an envelope with personalized drawings—was extremely emotional. It rains hugs and kisses. Then, we [undergraduate students] take a step aside to read their letters and see their drawings—the atmosphere changes radically: suddenly the affective bond has grown and we also give them a present that we had prepared for them. They are all very happy and sad at the same time—even the shyest kids approach each of the undergraduate students and confess that they will miss us.

When snack time arrives, all kids disperse with their best friends within the class. It is not until the moment of delivering the gifts that we all get together, although it seems that Iván was only present physically (he is by our side but with his back turned to us, looking anywhere and with his mind in the clouds). We all ask him to turn around so we can talk and that's how we get his focus to return. I am surprised by the drawings (which show their dedication and effort) and I am really moved by the thoughtful messages that they included in their drawings. I hug them and the kids are very happy that I liked their drawings. Then I surprise them by giving them the photos we have taken and they thank me for the present. Shortly after I am dragged out of the classroom by Anna so that she can give me a surprise. We sit on a staircase at the end of the hall and she sings a song to me that was written by her mother. She has an amazing voice and the lyrics are about a farewell that implies not forgetting— adding even more emotion to the act. She leaves me really stunned and I tell her repeatedly how much I loved her song and that she has a great talent. Her gesture causes me to immediately want to give her kisses and hugs to express how grateful I am that she dedicated the song to me. I promise her that I will never forget her gift. She accepts the offer and answers that it will also be impossible for her to forget me.

Human relationships require time and knowledge of the other person to be able to have a deep understanding of them and to make these relationships have a significant meaning to us. When it comes to relationships with children, the time to build rapport is reduced. Suddenly, every day we see each other becomes a much more meaningful act, even if no one talks about it. Mainly, it strikes me when Iván tells me—at the time of saying goodbye—that he is going to miss me. For a few fractions of a second I am speechless, since until this day I had not seen such a show of affection from him, nor did I expect a similar gesture from him or such a strong hug. I knew that he was not like the girls—who in the third session already hugged me and were excited to see me—so it was even more significant. Verbalizing feelings is something that even I find difficult on a day-to-day basis—especially when you do not know how the other might react, among a few other reasons)—this being one more reason why I attribute greater value to his words.

Once we have all finished this task, the children sit at the tables in the center of the classroom and look at us expectantly (they remind me a little of the looks we could see in the first session, before the confusion of not knowing what was to come). Then we explain that the surprise is to have a snack all together, sharing what the students and coordinators have brought. Their faces light up when they see the chocolate chip cookies, pastries, and chips. I am especially struck by the reaction of Morad, one of the children of Arab origin, who asks—pointing to each of the foods—whether or not it contains pork. It is a kind of cultural shock, in the sense that at no time had I even considered that any of the children might have any difficulty eating any of the food that was brought in. Luckily, most things didn't have pork—he just looks disappointed when he finds out that the croissants do. Quickly the rest of the children devour everything they can. Some of them asked right away if it was possible to get seconds and we refilled the empty plates".

(Nina's field note, December 17, 2015; translation, originally in Spanish)

Introduction

The Shere Rom Project in Barcelona and the Clase Mágica in Seville derive from the experiences of university-community collaboration in San Diego (la Clase Mágica) and Barcelona (la Casa de Shere Rom). They both involve transformation processes in schools that have suffered social and ethnic segregation, in which Roma and immigrant students are concentrated due the "white flight." They are inter-institutional projects in which the goals and practices of different institutions such as universities, public

schools, and neighborhood entities converge in a new context of activity with their own goals and practices. They also have an intercultural dimension, insofar as the university undergraduate students from the hegemonic cultural group meet mostly Roma minority boys and girls, and others from other countries in Latin America, Africa, Asia, and Eastern Europe. And also intergenerational, with participants at very different moments of their life cycle (school students between childhood and adolescence, university students in training, and expert professionals among school teachers and university researchers), with very different goals and aspirations. The projects are therefore hybrid contexts of activity, which constitute new practices differentiated from those typical of the original contexts (university, school, community, etc.).

What we intend in our chapter is to show how participants learn and transform themselves in this type of hybrid context of activity. That is to say, how, starting from a previous differentiated trajectory, entering the activity with different motivations, with different ways of acting, with different conceptions of the world; and by interacting through collaboration, establishing effective connections, jointly involving in shared tasks, and creating new meanings, the participants learn and are transformed. For this we will focus on university students, following their field notes.

The vignette we have shared as an introduction to our chapter is an excerpt from a field note written by Nina (a pseudonym) after her last visit to the Barcelona project. Nina was a psychology undergraduate student in the 2015–2016 academic year. Her writing exemplifies the transformational processes that stem from the participation in our projects, as they are experienced by the undergraduate students who participate in them through their reflective writing in their field notes.

Program Context

Shere Rom began in 1998 as a community of practice promoted by our research group in the Autonomous University of Barcelona (UAB) in collaboration with the Badalona Roma Association. The collaboration had been established through a publication co-authored by researchers from the group and members of the same association (Cerreruela, et al. 2001). This publication on Roma culture, a marginalized group throughout Europe (San Roman, 1986), was part of an action-research that sought to overcome the classic asymmetric and ethnocentric models of social science research (Crespo et al., 2002). The shared knowledge between university researchers and Roma activists regarding the educational needs of the

community was the foundation of La Casa de Shere Rom, an educational activity where Roma children and adolescents could learn free from assimilationist pressures and deficit conceptions (Crespo et al., 2005).

Throughout 20 years of community-university collaboration, Shere Rom has been implemented in 17 locations inside and outside schools in the Barcelona Metropolitan Area: eight schools, three institutes, one institute-school (the current collaboration), three Roma associations, one civic center, and one public library (Padrós et al., 2014; Lalueza et al., 2020).

At the end of the 2016–2017 school year, Shere Rom was taking place simultaneously in four educational centers and four locations outside school. But faced with the impossibility of maintaining a network without sufficient financial support, Shere Rom moved toward a model of school-university collaboration with a school that wanted to radically transform itself that same year: the El Til·ler institute-school (Bon Pastor, Barcelona).

El Bon Pastor is a neighborhood created in 1929 around the nucleus of "cheap houses" built to house the workers who had come to Barcelona for the construction of the metro and the Universal Exhibition and who, until then, had lived in shacks or informal buildings. Wedged between a river, a railway line, and a locomotive factory, this neighborhood was isolated for decades from the rest of the city, and home to a large number of Roma families. Despite urban transformations since the recovery of the democratic councils in 1979, which allowed the connection of the neighborhood with the rest of the city, it continues to be a low-income area, and in the last 30 years it has been nourished by immigrant populations coming from Latin America, Africa, Asia, and Eastern Europe, although maintaining an important core of Roma population and also of white working-class autochthonous population.

The El Til·ler institute-school, which caters to students between the ages of 3 and 17 (preschool, primary, and compulsory secondary), asked the research group of the UAB to accompany them in the process of change to guarantee student's successful completion of compulsory education, and, in turn, reverse the strong stigmatization of the center. The objectives of this collaboration were to:

- make school internships a meaningful experience for students;
- facilitate dialogue about practices, meanings, and goals between the school and the learners, their families, and their communities;
- promote a critical practice of intercultural education.

This new stage of the Shere Rom Project has been carried out by adopting a Funds of Knowledge (González & Moll, 2002; Moll et al., 1992) and Funds of Identity (Esteban-Guitart & Moll, 2014; González-Patiño & Esteban-Guitart, 2021) approach. Thus, early childhood education teachers (of children ages 3–6 years) were accompanied in exploring the Funds of Knowledge of their students' families, with the creation of a study group on cultural diversity and family practices, visits to students' homes, and joint construction with their families of new activities. The continuity of the Shere Rom Project has consisted mainly in the integration of the intergenerational participation model of the Fifth Dimension and the methodological strategies of Identity Funds in the new *Identit.art* project, for which each academic year, a group of between 15 and 18 undergraduate students participate 1 day a week from October to May, each leading a group of three or four students from the school.

Identit.art is an activity for children and adolescents from 10 to 15 years old (fifth- and sixth-grade of elementary school and first, second, and third-grade of secondary school) in collaboration with university students, identifying objects, people, spaces, and symbols connected with identities of the former, and using artistic creation as a process to build narratives that provide multimodal tools to construct subjectivities. It is intended to link contents and social skills with the situated knowledge of the apprentices, always based on artistic techniques. With this proposal, a space for inquiry and questioning is fostered on issues related to the different forms of discrimination and oppression that affect the lives of students (Zhang Yu et al. 2021).

Thus, in the 2022–2023 academic year, for groups of 12- to 14-year-olds, the proposal involved working on migrations in a way that allowed understanding the historical, economic, climatic, political, and other reasons why people migrate. The starting point was the experience of kids, through the collection of personal objects and family narratives, as well as the identification of specific territories and places, followed by the artistic expression of these elements and discussion based on them. Finally, in collaboration with the school's teachers, they were integrated into the curricular content. The work was brought back to the neighborhoods in the form of exhibitions or artistic installations.

The group of 14- to 15-year olds collaborated in this course, in addition to pregrade students, with the Bon Pastor Public Library and the Rromane Siklǒvne Association (an educational Roma NGO) in the recovery of the historical memory of the neighborhood. To do this, a map of

Fig. 13.1   Some artwork designed in the Identit.art program in Shere Rom

the neighborhood has been created and will be exhibited in the library, in which stories of the people of the neighborhood will be included, as well as their own stories, located in specific places. As a result, the Library will have a large map in which small boxes will be placed that will offer popular stories that tell about life in the neighborhood, as well as a digital reproduction that can be consulted online (Fig. 13.1).

La Clase Mágica in Seville began in the 2012–2013 academic year, as a pilot experience in the Social Education Degree at the Pablo de Olavide University. The project was an iteration of La Clase Mágica's original idea in San Diego (Vásquez, 2003) where a researcher in the Sevilla team had been actively involved (Macías-Gómez-Estern & Vásquez, 2014, 2015). The pilot experience consisted of a year-long negotiation with different educational agents in Polígono Sur, an historically marginalized

neighborhood in Seville,[3] southern Spain, to set the bases of our collaboration. Our motivation was not to interfere in the social transformation and educational processes going on in the neighborhood, establishing collaborative networks that could add value in a meaningful way to the already existing activism (Macías-Gómez-Estern & Vásquez, 2014).

After this period of negotiation, we implemented the project with a service learning methodology in the first semester of the Social Education degree. Nowadays the project is being run in various psychology classes in different programs (Social Work, Social Education, and Sociology) at the Faculty of Social Sciences Pablo de Olavide University. Some of these classes are taught in English, hosting international students from different European universities under the Erasmus + program. In La Clase Mágica, university undergraduate students collaborate with educational centers in Polígono Sur. We have maintained a long-term collaboration with a preschool and primary school center (CEIP Andalucía) and an adult education center (CEPER Polígono Sur).

CEIP Andalucía is a public center of preschool and primary education. It was constituted as a Community of Learning (CoL) in 2006, and mostly Roma children attend it. Being a CoL implies implementing a Freirean-based educational methodology, in which different actors participate, and all are involved in the educational process: neighborhood residents, caregivers, teachers, volunteers, university students, and students of the center. Everyone learns together, participates in the classroom, has a voice, and can make decisions. Egalitarian and horizontal dialogues are key to the educational process (Aubert et al., 2009; Kleine-Kracht, 1993; Lalueza et al., 2019).

Students from the Faculty of Social Sciences participate as collaborators and helpers in different educational activities in CEIP Andalucía and CEPER Polígono Sur, as part of their higher education training. They attend the school during one semester, learning interdisciplinarily through service learning (SL) methodology. This methodology involves learning from practice, but not just any practice, but a community practice, through service to the community. All the subject matters of the semester are

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[3] For socio-economic and demographical information about Polígono Sur, see 'Diagnóstico de Zonas con Necesidades de Transformación Social' (Ayuntamiento de Sevilla, https://www.sevilla.org/servicios/servicios-sociales/publicaciones/diagnostico-zonas-necesidades-transformacion-social.pdf) and 'Monografía comunitaria Polígono Sur: aprendemos a con-vivir mejor' (Fundación Atenea, http://convivirpoligonosur.fundacionatenea.org/2017/02/13/monografia-comunitaria-poligono-sur-aprendemos-a-con-vivir-mejor/).

integrated in this project: bases of human psychological functioning, didactics of social education, foundations of anthropology, foundations of sociology, lifespan developmental psychology, cognitive bases of social interaction and communication and social pedagogy. All incorporate teaching activities that connect theory with the service performed by students, generating significant conceptual learning and providing tools of analysis of reality for reflection and learning from the methodology of SL.

The community service performed by the students involves their attendance at the center for 7–10 weeks (depending on the class and degree), 2 hours each week, collaborating in interactive groups in the classroom, which are one of the successful actions implemented in the CoL (Fig. 13.2). These interactive groups are made up of four or five students; different thematic activities are developed in them, each activity being coordinated by an adult. Normally, there are three or four adults per classroom, including the teachers, so that while collaborative learning is worked on, teaching is as individualized as possible. The classes are extremely heterogeneous, finding children with very different educational levels in the same class. Each student at the university is assigned to a specific class and timetable, so they have a reference group at all times.

University students must write a field note every day they attend the program, in which they report about what has happened that day in as much detail as possible. Field notes also include a reflection on two levels. On the one hand, a *theoretical reflection*, in which they should use the concepts they are working on in class relating them to practice, so that a better understanding of both levels is possible. This allows them to deepen their disciplinary learning, apprehending concepts in a more real and authentic way. On the other hand, and no less important, they must make a *personal reflection* where they have to comment on their sensations, emotions generated, personal perceptions, experiences, prejudices, doubts, and questions. The field notes are therefore an essential part of the project, which contribute to the consolidation of disciplinary learning. At the same time they constitute a tool for building identity, where students must reflect on themselves and on the other people with whom they participate (Arias-Sánchez et al., 2018; García-Romero et al., 2018).

As part of their learning, university students must produce a short film about the experience, which is screened at the end of the course for the entire university community. The school too is invited to come to the university to join us in the celebration.

Fig. 13.2 La Clase Mágica-Sevilla undergraduate international students walk along the neighborhood on their first visit to the school

Key Ideas

We conceptualize the interventions developed within the framework of the Shere Rom Project and La Clase Mágica Seville as "hybrid contexts of activity" (Macías-Gómez-Estern, 2021). They arise from interactions between participants who simultaneously act as agents in different activity systems, their "original systems." Thus, university students are

participating in a university activity (generated by their university, directed at developing knowledge and skills typical of the university curriculum), but at the same time they must respond to the requirements of the host institution and its professionals and the educational, social, and affective needs of children and adolescents with whom they enter into action. In other words, they participate in a hybrid system that responds to the goals, procedures, rules, and roles of two different activity systems (in our case, the university and the schools), which implies the creation of new goals, procedures, rules, and roles, distinct to, but not disconnected from, the original systems (Lalueza & Macías-Gómez-Estern, 2020).

An interesting feature of these hybrid systems is that, while the original systems (such as the university and the school) are strongly institutionalized with very clear goals and highly institutionalized procedures, the resulting hybrid system has a low level of institutionalization. Students' goals, their practices, and the roles of the participants are constantly redefined in relation to the contradictions that emerge when having to respond to the goals of different systems. And that process, which requires constant negotiation, allows constant innovation.

Another characteristic of this system of activity is the character of joint activity based on the legitimation of the diverse motives of its diverse participants. University students, researchers, school teachers, and their pupils (children and adolescents) participate from different motivations that can generate collaborations that complement it or develop contradictions questioning the activity. In a rigidly institutionalized system, contradictions are solved by imposing goals, practices, and roles, with the expectation that the participants will have to adapt to this mandate through the corresponding disciplinary procedures. However, the activity that we present here is based on the legitimization of the various agendas and the creation of an environment that responds satisfactorily to them, in what in Kris Gutierrez's terms would be a "third space" (Gutierrez, 2008). So, the participants must weave an intersubjectivity that supposes the construction of shared meanings and also shared goals.

This hybrid system of activity in constant transformation is a learning environment for all participants, but we are analyzing here exclusively the group of university students. The field notes prepared by these students, such as the one illustrated in the opening vignette of this chapter, allow us to trace an itinerary of learning and personal transformation through participation in the activity, which broadly follows the stages prefigured in the model of Transformative Learning (Mezirow, 1997). The Transformative

Learning Model helps us to understand a series of critical incidents derived from the contradictions experienced by our undergraduate students when entering a system of activity whose rules differ from the systems of origin (the institutional framework of the university activity, the cultural framework of the community, and family of origin). This is a situation of "dissonance," that is to say, of rupture of the expectations and scripts based on the contexts of previous activity. A new situation in which the student accesses other ways of interpreting reality and legitimizing behavior, but also a new situation that requires new responses because the routines learned in other contexts do not work. This situation generates confusion, doubts, and rethinking, that can be the basis of a reflective process. In the following excerpt (Lalueza & Macías-Gómez-Estern, 2020) we show some traces of this process in a student from La Clase Mágica Sevilla:

> My experience on the first day impressed me a lot since even though I imagined finding myself in similar situations, I didn't think that the students had so many curricular shortcomings or that the alternative methodology would work so well (…) On the one hand, what particularly struck me was the fact that the students would leave the classroom without the teacher's permission when they didn't feel comfortable or got angry (…) I had never been in a situation like that, and to be honest I found it really frustrating not being able to do anything to calm the teacher down or help her. (María [pseudonym], field note 1)

But this reflective process requires another element, which occurs in most students but not necessarily in all: the establishment of personal relationships with the "others," represented mainly by children and adolescents who come from very different community environments, than those of the students. The emergence of affections and empathy favor the adoption of new perspectives that allow the social environment of the activity to be interpreted from a different point of view than that of the hegemonic culture and social classes to which most of the students belong. In the next field note from María's fifth visit, we can see how she starts connecting with the children's reality and using the university classes theoretical tools to do so:

> Antonio, one of my new students, ended the activity before his classmates and sat next to me to tell me how he felt (…) "Teacher, did you know that even though I'm an entrevelao [mix of Roma and non-Roma] I consider myself Roma? You see, my father is Roma, but my mother isn't. Here the

Roma call me entrevelao, but since I grew up with the Roma in Las Vegas (they're my father's cousins) I'm now Roma." So, I asked, "Why would you like them to treat you like a Roma?" And he said, "Oh, teacher, because the non-Roma mess with the Roma and look down on us. Roma blood is better."

Many of the parents told me, in an interaction I had while waiting for a colleague, that they had to feed their children while working with their pathetic salaries and that many wouldn't accept it. When I decided to ask them why they thought that happened they all had the same answer: "because we're the Roma from the 3000[4] and they don't trust us."

Unfortunately, this ethnocentrism that anthropology teaches us about still exists today. We still find this tendency to consider our culture superior and to judge others, and it's a fact that this should no longer exist given the major advances in the situation of the Roma. (María, field note 5)

This relational and affective immersion offers important tools to overcome the dissonance of the moment of entering the activity through the experience of a new perspective. It allows for many students a cognitive change, in ways of knowing and explaining reality.

Finally, this process of "real learning" in which the relational and affective converge with the strictly cognitive culminates in the "assumption of agency," that is, the adoption of goal-oriented commitments, the transition from peripheral participation to a central participation (Lave & Wenger, 1991) of involvement in the progress of the activity and in the spiral of its design, implementation, and evaluation. The learning subject is thus transformed.

Nina's field note (transcribed in the vignette) shows the culmination of this process. She went through the stage of dissonance that she tried to address from her role as "observing college student." The establishment of relationships with the "others" (which are evidenced in these field notes) allowed her to understand reality in new ways but, above all, led her to adopt commitments, with each of the children with whom she entered into interaction, as with the goals of the activity.

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[4] Las 3000 is the popular and best known denomination of one of the neighborhoods that make up the Poligono Sur of the city of Seville. Its origin is the number of houses that housed the neighborhood in its creation (the 3000 homes). This denomination is also the most used in the media when the neighborhood is related in its entirety with high marginality and cases of delinquency.

DISCUSSION

In our chapter we have followed the development of two projects, La Casa de Shere Rom (Barcelona) and La Clase Mágica (Seville), as two Spanish iterations of the University-Community Links (UC Links) vision of community-engaged research. (See https://uclinks.berkeley.edu/ for more information about UC Links programs and the global UC Links network.) The researchers involved in these two projects (the chapter authors are part of a larger team) have shared reflections, tools, and strategies after identifying some commonalities in the main population we work with (Roma children) as well as the focus on undergraduate learning processes, as part of the whole learning system that all our network projects generate.

The history of our two projects, as a living system in which university students and teachers, researchers, school teachers, Roma community leaders, members and children have interacted and shared over more than 25 years, has led us to insights into the complexity and transformative power of these learning settings. They have fostered transformation in all participants (researchers, students, children, etc.) (Underwood et al., 2021). In this chapter we have focused on the transformation and learning processes experienced by undergraduate students as part of a whole.

We have followed the learning processes of our undergraduate students over time, through their own reflective writing in their field notes (García-Romero, et al. 2018). To do this, we have used concepts developed in the tradition of "Transformative Learning" as internal psychological processes (Lalueza & Macías-Gómez-Estern, 2020). However, for us the roots of these learning processes do not lie internally, in students' cognitive and emotional processes, but in the features that the projects have developed as "hybrid contexts of activity." "Hybrid contexts of activity" (Macías-Gómez-Estern, 2021) contain goals, artifacts, motives, and subjects that originally develop in at least two differentiated activity settings (university and formal schooling). This gives them a number of potentialities for change, which we have tried to reveal in our chapter. Firstly, through the voices of the students, which show how they are moving toward more nuanced and richer perceptions of the "cultural other" and their own values, transforming their own ways of being in the world. Nina's and Maria's testimonies show how their perceptions and attitudes have changed as a result of their participation in La Casa de Shere Rom and La Clase Mágica Sevilla. Secondly, through the narrative of the history of our project, where we show how the systems are living entities and long-term communities of practice, where transformation takes place in different

directions and in all participants, moving away from traditional monological and patronizing concepts of socio-educational intervention.

We could conclude that the hybridity of our projects, which we tentatively conceptualize as "hybrid contexts of activity," could be the main dimension that helps these transitions, these transformations, and learning processes in different directions to happen. The hybridity of our projects is the result of a low-level of institutionalization, in such a way that roles and tasks have to be constantly negotiated, offering more possibilities for creation and learning for all participants. This hybridity generates the need to create new (not tied to the "original" institutionalized university and formal school settings) shared meanings among the participants, what has been called a third space (Gutiérrez, 2008). All participants need to explore and find their agency in their own way. Participation, face-to-face interaction, and empathy with "the other," in a context where decontextualized social categories become meaningless, are crucial elements for the emergence of transformative processes in all the different learners involved in our projects.

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Learning with the City: Establishing a Culturally Sustaining School-University-City Partnership

Ellen Middaugh, Yasmeen Ramos, and Amrita Deo

*Our group of almost 40 people poured out of the school building onto Green Rd. After spending the morning learning new terms like "flashing beacon," "bollard," and "ladder crosswalk," the eighth-grade students of Ms. James' class set out to view the busy street in front of Escuela Paolo Freire (EPF) with new eyes. As their surveys of the local community would later reveal, everyone in the neighborhood knows that Green Rd. isn't very safe. Their job today was to imagine with their clients from the Department of Transportation (DOT) how Green Rd. **could** feel with the right improvements.*

As the narrow sidewalk forced students to spread out, and the noise of the traffic surrounded us, it quickly became clear that students were going to have trouble hearing Jane and Amy as they pointed out different features of the street and to share their own ideas about what makes them feel safe/unsafe. Fortunately, our team of nine adult partners quickly mobilized to adjust. I (Ellen) jumped up on a nearby wall halfway down the line to repeat

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information being shared at the front of the group by Jane and asking students for their ideas. Amy (City of San José Department of Transportation—DOT) followed suit in a different location. Yasmeen, a San José State University (SJSU) MA student who had been working with the class all semester, walked along with students repeating this process in Spanish.

Our partners from the UC Links Office were there to observe, but they quickly merged with the group. Mara chatted with Ms. James to learn more about her motivation as a teacher to engage her students in this Y-PLAN (Youth-Plan, Learn, Act Now!) project, Karla and John chatted with students in Spanish and English about how this street looked and the way people drive compared to what they've seen in Mexico or Colombia and other countries from which they and their families immigrated.

As we walked, students pointed out the narrow and faded bike lanes, the lack of speed limit signs and the way the cars ignore existing signs, and the fact that (in spite of years long drought and lack of tree canopy in this busy urban area) trees had not been trimmed and were covering stop signs and pedestrian crossing lights. As we looked across the busy intersection of Green Rd. and Twin Rock Blvd. to the local public library, the students noted that they didn't think the crossing light gave enough time for their little siblings or elderly abuelas to cross safely. (Observation field notes, March 18, 2022)

Introduction

As the Berkeley Y-PLAN chapter in this volume details (Chap. 15), Y-PLAN (Youth-Plan, Learn, Act Now!), as a program to center youth voices in the design of safe, caring, and joyful cities, has existed for more than 20 years (McKoy et al., 2021). The San José Regional Hub, however, began in 2021 as a new branch and iteration of the model. In an era where educational initiatives face continuous pressure to distill core practices to be scaled up with consistent and predictable outcomes, we (Ellen, Yasmeen, and Amrita) argue for a situated and place-based approach that recognizes educational practices are necessarily transformed by their local social contexts. In this chapter, we employ a case study of Ms. James' eighth-grade class experience with Y-PLAN as a mechanism for illustrating a place-based approach to growing a regional partnership to center youth voices in the design of safe, caring, and joyful cities.

As a scholar, my (Ellen's) work in youth civic engagement and civic education has consistently been guided by the question, "How can we best support young people to become effective, ethical, and empowered

advocates for themselves and their communities?" Research on best practices suggest youth need opportunities for *socio-political critique* or to ask *why* our society is the way it is and what it should be, for building *connection to a collective identity* or identifying who is in the community and who we might be collaborating or negotiating with to solve collective problems, and development of a sense of *agency* having experiences that reinforce for youth that their voices matter and they can make a difference (Flanagan, 2013; Ginwright et al., 2006; Kirshner, 2015). In this large, and multidisciplinary field, the theoretical models and programs tend to vary in terms of starting points (e.g., starting with learning about systems as they exist and then moving on to examine how they can be better vs. starting with learning about public problems that students have direct experience with and the systems that regulate them) and degree to which they emphasize different components (e.g., individual critical thinking and agency vs. collective knowledge construction and efficacy), but the broad principles frequently hold.

However, the question of what these experiences look like is heavily shaped by the local context and the positionalities of the youth and adult partners within that context. In this chapter, we examine the ways in which the Y-PLAN methodology, which has operated with great success for years in urban, progressive cities like New York City and Oakland, CA, intersects with the context of a predominantly Latinx area of the third largest city in California, San José. Specifically, we examine (1) planning as social justice work: how the Y-PLAN methodology enabled our community of practice to gain a better understanding of how our quality (and inequality) of life is shaped by city planning and how we can participate to make those processes more representative of the needs of the community, (2) linguistic capital and planning: how our community of practice leveraged different kinds of linguistic capital and developed new linguistic capital through this process, and (3) higher education as a connector of cities and schools: what unique affordances a regional state school can offer as integrated resources for the local community.

Program Context

As seen in Fig. 14.1, the "site" of our work with Y-PLAN spans several institutions and locations in San José. Indeed, a major emphasis of the Y-PLAN methodology, as is described in detail in the Berkeley Y-PLAN chapter in this volume (Chap. 15), is to help make visible the
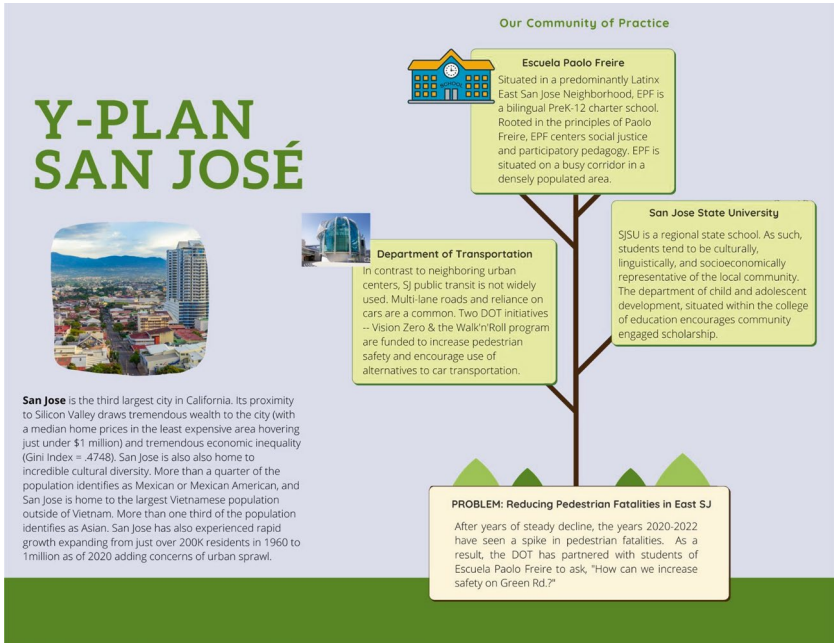
Our Community of Practice

Y-PLAN SAN JOSÉ

Escuela Paolo Freire
Situated in a predominantly Latinx East San Jose Neighborhood, EPF is a bilingual PreK-12 charter school. Rooted in the principles of Paolo Freire, EPF centers social justice and participatory pedagogy. EPF is situated on a busy corridor in a densely populated area.

San Jose State University
SJSU is a regional state school. As such, students tend to be culturally, linguistically, and socioeconomically representative of the local community. The department of child and adolescent development, situated within the college of education encourages community engaged scholarship.

Department of Transportation
In contrast to neighboring urban centers, SJ public transit is not widely used. Multi-lane roads and reliance on cars are a common. Two DOT initiatives -- Vision Zero & the Walk'n'Roll program are funded to increase pedestrian safety and encourage use of alternatives to car transportation.

San Jose is the third largest city in California. Its proximity to Silicon Valley draws tremendous wealth to the city (with a median home prices in the least expensive area hovering just under $1 million) and tremendous economic inequality (Gini Index = .4748). San Jose is also home to incredible cultural diversity. More than a quarter of the population identifies as Mexican or Mexican American, and San Jose is home to the largest Vietnamese population outside of Vietnam. More than one third of the population identifies as Asian. San Jose has also experienced rapid growth expanding from just over 200K residents in 1960 to 1million as of 2020 adding concerns of urban sprawl.

PROBLEM: Reducing Pedestrian Fatalities in East SJ
After years of steady decline, the years 2020-2022 have seen a spike in pedestrian fatalities. As a result, the DOT has partnered with students of Escuela Paolo Freire to ask, "How can we increase safety on Green Rd.?"

Fig. 14.1   Site description

interconnections between the cities, universities, and schools and to help students see their most immediate and local lived environment as part of a network of systems and neighborhoods with varied, and often systematically inequitable, access to the resources that help them thrive. Indeed, as Amrita Deo, an SJSU MA student and passionate advocate for first-generation college students, describes in the section "Seeing Street Design as Social Justice," our goal was to invite students to critically examine their local built environment, imagine better for their community, and identify opportunities to work with the city to make that better environment a reality.

Key Idea: Seeing Street Design as Social Justice

As described in the chapter by Buss and McKoy (Chap. 15), Y-PLAN's methodology brings together youth, planners, and civic partners to engage with one another as equal partners to address or bring light to important matters in communities that have been overlooked or not given priority to. It helps create a bridge between civic partners and the youth who are living in historically marginalized communities to bring real issues and solutions to the surface, all while providing youth with real-life experience with leadership, critical thinking, and technical skills that complement their academic curriculum, which they will use beyond a classroom setting. Over the years, students, educators, and civic partners have helped develop Y-PLAN's five-step methodology and program to what it is today. This approach challenges the policies and practices that have shaped the inequities that impact marginalized communities and creates space for youth to recommend important changes for their communities now and for future generations.

By partnering with youth living in these communities, we recognize they are experts on what their community needs are, and can bridge the gaps from generations of mistrust between government and historically marginalized communities. Additionally, by having youth participate in Y-PLAN in eighth-grade, it helps develop leadership, critical thinking, and technical skills in preparation for high school. Skills which students from historically marginalized communities often do not gain until they are well into high school, and sometimes even college. Y-PLAN helps address not only gaps in community planning, but also within the education system itself. In this case study, the DOT clients were appropriate because Green Rd. was on the schedule to be updated and revitalized as of 2023. In 2022, students were asked to conduct research to weigh in on this process so that they can help their community have a say and tell the city what would make this busy speedway in front of their school feel like a place where they are safe to walk and be on their bikes, scooters, or skateboards.

In my (Ellen) decades of asking teens and young adults, "Are there any problems or issues in your community that you are concerned about?" the youth I speak to always have had something to say, and I can't remember a single young person saying, "Yes, I'm really worried about street safety." Discovering how the decisions a city makes whether to apply paint, build stop lights, or build bike lanes can be a social justice issue was a process. When Yasmeen first posed the questions to students as to whether they

feel safe on Green Rd. and why or why not, the responses were mixed. Some students referred to the fact that cars do not obey the speed limit or do not always stop when people are crossing the street in front of the school. But in line with the well-established research findings that early adolescence (ages 12–14) is a time where young people want to push for and establish their autonomy (Steinberg, 2023), some of the more vocal members of this group made comments asserting their capacity to manage the danger and lack of need for assistance.

Our task then became to both focus and widen the lens that students used to observe their surroundings. Widening the lens included asking students to not only consider whether they feel safe, but whether they would feel comfortable with their younger siblings or elder relatives or those with motor-related disabilities crossing the street. Widening the lens also included learning in the meeting with DOT about the bigger problem of pedestrian fatalities in San José, that the street in front of their school was one of the streets where these incidents happened more frequently, and that pedestrian fatalities is not something that everyone has to deal with outside of their school. As one student asked during this meeting, "Why is it that the street in front of our school is so busy and not other schools?" (Observation field notes, March 18, 2022).

Focusing the lens included leading students to look more closely at the street in front of the school through a street design perspective. The natural human tendency to adapt to our surroundings is useful, but at the same time, critical imagination and hope are crucial for envisioning not just what is but what should or could be (Garcia & Mirra, 2021). The students in Ms. James' class had a few opportunities to focus their lenses. Yasmeen first led them on an initial investigation to look closely at the road to identify features that increase safety and features that challenge safety. Students created visual representations of the streets and began to focus on specific features like protected crosswalks, obscured signs, narrow bicycle lanes, etc. (Fig. 14.2).

From there, students spent additional time sorting their information into a SWOT (strengths, weaknesses, opportunities, and threats) analysis and formulating questions to ask the DOT clients.

Further focusing of the lens happened during a site visit, where the clients came out to share additional information with the students and clarify what they needed community input on. During this phase, representatives from each partner in the project (SJSU, EPF, DOT, and University-Community Links [UC Links]) were present. As students
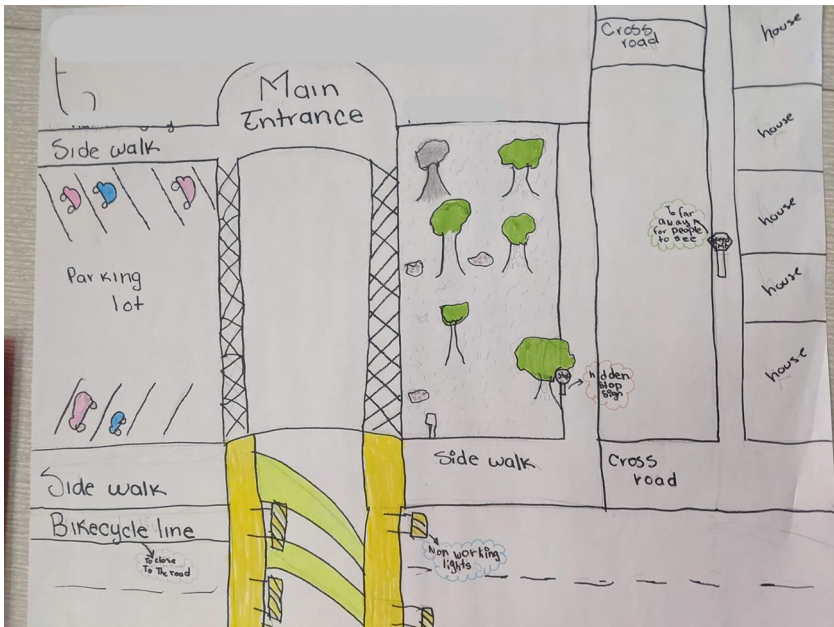
Fig. 14.2 Student site map

repeated and extended their analysis of Green Rd., this time they had additional information gathered during Step 3 of the Y-PLAN methodology, "Into Action." They had seen examples of what bike lanes could look like, what roads look like when people feel safe to walk on them, and additional options for slowing traffic, making space for people, and improving the experience of safety. In this site visit, students looked more critically at the narrow bike lanes, narrow sidewalks, faded crosswalks, and minimal traffic calming measures and, with the support of our learning community, started to come up with ideas of changes that could make Green Rd. feel like a street and a place they would want to walk, ride, or roll on.

By the end of the semester, we saw this scaffolding of learning to read the city through an urban planning lens (McKoy et al., 2021), lead students to more naturally see street design and safety as not just a fact of life, but as a set of conscious decisions made by people with power to shape the quality of their environment. In their final presentations and end-of-year reflection focus groups, students demonstrated their growing awareness of

street design as a social justice issue. For example, Alejandro noted, referencing the graph in Fig. 14.3,

> I have seen a lot of people that do not feel safe in the streets like other roads, even though the graph shows that they don't feel safe. The roads are rushed (busy streets). I think our experience **helps us learn more than just the streets but how to protect them and the people in San José**. (Student Focus Group, May, 2022)

Mariana echoed that the process "helped me view the community from a different perspective and the things that can be improved in my community" (Student Focus Group, May, 2022). In their observations as they carried out the work, their preparation of their final projects, and as they presented, students repeatedly stressed that the very road that houses two schools, a youth center, a library, a senior center on one-side and is lined by residential family homes on the other is a road that 89% of people do not feel safe walking on, especially at night.

As we will discuss in the next section, students did not simply stop at pointing out the lack of walkability and safety on the road they navigate every day to attend school. They leveraged their linguistic capital as native and/or bilingual Spanish speakers, paired with their expanded urban planning vocabulary, to invite in the voices of their local community and to advocate for a design that will make Green Rd. more than a busy thoroughfare.
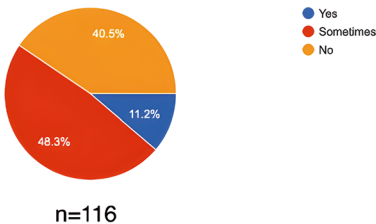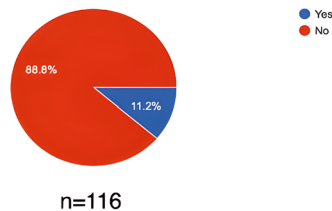
Fig. 14.3 Student survey findings

Key Idea: Building and Extending Linguistic Capital

As a bilingual charter school, the Escuela Paolo Freire community was uniquely positioned to invite more community voices into the planning of improvements to Green Rd. Of particular relevance is the school's explicit recognition of "Community Cultural Wealth" (Yosso, 2005). In the first iteration of the DOT project, we (Ellen and Yasmeen), worked with an adult high school night class made up of some of the least represented residents of San José—recent immigrants from Mexico and Central America who are still becoming comfortable expressing themselves in English. Building on this initial effort, the eighth-grade students in Ms. James' English Language Arts class joined in the effort to add their youth voices and concerns. As Jane and Amy from the DOT noted, decisions made about safety design improvements are made through a combination of traffic studies but, "engineers are also encouraged to seek community feedback, through meetings with residents/businesses and through mail outreach, where the community is encouraged to provide feedback on a proposed change," (Partner Focus Group, May, 2022). However, Spanish-speaking residents who work long hours or may not be able to attend meetings and youth perspectives are more challenging to access through these mechanisms. They noted, "Working with students gives DOT insight into how a particular safety design might impact the community, possibly in ways that might give DOT reason to rethink a design" (Partner Focus Group, May 2022).

In this project we were able to see how the Community Cultural Wealth (Yosso, 2005) that students brought to the Y-PLAN project enhanced this process. Specifically, at play in this project were in the form of "the intellectual and social skills attained through communication experiences in more than one and/or language style," (p. 78) and *familial capital* in the form of kinship ties and commitment to nurturing extended family as a way of "maintaining a healthy connection to our community and its resources" (p. 79). Throughout the semester, we saw students integrating new urban planning terms into their linguistic repertoires. As I (Ellen) walked into class to help students learn to use Google Forms to design their survey, I noticed students chatting in Spanish, punctuated by terms like *flashing beacon* (field note, April 18, 2022).

Using their linguistic capital, students integrated these ideas into their surveys to the community, contributing survey items in English and in Spanish and using pictures to convey words that are not familiar to many.

However, certain technical street design terms like, "mountable rubber speed humps," mean little to native English speakers, and translations into Spanish would not bridge the gap. Integrating pictures to illustrate the concepts allowed them to communicate more effectively and gather community input (Fig. 14.4). Drawing on their familial capital, students were able to share these ideas with adults in the community and gather feedback using their networks to collect over 100 surveys with input on the desirability of these different options for improving street safety.

While students learned new vocabulary and translated concepts for their community to gather input based on what they learned from DOT about their options for improving street safety, the use of open-ended questions asking the community for input also allowed students to bring new ideas to the DOT. From the closed-ended survey responses, DOT learned during student presentations "students and their families ranked speeding and failure to stop for pedestrians (particularly EPF students crossing Green Rd) as the top safety issues for the community," (Partner Focus Group, May 2022). However, the inclusion of the open-ended question revealed something that was surprising to the DOT clients was "that the community largely supports use of speed enforcement cameras, which has been the subject of debate across California." The suggestion of speed enforcement cameras came up in multiple responses to the open-ended question about improving street safety. Due to concerns about
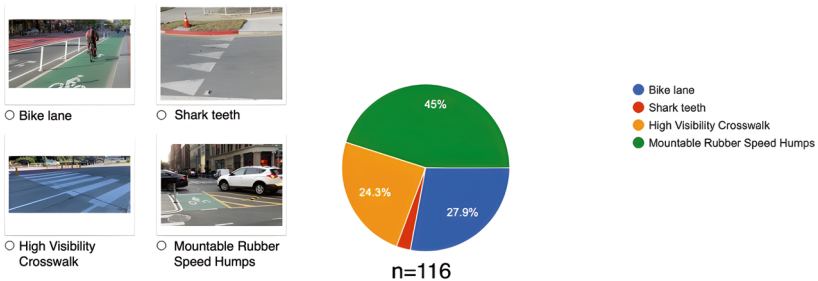
Fig. 14.4 Student survey findings showing use of translation and pictures to convey meaning

surveillance, speed-enforcement cameras are a controversial topic in California, often for social justice reasons, and as a result were not included in discussions with students about options for improving street safety. At the same time, hearing from members of the communities most highly impacted added nuance and complexity to the debate. Ultimately, "the students' concerns and ideas became part of the discussions among various DOT engineers and planners" (Partner Focus Group, May 2022).

Key Idea: Growing an Organic Partnership

When I (Ellen) was first approached by the Y-PLAN founder to lead the San José Y-PLAN hub, I was intrigued but also had some hesitation. As a tenure-track assistant professor, I had spent the last several years building my research portfolio and reputation as a scholar of youth civic development and engagement, with a specific focus on understanding and educating for digital media in the era of social media. Taking on a new program rooted in the principles of urban planning on top of my other projects presented some risk. Y-PLAN required expertise outside of my department and took time away from projects that were "mine" and illustrative of the expertise that I was known for as a scholar. Furthermore, ethical community-engaged research necessarily requires prioritizing benefit to the community (Mikesell et al., 2013), which typically requires spending time building relationships and prioritizing responding to shifting priorities. Thus the research that comes out of such partnerships often begins as exploratory and takes time to evolve into studies guided by well-formed and also community-informed research questions and structured data collection.

However, what ultimately caused me to jump at the chance was what I saw could be a new leadership and career development opportunity for the SJSU students with whom I work. As you will see in their own words in Chap. 11, my co-authors, Amrita Deo and Yasmeen Ramos, MA students from my department, brought interests, backgrounds, and experiences that were incredibly valuable for working with low-income and/or multilingual students growing up in urban environments. Because the CSU system is designed to serve California and SJSU is designed to draw in a regional population, the students in my department reflect the surrounding community, and like much of San José, a high percentage of SJSU students are multilingual, students of color, and/or first-generation college students from low-income communities, often with ties to the very neighborhoods we work with. These students frequently exhibit *ganas* or will to persist and

overcome challenges that have been identified as an important factor in college success, particularly for undocumented Latinx college students (Contreras, 2009). Building on this concept, O'Neal et al. (2016) found for first-generation documented and undocumented college students, the concept of "ganas" derived from relationship-based factors such as a desire to build on prior generations' sacrifices or to give back to the community and others who can learn from their experiences. Thus the partnership with EPF was positioned as not only an opportunity for SJSU students to benefit EPF, but an important opportunity to engage SJSU students in meaningful opportunities to build their own skills while supporting others.

Through my work with Y-PLAN, I have connected to the UC Links network and found that the principles behind UC Links align with my priorities and those of my department, college, and university. (See https://uclinks.berkeley.edu/ for more information about the global UC Links network.) While this chapter focuses on my work with Y-PLAN, UC Links' attention to building a long-term sustainable university-community relationship in which undergraduate students work collaboratively with K-12 young people and engage in digital, civic, and STEM learning activities reflects the same umbrella of priorities in my own work. Joining a community of practice with faculty, graduate, and undergraduate students, and community partners from across California and around the world has provided me with invaluable inspiration and practical strategies for building a sustainable partnership.

Thus, the final insight from this case study has been on the importance of building partnerships organically in a way that is responsive to the needs of university students and partners, rather than just me as a faculty researcher. What has happened as I have pursued working with Y-PLAN alongside my work with two other initiatives, and with faculty from Urban Planning and Science, is an unexpected emergence of a network of mutually reinforcing projects. Teachers who participate in an initiative that I consult on (Diversifying STEM) are often eager to understand how they can inspire students to take action on the issue of climate change. High school humanities teachers that I work with to develop civic action projects are often looking for opportunities to connect their students with authentic audiences. The undergraduate and graduate students I work with want to build professional experience, form relationships with each other and faculty, and have a chance to ensure all of the navigational capital they've gained as first-generation college students won't just end with them. As I have followed projects along independent tracks, I have found

opportunities to weave them together situating my work under the umbrella of sustainability, as defined by the United Nations Sustainable Development Goals (United Nations, n.d.), and working toward a college campus sustainability summit that all of my K-16 partners can participate in.

Discussion: Reimagining Education by Expanding the Perspectives, Voices, and Physical Spaces Where Learning Takes Place

Growing a slow and organic partnership that centers the interests of students and community partners is often in tension with the demands of "original" independent work and scalability that typically marks academic success. As a newly tenured scholar, I've experienced the urge to do something big, to scale up, and to show my productivity through quantity and original work. From that perspective, working with Y-PLAN was contraindicated. I am working on other projects to create curricula with teachers related to my research on digital media and civic education. If I want to scale up or land the big grant, the logical thing to do would be to choose one curriculum, get as many teachers as possible to use it, and to test its impact on measurable outcomes. Instead, I've followed my heart and showed up in educational spaces where I think I can contribute to meaningful work that all fits under my professional guiding question, "How can we support young people to advocate for themselves and their communities to build a more just and sustainable society?"

I have been able to take the risks in part because my work is situated within a department, college, and university that is invested in the local K-16 pipeline, community-engaged research and learning, interdisciplinary work, and scholarship of engagement. As a result, I have support to create a new course with Urban Planning to support Y-PLAN as well as faculty partners to lend Urban Planning expertise, and such interdisciplinary work has been explicitly encouraged by SJSU's strategic plan. Additionally, the college and department culture of community-engaged research and learning provides multiple courses in which there is an expectation of undergraduate students to volunteer with community and school partners. Finally, the new addition to explicitly recognize "Scholarship of Engagement" as a category in the guidelines for tenure and promotion evaluation are supportive of faculty who wish to spend the time growing

deep and authentic partnerships with the community and facilitating our undergraduate students to do the same.

While community-engaged work like Y-PLAN is time and labor intensive, it has yielded personal and professional rewards. My close attention to the needs and priorities of EPF and the teachers I have partnered with has led to an expansion of teacher participants. In this current climate of teacher burnout and retention challenges, I see how much more easily I can gain investment and cooperation from teachers to try new things due to the quality of relationship we have built. As I have brought students and civic client partners to campus, the value of my work for enhancing the reputation of the college with the community and inspiring students to consider SJSU and the College of Education was reflected by the positive comments and offers of support to continue this work. Perhaps most importantly to me, the slower relationship-driven approach has resonated with the Latinx and first-generation university students I have worked with as well as my educational partners. As SJSU is a designated Hispanic Service Institution (HSI), using culturally sustaining practices in our teaching and research is encouraged and seen as an important strategy for ensuring student success.

Finally, by engaging in this work within a supportive network of academics, community partners, and students through UC Links, I have been able to grow as a scholar, mentor, and community-engaged researcher. The network simultaneously provides practical support in sharing of practices and strategies to manage labor-intensive projects, social support, and inspiration to persist in this work, and theoretical and methodological inspiration.

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Forming Authentic Civic Partnerships While Creating Joyful, Equitable Cities

Shirl Buss and Deborah McKoy

The bright multi-purpose room was packed with families, teachers, and students. Twenty-five fourth-graders proudly stood in front of the room next to an eight-foot-long scale model of the city of San Rafael. The model they collaboratively built and entitled Marin Red Cross featured their proposed strategies to protect the city from the impacts of climate change and sea-level rise. Some students were admiring the colorful 3-D features on the model they made from clay, paper, and natural materials. Others were holding graphic posters articulating their ideas in more detail. One by one the children bravely stepped up to the microphone to share their recommendations for levees, oyster bed reefs, protective walkways, bridges, and more. The people in the audience were impressed with the range of sophisticated strategies the children proposed to meet the challenges posed by climate change.

One of the students, 10-year-old Alex Macías, proudly showcased his model and poster as he described his vision for a "floodable park" adjacent to the San Francisco Bay. A local activist commended him on his detailed proposal, then asked him "What will happen when our toilets won't flush?" At first Alex was

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confused. He couldn't see the connection between sea-level rise and toilets. The activist explained how when sea levels rise, percolating groundwater impacts the sewers and storm drains. Alex scratched his head and dejectedly went back to his seat. Ten minutes later he was back, eagerly and earnestly telling the woman, "I think I have the solution about how to keep our toilets working." He then described his idea for a plumbing pipe system to remediate flooding. Even though his plan may have needed more technical information, Alex clearly saw himself as an innovator, problem solver, and leader—ready to meet every challenge thrown his way.

Introduction

The scenario described in the vignette above was just one of many public encounters these students had as part of the year-long Bay Area Resilient by Design (RbD) Youth Challenge. Architects, planners, landscape architects, artists, university mentors from University of California, Berkeley's Y-PLAN (Youth-Plan, Learn, Act, Now!), and the local non-profit, Youth in Arts engaged these children in a program which ran parallel to the 2018 Resilient by Design (RbD) Bay Area Challenge, a Rockefeller Foundation-funded initiative that enlisted international teams of adult professionals to work in nine cities around the San Francisco Bay (Siegel, 2019). Each team worked with local community leaders to generate proposals about how their city might best respond to the impacts of climate change and other environmental disasters. During the RbD Challenge, the children had many opportunities to speak out in public and share their knowledge and abilities with friends, family, and civic leaders.

This process gave the students the confidence and skills to face tough questions like the one Alex fielded, to ponder them, and to think things through further. This chapter explores how, with the support (and scaffolding) of adults and university mentors, the Y-PLAN methodology enables elementary age students to become powerful agents of design and policy change, moving their community or city affirmatively toward more justice and joy.

The sense of agency that young Alex spontaneously demonstrated in that community meeting was an expression of his experience in Y-PLAN. An initiative of the Center for Cities + School at UC Berkeley and part of the University-Community Links (UC Links) network, (https://uclinks.berkeley.edu/) Y-PLAN builds the foundation for academic success and civic activism for children such as Alex. It creates a framework within

which students can cultivate their capacity to be leaders and innovators (McKoy et al., 2021).

For the Resilient by Design (RbD) Challenge, Alex was among 45 other 9- and 10-year-old children at Laurel Dell Elementary School in San Rafael, California, who worked side-by-side with adult architects, planners, and landscape architects to generate strategies to respond to rising seas projected to impact their city. Through the Y-PLAN experience, Alex and his classmates had the opportunity to build their skills and knowledge while they generated innovative solutions to an authentic community development challenge (Bishop & Corkery, 2017). They conducted research and made models and posters featuring their recommendations and visions to respond to climate change. They shared their findings and their proposals at community meetings, nights for families, and even a Flood Fair at their local park. Throughout the process, students applied core academic skills as they thought critically, used their voices, and experienced themselves as active participants in shaping the future of their city.

At its heart, Y-PLAN is a participatory planning and civic learning strategy and methodology that brings together the fields of city planning and education (McKoy et al., 2021). Since its inception in 2000, Y-PLAN has centered on youth engagement in city planning. Through civic learning experiences in public school classrooms, Y-PLAN's practice is underpinned by a set of core conditions. These conditions include:

1. partnering young people with an authentic civic client;
2. maintaining a social justice and equity focus;
3. focusing on a hands-on place-based project;
4. aligning with public school-based curriculum/working within school classrooms;
5. adhering to a rigorous five-step research methodology (Fig. 15.2).

In Y-PLAN, university students partner with K-12 classrooms, city planners, and civic leaders to form intergenerational communities of practice using the Y-PLAN methodology to take on authentic city planning projects posed to them by city leaders. The Y-PLAN teams focus on four areas of the civic domain: transportation, housing, public space and schools, services, and amenities. Woven through all four domains are themes of resilience, health, and sustainability (McKoy et al., 2021).

Access, navigation, and transformation are the three critical components that form the conceptual framework for understanding how the
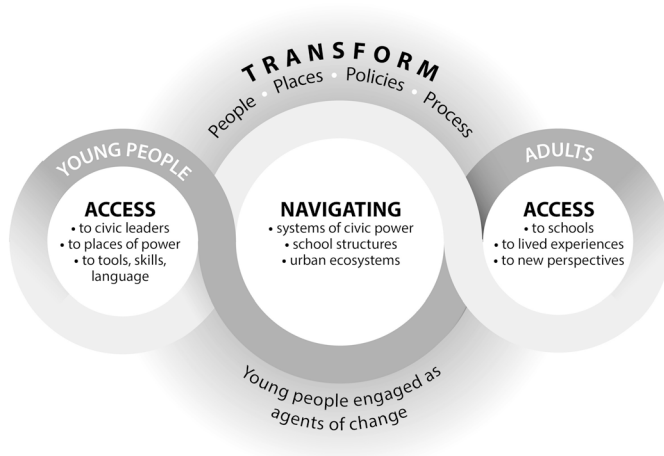
Theory of Change
Planning Cities for Justice and Joy

Fig. 15.1 Y-PLAN Theory of Change

process embodied in the Y-PLAN Theory of Change supports student agency while addressing the challenges facing our cities (Fig. 15.1).

According to the Theory of Change, using the Y-PLAN process in a community of practice enables young people to have *access* to—and meaningful interaction with—adult professionals and civic leaders focused on civic challenges. At the same time, this process enables city planners, leaders, and activists to directly access the lived experiences of the residents they serve. For children and youth, this access creates the opportunity, time, and guidance for them to learn about and use professional planning tools, vocabulary, and knowledge. The process often grants young people access to information, public officials, agencies, and places of power from which they and their families may have traditionally been excluded. On the other hand, this two-way access enables adult professionals and civic leaders to develop authentic relationships and trust across traditional barriers of age, race, class, and place enabling them to implement civic policy and design decisions more equitably and respectfully.

When children and teens participate in the Y-PLAN process, they often gain access to people, organizations, and places where policy and design decisions are being made. This enables them to see and learn about how our cities function, and why they look the way they do. When young people have the opportunity and space to participate as stakeholders and *navigate* within this decision-making process, they can contribute in crafting a city's future. Young people are often eager to be part of the solution to the problems they see around them. As the opening vignette illustrates, when they have opportunities to be active participants in planning our collective future, children bring insightful voices to the table. When adults and young people can navigate these networks of power together, they are able to help cultivate more diverse social networks and reach across historically established societal divides (Hart, 1997).

When planning professionals and civic leaders work effectively *for* and *with* children and youth, together they can leverage young people's expertise and lived experience in order to *transform* city systems to favorably impact all city communities and populations. Achieving meaningful transformation requires tapping into the capacity of young people to use their imagination to meet challenges, to apply the tools and skills they have learned to address real-life problems, and to think critically and creatively about the communities in which they live. Working alongside adult allies, students of all ages can navigate and *transform* those places, policies, and processes to help their cities and schools better meet the needs of their diverse residents (Derr et al., 2018).

There has never been a more important time for young people to play a direct, visible role in calling for change, in schools, and within cities. When given the opportunities, skills, and knowledge to learn how to *access* social systems of power and *navigate* new ways of thinking about, planning, and managing cities, they can become active participants in *transforming* the very definition of city planning. In the process, young people use their personal experiences and fresh insights to improve their neighborhoods and cities. In turn, civic leaders access the lived experiences of community members and integrate those perspectives into civic policies and practices. Young people and civic leaders, deeply engaged in this process, can more fully honor local conditions and the socio-political needs and concerns of a diverse populace. Together all participants in this process gain a new and essential understanding of what it means to plan a truly inclusive, joyful, and just city.

Program Context

Each year, 20–25 undergraduate and graduate students enroll in a course taught by Dr. Deborah McKoy (chapter co-author) within the College of Environmental Design at UC Berkeley. The students typically come from Architecture, Urban Planning, and Education, but over the years have also come from departments such as Engineering, Business, and Landscape Architecture.

Meeting once a week in a 3-D hands-on studio, Dr. McKoy introduces the university students to the theory and practice of engaging and mobilizing young people as agents of change in their communities. They learn about how to mentor younger students across the K-12 age spectrum. Guest speakers come into the studio periodically to introduce theory and best practices in education, urban policy, planning, and design. Before working with children and youth, the mentors also learn about the Y-PLAN five-step methodology by going through the process themselves (Fig. 15.2). They also study inspirational examples in urban planning and design that they can share with younger people.

Fig. 15.2   The five-step Y-PLAN Roadmap

The university student mentors then go into elementary, middle, and high schools to work directly with children and teens engaging in the sequential Y-PLAN process, and grappling with challenges in their local communities. This chapter focuses on a Y-PLAN case study at the K-5 level, while Chap. 14 in this volume by Professor Ellen Middaugh at San José State University features a middle-school case study. At the elementary school level, the mentors work in Bay Area schools alongside seasoned architects, planners, and educators. The school sites change over the years, but many are long-standing partnerships. Together these teams collaborate with classroom teachers and civic clients to craft a project question and a curriculum plan for a 6- to 15-week period.

The project client is typically a city planner, a department head, or a leader in the community with a problem to solve. Project questions focus on the four domains: housing, transportation, public space, and schools/ services/amenities (Fig. 15.3). Examples of project questions include: "How can we improve the main street in our community?" or "How can we re-imagine a ghost mall in our city?" Members of the Y-PLAN team, university mentors, then meet with the children in the public-school classroom for a 2-hour session once a week. Together, along with the children's teachers, the mentors guide young students through the five-step Y-PLAN Roadmap to Change process (Fig. 15.2). In each session the children are introduced to information, skills, and best practices. Then everyone works together in a hands-on studio session—drawing, building, making models, mapping, and more. The client and other specialists may also come into the sessions for strategic one-time presentations.

In a typical Y-PLAN program with elementary school children, Step One, *Start Up*, the team presents the project question to the young students and introduces the client. The team leads off a typical session with a slide show or presentation to introduce issues and ideas such as *What is architecture? What is planning?* To help focus on the strengths and talents each child brings to the table, the young students build a *Tower of Power*. These model structures feature the child's name, plus affirmative adjectives such as *creative, smart,* or *loyal* to describe themselves. This step is important, as it builds the foundation for the collaborative work that is to follow during the next steps of the process. Children start to understand what qualities they, as well as their peers, bring to the table as they set out meeting their project challenge. When the landscape architects, Bionic, from the RbD Challenge, were the clients, they posed this question to the children: *What will keep my family, friends, community, and me—safe,*
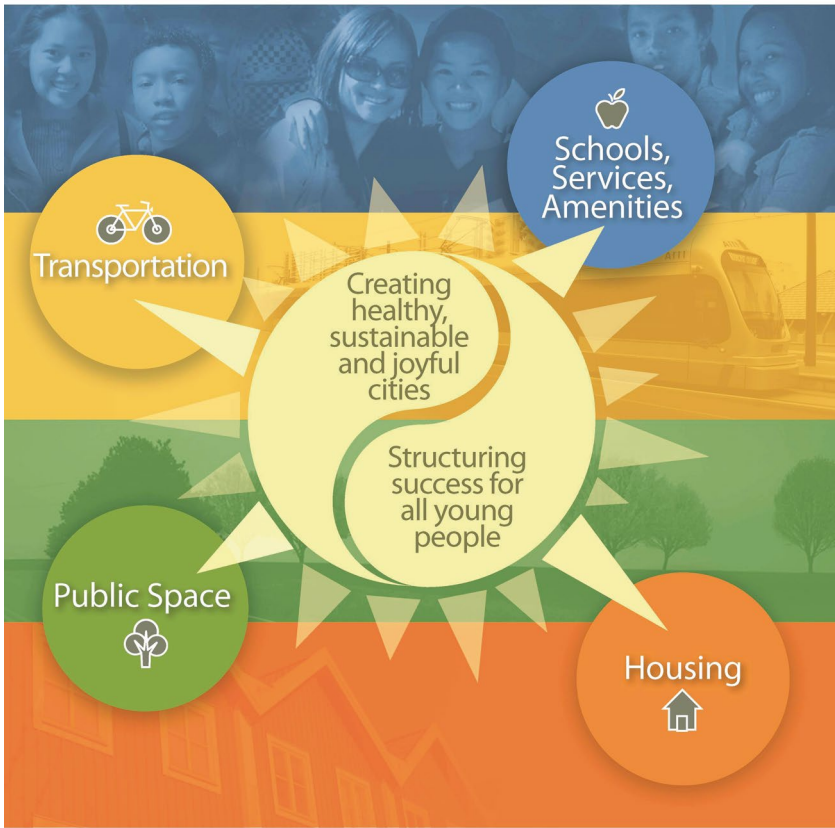
Fig. 15.3   Y-PLAN project questions focus on four domains of public life, while also supporting the individual growth of each student and the optimal outcomes for cities

strong, and prepared for floods, earthquakes, sea-level rise, and other environmental challenges? The stage was set for the children to get to work on this challenge for the next 3 months.

In Y-PLAN, during Step Two, *Making Sense of the City*, the children go on a "site visit" to collect data, make maps, and/or to interview community members about their project challenge. Based upon their observations, the information gleaned from community members, and research about the history of the site, they then conduct a SWOT analysis: a planning method used to document and tell the story about the cumulative **S**trengths, **W**eaknesses, **O**pportunities, and **T**hreats at that site. During this phase, planners with expertise in mapping or engineers specializing in public transportation may come for a session to share their knowledge and teach the children how to use technical tools such as maps or visualization techniques. They also introduce the students to authentic language used by professionals grappling with these issues. For the Laurel Dell Resilient by Design Youth Challenge, strategic planners specializing in climate change and sea-level rise came into the classroom and showed the children map images projecting where sea level was going to impact San Rafael in 10 years, 50 years, and 100 years. The children were in awe as they could see how their own homes and neighborhoods were projected to be under 12″ of water or more during their lifetime.

Into Action is Step Three of the Y-PLAN process. Here, the children view images of inspirational best practices in relevant projects around the world—with a special focus on issues that will inform their visioning process. This is where the students and faculty from the university play a key role, as they collect and present images to inspire the young students—based upon their expertise and academic knowledge of best practices (Lange, 2018). The children then work in brainstorming teams to generate ideas to respond to their SWOT analysis and their project question. The university mentors help the young students articulate and professionalize their visions and recommendations—in the form of posters, models, digital and oral presentations. They offer the children guidance, inspiration, and individualized attention as the young students build their technical skills and capabilities. For the Laurel Dell students, images from Amsterdam and New York City helped them visualize how people could affirmatively "live with water." They loved seeing canals, floating homes, oyster beds, bridges, and levees that protect people from rising seas while improving the quality of life in those cities. They voted on the best practices and ideas they felt were applicable in San Rafael (Fig. 15.4). Then

Fig. 15.4 After learning about a range of best practices to respond to sea-level rise, the students voted upon the strategies they felt could best be applied to local conditions in San Rafael

they collated the results and created charts that guided their own visioning process, as they generated proposals for the city (Fig. 15.5). Hence, their proposals included visionary ideas such as horizontal levees with walking paths, floodable parklands, floating structures, and uniquely designed bridges.

In Step Four, *Going Public*, the university mentors support the young students to prepare to present their visions for change to their clients at Youth Summits or culminating events in civic venues such as City Hall. Mentors help the young students create graphics or digital presentations. They coach the children on their public speaking and help the children practice how to field tough questions about their ideas. For the Resilient by Design Challenge, the students at Laurel Dell School gave a
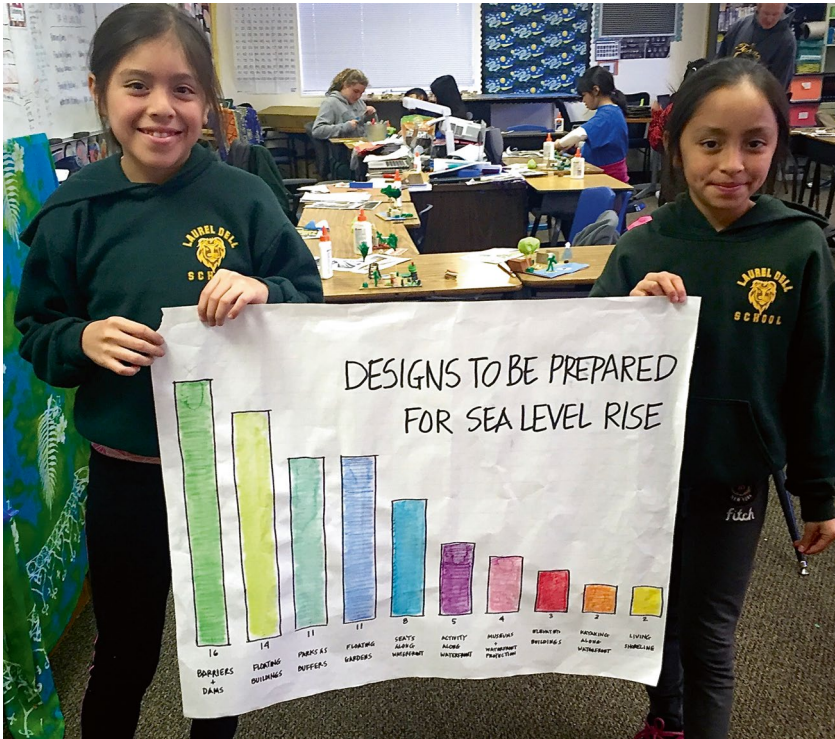
Fig. 15.5 The students created a bar chart to represent the top strategies they felt would be most effective, and which they could adapt and develop in their models and drawings

presentation to their families and others at a school community meeting. They used their public-speaking skills while displaying the large 3-D model of San Rafael they created (Fig. 15.6). The model illustrated the neighborhoods to be impacted by rising seas in the coming years, and the students' various proposed strategies for protecting those neighborhoods. During this event the children fielded some tough questions, such as the one Alex grappled with, as described at the beginning of this chapter.

That spring the landscape architect team, Bionic, sponsored a Flood Fair in a local park. The weekend events featured a tricked out Flood Mobile, informational exhibits, and activities such as a real-time glacial melt display. The event was packed with families with children,

Fig. 15.6 Students presented their collaborative map of San Rafael, featuring strategies to respond to the impacts of sea-level rise in the neighborhoods along the creek and canal, as well as downtown

community leaders, and participants in the Resilient by Design Challenge (Siegel, 2019). The Laurel Dell children created T-shirts to be distributed for free to community members (Fig. 15.7). They also exhibited their models and posters designed to encourage people to prepare for climate-induced emergencies such as floods, fires, and heat waves. They also created an interview booth, where they asked residents and community leaders about their emergency preparedness plans (Fig. 15.8). Finally at the end of the school year, the students presented their projects and recommendations to a panel of civic leaders, urging them to consider their recommendations in future policy and design decisions in the city.

Throughout the full arc of this Y-PLAN process, especially during Step Five, *Looking Forward, Looking Back*, the college mentors give the young students feedback on their work. They also answer questions the children may have about college and careers, such as "What is college?" "How do you get into college?" "How much does it cost?" "What do you want to be after college?" The cohort of students at Laurel Dell continued to work with mentors from Y-PLAN the following year. They had many opportunities to reflect upon and integrate their work on sea-level rise and climate change into a 2050 visioning project sponsored by a Bay Area-wide coalition and the San Rafael 2040 General Plan (McKoy et al., 2019).

Fig. 15.7 Alex with the posters and T-shirt he helped design for the San Rafael Flood Fair

In recent years, the UC Berkeley Y-PLAN mentorship model has expanded to other higher education "hubs" at UC Davis, San José State University, Cal Poly Pomona, and more. Together at each of these locations, university, school, and community partners are using the Y-PLAN methodology as inspiration to authentically engage and mobilize youth in the civic arena in their local communities. Lead professors are also adapting Y-PLAN to align with academic and social goals specific to their respective departments. Professor Ellen Middaugh's chapter in this volume (Chap. 14) is one example showcasing the Y-PLAN process with San José State University students working with middle school youths at Escuela Paolo Freire in San José, California.

Fig. 15.8   At the Flood Fair, the students created an interview booth, where they asked community members and civic leaders about preparedness plans

Key Ideas

The Laurel Dell case study illustrates how—when asked—children want to be real players in larger community efforts. They have a key role to play in an intergenerational community of practice. When adults consider young people's basic needs first, develop mutual understanding, build trust, embrace the K-12 age spectrum, maintain high professional expectations, and forge connections between all participants, the results are powerful. Embracing these six essential axioms are key to engaging children and youth meaningfully in planning and designing just and joyful cities (McKoy et al., 2021).

Focus Upon Basic Needs First

As members of our most vulnerable groups, these fourth-grade students, many of whom were also newcomers to the US, had a unique understanding of their neighborhoods and community. They were able to instinctively speak directly about how basic needs for safety, security, and stability are critical to their families and neighbors. When we discussed sea-level rise, students had firsthand knowledge about the hardships caused by flooding from storms and tidal surges. Many live by the San Rafael Creek/canal, which is connected directly to the San Francisco Bay, so rising seas are not an abstract issue for these children. Many of their strategies for this project focused on the quality of life and basic needs such as safety, food, and housing. One girl remembered, "When it rained and the drains overflowed, my father had to wear really tall boots to get to his truck to go to work. We were pretty scared and worried." Another wondered, "If it floods again, people might have to share water and food." While thinking about the future, the children rightly asserted the primacy of keeping the prerequisite focus on the basics. Our youngest residents have clear, creative visions of how their community could better respond to their own and their peers' needs for features such as enhanced safety, mobility, access to nature and joy.

Mutual Understanding and Sharing

The Resilient by Design process granted the young students and a wide range of adults access to each other. This reciprocal dynamic helped open up opportunities for mutual understanding across the youth/adult divide. Adults and university mentors on the Y-PLAN team listened with interest and humility to the youth voices and gained fresh insights and approaches. They gained a deeper appreciation of the lived experiences and perspectives of young people. Conversely, the children gained a better understanding of, and respect for, the wisdom, experience, and abilities that the adult professionals and university students brought into the equation. Youth and adults together participated in an interactive process where all voices were valued and needed while everyone worked for the common good of the community. The Flood Fair put this partnership on display as the RbD Bionic team, the Y-PLAN team, and the Laurel Dell students brought lively, informative educational experiences into the park in the heart of the community. The children brought their families and friends

Fig. 15.9 At the Flood Fair, the students showcased their model for families and friends, participated in a question and answer session, and participated in a press conference with local leaders

into the park to see their friendly, interactive exhibits (Fig. 15.9). The Bionic team brought the Flood Mobile, put maps, renderings, and scientific information on display alongside the children's work.

Trust and Genuine Connections

For the RbD Youth Challenge, the Y-PLAN team met consistently with the young students, every week for months. This enabled the mentors to forge honest and authentic connections with the children. Repeated interactions over time established the foundational trust necessary for successful collaboration with youth. Being genuinely included and heard by adults imbued the children with a sense of purpose and pride. This was on display when Alex spoke at the community meeting and later engaged with the community activist. When young people such as Alex feel heard, understood, and genuinely included and respected, it enables them to see themselves as innovators and leaders, with the courage to speak and interact confidently with adults.

Engaging Across the K-12 Spectrum

Engaging across the entire age spectrum is extremely powerful. Students as young as 5 or 6 years-old can contribute powerful insights about the environments they inhabit. When they are encouraged and supported to engage in projects in authentic and meaningful ways, they are eager and able to take on the challenges facing their cities. Children can grapple with complex issues, such as transit, housing, and sustainability, with intensity, intelligence, and creativity. Participating in these projects boosts their confidence and their appetite for higher learning and lifelong civic activism, and their proposals are consistently imbued with optimism and hope.

The fourth-grade students at Laurel Dell were excited about generating imaginative, insightful, and humane solutions to meet the challenges of climate change. Engaging with the very real challenge activated their sense of purpose and investment in their community. In community meetings, and at events such as the flood fair, they were proud to share their expertise and knowledge about immediately understandable topics such as emergency preparedness, as well as long-term visions for how to change the city infrastructure to protect from storm surges.

Real Tools and Responsibilities

Rather than engaging young people as "window dressing," it is both possible and effective to introduce authentic professional terms, practices, and responsibilities to participants of all ages (Bishop & Corkery, 2017). Young students can analyze data, create models and maps, employ technical vocabulary, propose solutions, and provide leadership to help meet contemporary urban challenges. Once professional relationships have formed, students deserve the opportunity to shine, impress, excel, and be held accountable. Gaining access to and knowledge of rigorous, authentic practices, and expressing their ideas with rigor is an empowering experience for young students.

In an age-appropriate way, it is possible to introduce technical terms, tools of the trade, and complex concepts to children. Raising the bar of expectations, praising students' early efforts, and letting them know how they can improve supports their growth, improves their projects, and most importantly is a valuable investment in our shared future. When young people use professional language, it legitimizes and amplifies the power of their ideas.

For the RbD Youth Challenge, Laurel Dell's fourth-grade students showed how eager children are to use real tools to analyze data, create models, and generate imaginative, insightful, and humane solutions. The children loved being introduced to inspiring best practices from around the world. Images of waterways and floating buildings in other countries showed them how people live with water. Learning about the creative, protective strategies being implemented in New York City in the wake of Hurricane Sandy helped them think realistically. The students translated their research into models and posters featuring their own vibrant, yet realistic, proposed strategies for the future of the canal district and central San Rafael. Their proposals focused on protecting neighborhoods from flooding, while also enhancing livability, accessibility, and fun. Their solutions included lush living shorelines by the bay and delightful protective boardwalks along San Rafael Creek (Siegel, 2019).

Presenting in a high-level civic arena brings gravitas and credibility to students' work and impresses adults. When students give speeches fortified with data and technical language it amplifies the strength and transformative potency of their proposals for change. Laurel Dell's fourth-grade students were enthusiastic about presenting their work to stakeholders in community forums. To the astonishment of some of the adults in the audience, words and phrases such as "sea-level rise," "floodable parklands," "education stations," "horizontal levees," and "protective wetlands" rolled off their tongues with aplomb. They showed adults that they were capable of grappling with complex issues with intelligence, intensity, and creativity. And they were quite proud of it.

Connectivity: Bridge Gaps Between Disparate Networks

Children have the power to motivate adults and break down barriers. Young people's participation in the planning process can be inspiring, heartfelt, and personal. Their activism, energy, and leadership can catalyze the engagement of the adults around them (Fig. 15.10). Authentically involving children in the planning process can have a transformational impact on everyone involved. When they convey complex information in accessible and compelling ways, young students can bring a broader audience into the city planning process. Their activism and leadership can catalyze engagement of adults who in some ways might see themselves as being powerless or on the margins. Children's family members and neighbors who attend students' events start to develop a more personal

Fig. 15.10 The students' enthusiasm for the project enabled them to make these posters and effectively reach out to families and friends to invite them to the Flood Fair in the community park

connection to the issues at hand. Through their honesty and their vulnerability, our children and youth embody the authenticity to bring people together, building bridges across differences in socioeconomic status, race, age, and more.

At Laurel Dell Elementary, children's involvement in the RbD Youth Challenge brought a broader audience into varied settings to grapple with complex issues. The students had multiple opportunities to present models, posters, and drawings representing their visions and recommendations to adult audiences. The students provided a gateway enabling more diverse participation in issues related to the impacts of climate change and sea-level rise on the local community. Teachers, friends, and family members became intensely interested in the children's presentations at school family night, the Flood Fair, and in other civic settings (Fig. 15.9). At these events, the students had the opportunity to shine and showcase their capacity to be community connectors. Additionally, throughout the RbD Youth Challenge, students, family members, teachers, city leaders, local

businesses, academics, and community activists had multiple opportunities to see that they shared many visions and values. These respectful and informative interactions encouraged these adults and university mentors to match the children's optimism and creativity about the future of the city.

"Embracing the six essentials for planning just and joyful cities is core to interrupting historically entrenched patterns of unequal access to opportunity for so many young people" (McKoy et al., 2021, p. 194). To effectively engage young people, especially our very youngest, requires humility, resource-sharing, and retooling by planners, civic leaders, teachers, and mentors from our universities. The results of this collaborative effort can be profound.

DISCUSSION: IMPACTS AND OUTCOMES

What are some of the most powerful and long-lasting legacies and impacts of the children at Laurel Dell Elementary's participation in the RbD Youth Challenge? This case study demonstrates how when adults and young people follow the Y-PLAN Roadmap to Change they contribute to dual outcomes. On the one hand, the Y-PLAN process builds the capacity of young people to learn about and utilize professional best practices as they contribute data and insights from their daily lived experiences to the planning and policymaking process. In doing so, they develop college, career, and community readiness skills. Through this process, students also develop their capacity to be agents of change for themselves and their communities. On the other hand, Y-PLAN engages participating adult professionals and civic leaders in authentic planning processes with young people, while building their capacity to respect and value youth insights. This enables them to integrate the youth perspective authentically and meaningfully into plans, policies, and designs for communities and cities (Hart, 1997).

In San Rafael, the project question posed to the children at Laurel Dell was a real challenge confronting civic leaders—one which also augmented and amplified the curricular goals and content standards for fourth-grade. This project was an excellent example of a thorny design or policy issue being grappled with by civic leaders, engineers, and design professionals. It enabled the young students to conduct research and apply their academics to a tangible issue of relevance to them and their families. Teachers were excited that the project brought social studies, writing, math, and

science alive for the children as they saw how subjects that were taught in the abstract in school mattered when they were applying them to a real set of conditions (Derr et al., 2018).

The landscape professionals and civic leaders incorporated the children's recommendations into their long-term strategies for climate change and sea-level rise. Four children wrote an OpEd piece that was published in the *Marin Independent Journal*. This experience enhanced the children's writing and leadership skills, while also influencing community leaders and residents. Their impact even extended beyond the local community.

In subsequent years, these students and others went through the Y-PLAN process with adult professionals, university mentors, and community members on a range of issues focused on housing, transportation, and sustainability. The children featured in this case study worked with a high-level committee of adults working on the San Rafael 2040 General Plan. Some of the young people's recommendations (as well as photos and models) were incorporated into that Plan, which creates a framework for development in the city for the next 20 years.

Subsequent classes of third-, fourth-, and fifth-graders at the school also contributed their visions and recommendations to developers of a project to re-imagine the local ghost mall in 2021, and to the San Rafael Housing Element Working Group in 2022. Their input was integrated, along with that of other community stakeholders, into designs and plans for those projects.

The intergenerational community of practice featured here, which includes youth in schools, adult professionals in planning and government, university mentors, and community stakeholders, can facilitate a meaningful process for all participants while yielding positive outcomes for our cities. When asked—in a genuine and authentic way—to engage with the challenges of sea-level rise, the children at Laurel Dell rose to the occasion and brought a serious, fresh, and optimistic perspective to the table. They showed us how young people of all ages are eager and able to take on challenges and invest in their community. The adults participating in this project integrated the children's actionable planning and design proposals and recommendations into city planning processes, projects, and policies. Together this community is working to change the way civic leaders and decision-makers understand the role of young people in our cities.

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La Mia Scuola è Differente, an After-School Program with an Intercultural Focus: The Challenges and Opportunities of Program Development

Lisa Bugno and Luca Agostinetto

'My first day of observation begins. I feel a bit tired from the ongoing exam session, but also very curious about the upcoming experience. The school is located in the outskirts of Padova. The spacious garden immediately catches my eye (it's well-suited for outdoor activities that involve free play and a connection with nature)' (Carmela, field note, June 27, 2022).

'To reach the building housing the gym, we need to cross a part of the extensive garden. The gym is painted in orange and blue and is shared with the middle school; it's actually located in the same building as the middle school.

This chapter is the result of a collaborative work: specifically, Lisa Bugno wrote paragraphs 1, 3, 4, 5, and Luca Agostinetto wrote paragraph 2.

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The volleyball and basketball courts are marked on the floor. It's very hot, and even with the doors open, the temperature is quite high. I observe while standing near the doors. There are 13 children in the group, including five boys and six girls […] I'm particularly drawn to one boy, M., as he seems to move differently, cautiously, and appears to be receiving special attention from both his peers and the educator. The educator suggests playing dodgeball. During the game, M. is frequently encouraged by his classmates, and his name is repeated many times, including the rules of the game, which are reiterated multiple times by the educator. He seems to speak very little but actively participates in the game' (Elena, field note, June 27, 2022).

'I observe that the way activities are presented does not seem to engage or motivate the children very much. Consequently, they easily lose interest and seek other activities, often disturbing those who are diligently trying to participate. […] Starting from 2:40 PM, the children are taken to the garden for free play' (Alessia, field note, June 27, 2022).

This chapter focuses on the launch of La Mia Scuola è Differente (in English: My school is different, LMSD), a new after-school project in Padova, a small Italian city located in the northeast of the country. Specifically, it describes the challenges and opportunities encountered during our entry into the school-community partnership established in 2019. Writing this chapter gave us (the co-authors Lisa and Luca) the possibility to pause for a moment to reflect on what has been accomplished so far and what directions the project should take (Figs. 16.1 and 16.2).

The opening vignettes feature insights from some of the key participants in the endeavor. These individuals include three university students, Carmela, Alessia, and Elena, who were involved in the research process. Due to their academic commitments and classroom responsibilities, they were not able to contribute to the writing of this chapter. Nonetheless, they generously shared their notes and thoughts with the authors regarding their first experiences in the after-school program. These passages contain rich descriptions that foreshadow some of the themes we will explore in depth throughout the chapter, offering readers an initial glimpse, a taste of La Mia Scuola è Differente as experienced and described by those who played a vital role in its creation. Indeed, from these few, yet rich lines, we are able to gather insights regarding the garden, the approach to presenting activities to the children, and the role of the observers.

Fig. 16.1   La Mia Scuola è Differente gym activities

Introduction: The Italian Perspective and Context

To better understand how and why LMSD was conceived, the Italian context must be defined. There are two main issues we need to consider. One concerns the issue of interculturality, in both theoretical and regulatory terms. The other has to do with how the presence of people with a migrant background has evolved in the country, which has several very important specificities.

Starting with the first issue, the approach to the concept of interculturality in Italian educational circles is consistent with the most authoritative international theories and views on social policy. This is particularly true of Italy's educational legislation, which is one of the most advanced in Europe. After struggling a little initially, the last 30 years have seen education theorists gain a strong grasp of the need for interculturality to focus on integrative and inclusive learning, rather than on filling gaps in students' knowledge (Allemann-Ghionda, 2013; Banks, 2010; Fiorucci,

Fig. 16.2   Free play in LMSD's garden

2020; Gundara, 2000). Interculturality should be seen as the education system's response to today's changing ways of integrating and including numerous diversities (Vertovec, 2007; Zoletto, 2020) expressed by complex societies (Grant & Brueck, 2011).

From an educational perspective, interculturality can be defined as an intentional, transformative project that addresses our multicultural reality (Agostinetto, 2016), with the goal of nurturing the mutual enrichment

that can stem from diversity and from our encounter with otherness (Buber, 1993; Milan, 2007). In line with a European framework clearly outlined by Barrett et al. (2014), taking this perspective demands that we refer to the concept of "intercultural competence". This term is used to describe a complex construct that includes cognitive, social, affective, and behavioral elements of our ways of being as individuals, and our relations with otherness and with the world (Portera & Milani, 2019). It is in this sense that we often return to the dynamic model proposed by Deardorff (2009), in which intercultural competences are developed in a revolving exchange between *internal outcomes* (adaptability, flexibility, empathy) and the practical experience of encountering otherness (*external outcomes*).

Italy's regulations and guidelines on education clearly express this theoretical approach. Among the numerous recommendations issued in recent years by the Ministry of Education, at least two are particularly worth mentioning. The most important concerns the "Italian approach to intercultural education and students of migratory origin" (*Ministero Italiano dell'Università e della Ricerca* [MIUR], 2007), which explains that

> the Italian school system chooses to adopt an intercultural perspective—or, in other words, to promote a dialogue and exchange between cultures—for all students and on all levels: in conducting lessons; school curricula; teaching methods; subjects taught; relationships; and life in class. Choosing an intercultural approach therefore does not mean merely adopting strategies for immigrant students' integration, or measures to meet special needs. It means embracing diversity as a paradigm of the very identity of a pluralist schooling, an opportunity to open up the whole system to every sort of difference (of origin, gender, social level, academic history). (p. 9)

Today in Italy, there are schools that are lagging behind, retaining naïve approaches that sometimes tend to be more assimilationist (and consequently exclusive) instead of striving for an authentic integration. In regard to teaching practices in particular, we all too often encounter rhetorical attitudes to interculturality that have good intentions, but which are "staged" in superficial and stereotyped ways. These efforts are often marginal in relation to a school's activities (Agostinetto, 2016). They are tacked on, but have no influence on how the school system works, its educational content or teaching methods (Favaro & Luatti, 2008). There are also highly positive cases, however, where schools succeed in giving substance to intercultural principles. These schools are able to support the

genuine integration of students from migratory backgrounds in effective and creative ways (Ongini, 2011, 2019), even if such experiences struggle to become systematic and connect with the broader social fabric. So the picture we see in Italy's schools is rather hazy and very mixed—what Tarozzi (2015) neatly described as a "ghost of a model".

LMSD was conceived in this larger context and with the intention of drawing on this body of knowledge and the resources of the local community to fully implement intercultural practices in a way that successfully integrates students from migratory backgrounds. To complete the picture on the situation in Italy and more fully understand the development of LMSD, we now take a brief look at the second issue mentioned at the beginning of this introduction, that is, how the country's multiculturality has evolved and its specificities.

Like most of Europe, Italy is now a multicultural country, but one of its distinctive features lies in its lengthy history of emigration (migration out of the country). Since the unification of Italy in 1860, as many as 30 million Italians have moved abroad. There are currently about 60 million people of Italian extraction around the world, and more than five million Italian citizens residing in other countries (Fondazione Migrantes, 2021). It is only since 1973 that there has been an increase in the number of people moving to Italy compared to the number leaving the country, and even now—despite a rapid increase in the numbers of migrants arriving from all over the world in recent decades—Italians have retained a tendency to emigrate. So we can say that Italy is "a country of emigration and a country of immigration" (Fiorucci, 2020, p. 17).

As of 2020, the number of people with migratory backgrounds routinely present in the country amounts to just over five million. They live mainly in the north (58.5%), and 52% of them are women. Their reasons for coming to Italy, as stated on their residence permits, are to join family (48.9%) or work-related (43.4%), while 5% are motivated by the need for international protection. For these people with migratory backgrounds, the economic situation is not very encouraging. Their integration is still "subaltern" (Ambrosini, 2007): the jobs they do are under-paid, dangerous, and hard; and 26.7% of the foreign families in Italy live in a state of absolute poverty, as opposed to 6% among the Italian natives population. The foreign population includes just over a million minors (under 18 years old), 72% of whom were born in Italy. The number of foreign students attending Italian schools has been rising constantly and, in the 2019–2020 academic year it amounted to 10.3% of the total. Although about one in

three foreign students still lags behind in their school careers, this proportion is gradually shrinking. Encouraging signs include the fact that the academic performance of second-generation foreign students increasingly resembles that of their Italian peers, and the number of foreign students attending higher education (beyond Grade 8) is gradually growing.

LMSD was conceived in the context of these fragile steps forward and the fragmentary intercultural scenario in Italian schools and strives to develop a genuinely effective, democratic, and inclusive program.

Program Context

Historical Background of the District

The project La Mia Scuola È Differente (LMSD) aims at operating an after-school program focused on promoting diversity, increasing social inclusion, and empowering children who attend primary and middle schools located in a socially complex part of Padova called Stanga. Educational processes are always culturally situated: the environment is an integral part of the life system and this means that people, relationships, and the spaces in which they (co-)exist are strongly connected. For this reason, it is important considering the background of the project. The program runs year round and it is twofold: while the after-school program takes place during the school year and is primarily a "classic" homework activity in the afternoons, managed by a local social cooperative, the Summer version is much more aligned with a UC Links model. (For more information about UC Links programs and the global UC Links network, visit https://uclinks.berkeley.edu/.)

The Stanga district is very unique; it was created in the 1920s as the city's first industrial area, which means that it was not intended for people to live in but for manufacturing activities. In the 1950s and 1960s, the neighborhood saw further development; the industrial area was enlarged, the motorway was completed. With the manufacturing crisis in the 1970s, some large industrial plants closed or transferred to other locations and some residential complexes began to develop, while in the 1980s, management and commercial activities spread in the area. In the 1990s, Italy experienced its first major waves of migration and the Stanga became the district where people with migratory backgrounds first settled, because it was the only area where they were accepted as renters.

The neighborhood thus became what many call a ghetto, with Anelli street as a symbol of widespread social unease. Due to the lower cost housing for working-class families, Anelli street began to host an ever-increasing number of people with migratory backgrounds, and in a few years almost all the native Italians left the area. Moreover, criminal activities proliferated, mainly linked to drug trafficking and prostitution, generating tension between different criminal groups. Interventions by law enforcement failed in changing the situation and, over time, there were no attempts at 'social recovery.' The worst outcome of this situation was the construction in 2006 of the so-called 'wall of Padova:' a three-meter high, ninety-meter-long metal barrier designed to isolate the area from the rest of the city. Reported also by the international press (the BBC, *The Guardian*, and the *New York Times*), it was one of the most resounding political and social failures related to immigration recorded in Italy. Later, the buildings in the fenced-off area were completely cleared and some flats were walled up to prevent their reoccupation. During the Summer of 2019, the municipality took ownership of the buildings and began the works to settle the new police headquarters in Padova.

Today, the neighborhood is still affected by cultural segregation, a lack of integration with Italian residents, violence, drug traffic, and social stigma, and 14% of the total migrant families living in Padova live in this area, which is unfortunately still known for its "social disadvantages." It is in this context that the 7th Instituto Comprensivo (District) of Padova "San Camillo" finds its home; the district includes four primary schools and three secondary schools, and over 80% of students have migrant backgrounds.

The Project La Mia Scuola è Differente

La Mia Scuola È Differente project began in 2019 thanks to provisions from the Child Educational Poverty Fund. The project's primary goal is to cultivate individual and collective transformation and seeks to achieve this goal by creating a participatory culture of learning characterized by principles and practices of respect, mutual support, inclusivity, lifelong learning, and self-appreciation. Substantial efforts have been invested in collaborating with local stakeholders to achieve this goal. Collaborative partners include the school district, the municipality, the university, Fenice Onlus, ZaLab, Renato Franco Association, Mary Poppins Social Coop, and Eos Cultural Association.

Before proceeding, it is important to clarify why the title "La Mia Scuola è Differente" was chosen for this project. This name invokes the dual meaning that the word "differente" can have, at least in Italian. The first meaning relates to the sense of "difference" in comparison with dominant cultural norms; it refers to the significant diversity of backgrounds among the children who attend the school. For example, in the primary school that hosted the activities we will discuss later, the percentage of children with a migratory background is 54%, and more than 15 different nationalities are represented.

The second aspect pertains to the fact that, in connection with this diversity and the neighborhood in which it is situated, the school has experienced the phenomenon of "white flight" (Cordini et al., 2019). In fact, the literature suggests that "there are three main drivers of school segregation: the residential distribution of the population, regulations concerning school placement, and parental choice concerning their children's education" (Cordini et al., 2019, p. 3217). For this reason, in recent years, the staff working in these schools have been committed to trying to reverse this trend by offering high-quality education that can also attract Italian families.

In other words, schools like the ones in San Camillo's district have acted as community focal points, fostering actions that respond to the fundamental needs of the neighborhood: improving interpersonal/intercultural relationships, developing community networks with private and public local organizations (NGOs, volunteer associations, municipal districts, etc.). By using the school as a socially inclusive community hub and a transformative space during afternoons, the project reinforces the school's role as a barrier to social exclusion in the neighborhood. Maestro Fabio, a teacher at the primary schools close to Anelli street, has promoted initiatives for the wellbeing of Stanga district students for years. When asked how he would describe the situation at his school, he introduced the metaphor of frontiers/borders (*frontiere* in Italian). Maestro Fabio conceptualized the area as a frontier: "it is the place where the most important exchanges and changes take place, but it is also the place where conflict can start or develop. Borders are often places of contradiction, from which we as a community can emerge 'weakened' or 'strengthened.'" He is convinced that to change the situation of segregation, the whole community must be activated in its educating role: "frontier schools" must create a high-quality education starting from their specific context, translating problems into opportunities. Focusing only on reducing differences and

tackling educational poverty does nothing but reiterate the stigma. La Mia Scuola È Differente has been planned and developed to make high-quality innovative programs for everyone.

The part of the project we are considering is located at Giovanni XXIII school in the San Camillo district and includes several activities offered throughout the Summer. The fundamental one here concerns an after-school program that meets 5 days a week during the end of June and July for 8 hours and engages children from six- to 10-years-old in various creative, innovative activities that foster their linguistic, emotional, scientific, and technological skills. The educational initiatives are carefully designed to promote quality experiences, embodied learning, with special attention to family engagement.

The school district and Fenice Onlus, a local nonprofit providing robotics and a range of other activities, have established a partnership with third-sector organizations in the surrounding area, all of which are involved in education in various capacities, enriching the Summer offerings of LMSD. The educational initiatives are extensive, as discerned from the project's previously stated objectives. They look to support learning but, more importantly, to stimulate students' curiosity, open school facilities to the community, and assist families by extending the school day. In addition to coding and robotics programs, other project initiatives involve radio broadcasting in partnership with ZaLab, an association for the production, distribution, and promotion of social documentaries and cultural projects.

The University of Padova plays a significant role in various project initiatives. Specifically, the Department of Psychology contributes through the "Isola della Calma" (Calm Island—https://isoladellacalma.dpss.psy. unipd.it/), a service providing continuous professional psychological support that is readily available to children during moments of difficulty.

The other department involved in the project is the FISPPA (Philosophy, Sociology Pedagogy, and Applied Psychology), particularly our research group specializing in intercultural education. As previously mentioned, we did not initially join the partnership at the project's inception but were invited to participate while the project was already underway. At the beginning, our primary role involved conducting evaluations, which led to a collaboration concerning after-school activities.

The Garden, a Multidimensional Metaphor

The Giovanni XXIII and the Pacinotti primary and secondary schools share the largest green area in the neighborhood: 10,000 square meters of garden, where the Summer version of the after-school program is offered as part of the LMSD project. During the Summer months, the multiple offerings include sports activities, artistic endeavors, programs on sustainable energy, and English-immersion activities (Figs. 16.3 and 16.4).

LMSD is much more than a solution to keep children safe and engaged in learning. The garden of the two schools plays a fundamental role in the project because most social interactions take place outdoors. This is where the children gather in a circle in the morning, engage in various activities, meet to play freely between activities, have lunch, and wait for their caregivers to pick them up. The garden is thus an important relational space; it is here that children invent games, stories, and adventures, talk, collaborate, laugh, cry, argue, and make peace. It is a place rich in growth, participation, change, in essence, a generative "being together." Maestro Fabio

Fig. 16.3 Outdoor activities during the pandemic
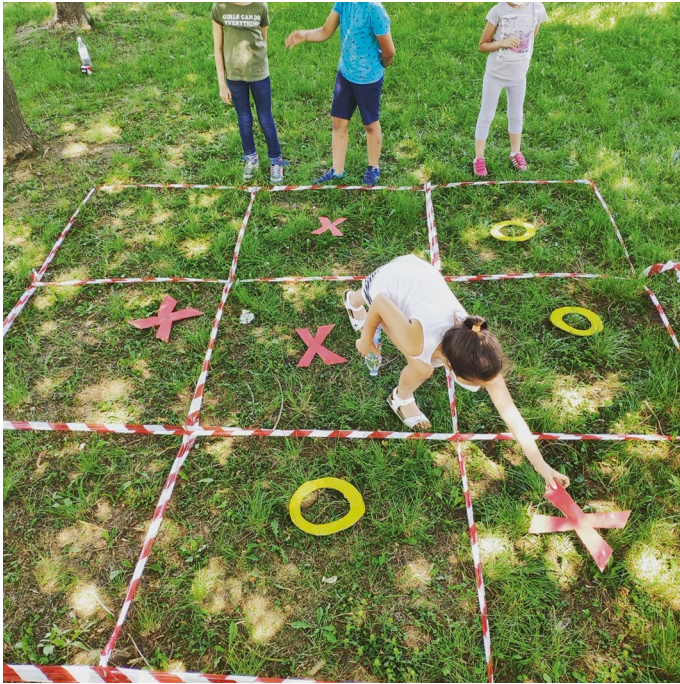
Fig. 16.4   Garden activities during the pandemic

also shared his thoughts on the garden space: "I saw the kids outside feeling a lot more comfortable than I had seen them in the classroom. For them, the garden is the school. The garden is for them a place of integration and relationship."

The garden is a pedagogical metaphor often used in education, including in this book. However, the perspective that, in our opinion, best represents what happens in the green space of this small suburban school relates to interculturality. The garden corresponds to a form of relationship, an aesthetic balance subjected to careful guidance (Milan, 2007). This allows individuals to become, to be authentic, to realize themselves in inhabiting, in assuming a space and giving it shape. The most interesting aspect here is that, from this perspective, one cannot inhabit alone: rather, one must engage with otherness. It is on this very ground that the meaning of interculturality is played out: it is subversive, enriching,

challenging (Panikkar, 2002), and requiring a "dense dialogue" (Taylor, 1993).

Also thinking about the specificities of the whole project, the image of the garden is particularly effective. In addition to representing a reality and an important characteristic of the context in which the after-school program is situated, and serving as a theoretical reference that has long interested those involved in education, it is a metaphor that aptly captures the nature of the partnership. It illustrates the mutual benefits of the partnership between the program and the community. It also provides a framework for understanding how the partnership can be improved, by providing opportunities for greater collaboration and communication.

When the LMSD partnership expressed interest in involving our intercultural education research group (at the University of Padova) to support these activities, we conducted a literature analysis to study how research has contributed to after-school programs. One of the main and promising outcomes of this literature review was the identification of the work of Marjorie Elaine at B-Club (Chap. 6) and University-Community Links (UC Links). This led to an intriguing and significant exchange that provided direction for participation in the LMSD project within a broader horizon of participatory action research (Martinez-Vargas, 2022; Vaughn & Jacquez, 2020). This helped us see the potential to revolutionize the way the after-school is approached in LMSD.

The UC Links model inspired the research group to formulate a project with two overarching goals: to understand how the UC Links model could be adapted to the LMSD project, and to explore how the research group could actively and effectively contribute to the school-community partnership. As a result, the research questions encompass multiple levels. On the one hand, it became imperative to participate actively at LMSD in order to understand the nature of the activities offered to children: to determine the educational significance of these actions, their potential to foster intercultural interactions, and the extent and nature of family engagement. We recruited three undergraduates studying to become future primary school teachers. We considered how their participation could contribute to the after-school program and how this experience could promote their personal and professional development.

In the remainder of this chapter, we will expound upon the challenges and opportunities associated with initiating such a collaboration, as highlighted by our fieldwork, and outline our aspirations for the future.

KEY IDEAS: CHALLENGES AND OPPORTUNITIES

The Partnership

The LMSD partnership is a dynamic and expansive collaboration, characterized by a rich diversity of participating entities, each contributing from their unique perspectives and missions. This diversity arises from a variety of factors, with one of the primary distinctions being the nature of these entities. Among the partners, there is a mix of public institutions, social enterprises, and entrepreneurial businesses. These inherent differences in organizational identity naturally translate into contrasting objectives and modes of contribution to the project.

On the one hand, these distinct missions and approaches can pose challenges when aligning strategies and objectives. For example, an enterprise may prioritize different issues than a public school. On the other hand, these divergent priorities, while potentially challenging, created an environment where diverse perspectives converge, fostering a holistic view of the LMSD objectives. Indeed, it is precisely this multifaceted approach that likely played a pivotal role in securing funding for the project.

Another noteworthy challenge in this diverse partnership lies in the disparity of terminology and nuanced understandings of educational matters. For instance, among the partner organizations, all entities have significant involvement in education. These include a cooperative managing a parish preschool, the public school cluster, more than one social co-op engaged in collaborations with schools for offering specific courses in technology, green practices, English language, sports, filmmaking, and environmental sustainability, as well as our research group, specialized in intercultural education and early childhood development. The differences in interpretations of learning concepts can be striking among these entities. This divergence fundamentally shapes how educational programs are designed, what is envisioned for children's educational experiences, and even the fundamental understanding of the role of children in the learning process.

Furthermore, the distinction between profit and non-profit entities within the partnership is another aspect that merits careful consideration. For instance, a future area of focus for our research group will undoubtedly revolve around the transition from having graduating students primarily engaged in observations and providing support to the educators in the cooperatives to a more proactive role where they may directly engage with groups of children, offering supplementary educational activities alongside the cooperative educators.

The Involvement of University Students

The Italian university system differs from the American one in that, in Italy, those aspiring to become teachers at the primary education level follow a predefined 5-year program. The first year focuses on theoretical and general pedagogy, psychology, sociology, and intercultural education. From the second year onwards, in addition to courses in linguistic, literacy, historical, geographical, mathematical-scientific disciplines, physical education, visual arts, and music, students engage in coursework related to teaching methods, special pedagogy, clinical psychology, developmental psychology, education, legal disciplines, and health and hygiene. Practical laboratories connected to theoretical courses and mandatory internships are integral components of the curriculum. The internships take place in schools for 600 in-person hours.

This well-structured academic pathway is defined in its principal aspects by the Ministry of Education, and students must carry out their internships during regular school hours, not during the after-school time. This constituted the initial challenge, which we successfully overcame: upon completing their academic journey, the students are required to write a thesis that delves into theoretical aspects and includes empirical elements. In the Spring of 2021, we engaged Carmela, Alessia, and Elena in the process of developing their theses. Another challenge lay in the fact that, in their academic curriculum, the students follow a very general research methodology course and are not specifically trained in ethnography or participant observation. Therefore, it became essential to implement an initial training period in which these elements were approached from a theoretical standpoint.

Following these initial two phases (graduating students' involvement and training), the research group embarked on the substantive work in the Winter between the end of 2021 and the beginning of 2022. Restrictions and measures for COVID-19 containment had delayed the beginning of the after-school program. Nevertheless, Carmela and Elena had the opportunity to gain experience with this format after regular school hours. The core of the project, however, unfolded during the Summer of 2022. The three graduating students spent the latter part of June and the entire month of July participating in the LMSD campus activities. Thanks to the Fulbright program, we had Marjorie Elaine (co-editor of this volume) as a visiting scholar, affording us the opportunity to engage in participant observations alongside her and to conduct meetings for data analysis and

reflection. This latter aspect proved valuable as it enabled the research group to make significant progress in terms of field note compilation and reflection work.

In the following months, we collectively devoted our attention to field notes and their rewriting process. Specifically, Carmela, Elena, and Alessia were guided step by step in reflecting upon the contents of their initial texts. This process was longitudinal and began even before their presence in the after-school program. In fact, following extensive discussions on participant observation, traditional after-school opportunities, and UC Links initiatives, they drafted a text outlining their expectations about the campus. Then, throughout their time at LMSD, they gathered field notes, which were revisited by the chapter authors themselves on three separate occasions, each time focusing on different specific details. Once collected, these field notes were transformed from jottings into texts that could be comprehended by a third reader, in accordance with the specific requirement of explaining what they had observed to an external person, someone who would never have the opportunity to experience the particular after-school environment and the situations they encountered. Attention was given to details, including tactile and olfactory sensations, as well as the emotions and feelings experienced. They allowed room for perceptions and thoughts that the experience had provoked in them, mindful of their particular educational backgrounds, and their trained perspective as future teachers.

Afterwards, a second phase was dedicated to selecting a focus, a particular aspect that had struck them during their time in the field. It is interesting to note that the themes that inspired them were quite diverse but highly meaningful. Elena chose to concentrate on after-school programs as a platform for social justice, Carmela focused on stereotypes, and Alessia explored conflicts and their resolution. These elements narrate the convergence of their interests and sensitivities with the shared experience they had with the children who attended the after-school program, bringing forth richness and significance.

The third stage revolved around interpreting their experiences through the lens of intercultural theory. While the initial steps were centered on their observations and the recursive deepening of their thoughts on the lived experience, at a certain point, we had to recall the theoretical framework.

Engaging Children as Active Learners

Involvement of children and caregivers in the LMSD after-school program has proven to be a multi-faceted experience, characterized both by achievements and potential, as well as areas for improvement. In terms of children's participation, the program offered a wide range of activities. However, many of these activities were essentially predetermined by the other partnering groups and allowed limited space for children's initiative. As a result, children were limited to following instructions instead of engaging in creative exploration, and this hindered the children's creativity and prevented them from developing their own ideas and opinions. For instance, the university students noticed that, due to the predefined structure of an English language session, some children were left on the sidelines. During another observed activity, the children were encouraged to color T-shirts, which was attractive to them; however, the educator's style and method of guiding was dominant, even though the children were free to choose what they wanted to illustrate on their T-shirts. Another educator, in the gym, gave the children the opportunity to choose from a selection of previously offered games, which were presented in a variety of formats. The children were free to select the game that interested them and were encouraged to explore all the options available. The educator also provided guidance when needed, but the choice was always up to the children. This approach allowed the children to be more engaged and motivated in their learning process. It gave them the opportunity to explore different games and activities, and to take ownership of their playing and learning. Furthermore, this approach also encouraged creativity and problem-solving skills, as the children had to come up with their own solutions when playing the games.

Interestingly, the moments when children's interests emerged most vividly occurred during breaks in the garden between various educational activities. Indeed, breaks allowed the children to venture beyond the structured learning environment, to explore their own interests and passions without being pressured by performance. Playing games impromptu together, for instance, promoted children's Italian proficiency while bringing them together. Furthermore, the garden provided opportunities for children to develop emotional resilience and foster their creativity. It was also a place where children could interact with nature, which allowed them to learn in a unique and untraditional way. Indeed, captivating discussions about insects and a thought-provoking exchange on languages, facilitated

by Marjorie, exemplified instances where children's curiosity and self-driven exploration thrived. During one of these breaks, we created an informal space where the children were encouraged to tell and share something about their own personal experiences related to the languages they know, along with discovering others' abilities and trying to pronounce words in other languages. The stimulus, the tool employed to engage the children's attention, was a small automatic translator. In a short period of time, the children quickly took control of the situation, enjoying themselves as they tested the translator, making it repeat the same words in various languages, laughing when it made mistakes, and finding alternative words when they were unfamiliar with the ones suggested. It was indeed fascinating to observe that the children were unaware of each other's abilities to speak different languages. However, it is essential to consider that these children are typically grouped in classes, thus not having an in-depth knowledge of each other. Additionally, it is worth noting that one of the primary concerns of teachers in our country often revolves around ensuring that Italian is learned to the best of their abilities, which often leads to fostering exchanges primarily in Italian. Hence, the after-school setting could serve as an informal environment where could also take place (as evidenced by Chaps. 3, 4, 6, and 10 in this volume). As a result, this experience can really be valuable for the children, as it gives them the opportunity to build their self-confidence and recognize their potential, as well as improving their communication skills.

DISCUSSION

Community projects that involve multiple partners often encounter a range of challenges at their inception. These challenges are well documented in the literature on community development and collaborative initiatives. Issues related to effective communication, power dynamics, and divergent objectives and expectations have been identified as common obstacles (Bryson, 2004; Gray, 1989; Huxham & Vangen, 2000). Navigating these complexities requires smart leadership, clear communication, and a commitment to establishing shared goals and processes. The early stages of community projects are pivotal in shaping the trajectory of collaboration and often demand substantial time and effort to overcome these initial hurdles. It is true that the challenges described in the preceding paragraphs have outlined various obstacles, but it is equally true that they can be viewed as opportunities.

In order to engage graduating students, finding a formal method of involvement has been the primary challenge. Adopting a research-oriented perspective to address the empirical component of their theses has proven to be a viable approach. However, this approach has its limitations as it means that individuals engaging in after-school programs have a limited amount of time, typically a few hours a day for a couple of months, and it also positions them more as observers and less as participants. On the positive side, involving individuals at the end of their initial teacher education has several advantages for their personal and professional development. As a result of their formal educational experiences, they are more aware of the dynamics of the teaching and learning relationship. Furthermore, their ability to interpret verbal and non-verbal cues from children increases in an informal after-school environment because it is characterized by smaller groups and allows for more interaction than in a typical classroom. Additionally, university students have the opportunity to participate in and learn from a community project that bridges the gap between the university, school, and community and provides a unique platform for social justice initiatives.

The LMSD project holds significant importance for the children it engages, not only as a safe space but also as an opportunity for educational experiences that would otherwise be out of reach. When viewed from a family-centered perspective, LMSD can be understood as a service that supports caregiving. It operates on a continuum encompassing promotion, prevention, and protection (Milani, 2018). By creating conditions that promote each child's growth, intervening early in matters that may affect people living in an area of high socio-cultural complexity, and addressing temporary family difficulties, LMSD may serve as a critical agent of social justice. Ensuring social justice in terms of equal opportunities for children is one of the most intercultural actions possible.

Regarding the issue of participation, strides have been made, but there is room for improvement, particularly in engaging children in opportunities to actively steer the direction of their own learning. The informal after-school context is particularly suited to this purpose. It is crucial to acknowledge that these points collectively underscore the need to strengthen and consolidate the effective collaboration of diverse partnership entities. This can be achieved through several means: dedicating time to partner meetings to facilitate group evolution, developing a shared lexicon and common meanings, identifying shared values to define educational and intercultural purposes, and subsequently delineating short- and long-term objectives for all involved entities, including children and caregivers.

We cannot deny that the LMSD process is still undergoing a considerable amount of flux: unless we embrace the potential that these initial phases of program development offer, the early stages can seem intimidating. As a result of this, we as a group of partners should be aware of this opportunity and take full advantage of opportunities to learn and grow by improving LMSD as a whole.

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Educational Inclusion in Uruguay: Creating Collaborative Narratives with Migrant Children During the Pandemic

Mónica Da Silva

Returning to in-person classes after months of virtual meetings feels somewhat strange. We (researchers) are moved, and some of us have expressed a bit of fear. We still don't know much about what will happen with the pandemic. We are returning gradually; with many protocols in place; wearing masks; and there are many recommendations to avoid physical contact, which is challenging with the children. We have prepared a set with several face masks for ourselves and the children, hand sanitizer and latex gloves. During the virtual sessions, we know that some children have not been able to connect to virtual classes, and we have not been able to establish contact with their families through any means. These situations are the most concerning because they represent the harsher side of the pandemic, isolation, and educational disconnection. Who are these children? What has happened to them during this time? What efforts have the teachers made to reach out to them? What can we do to reconnect them to the school? Is the pandemic coming to an end? We have many questions, and the only certainty we have is that we have to stay together

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in uncertainty. We are overwhelmed by a certain sadness and disappointment.

Our first planning meeting after the period of isolation finds us with many emotions coming to the surface. We share our difficulties in navigating this time at home; the challenges of caring for our children; working from home; being in the same space all the time; and the constant threat of illness toward ourselves and our loved ones. We are moved, tired of the protocols at the university, and have a sense of powerlessness since we can only bring four university students into the school, which greatly changes our work possibilities. The meaning of our work is linked to the students' education, and the possibilities of bringing them to the classroom/school also shape the scope of future tasks. Sitting in a circle—with distances and health protocols to protect us—we know that we have a task of reconstruction ahead of us that must be respectful of our own time. We agree to help respectfully, without interfering, and without judging the decisions that families have made during the pandemic time. Supporting the return to in-person classes and creating the minimum conditions for educational reconnection finds us with pain and with the need to renew our capacity for creation. Sadness is evident, but there is also the joy of meeting each other again, looking into each other's eyes.

From field notes, written by a researcher, June 2020.

Introduction

The vignette is extracted from one of the field notes conducted in 2020 during the process of returning to in-person schooling at the school where the research was conducted. Sharing this vignette allows us to showcase a challenging moment in our work, but one that also renewed our capacity for reflection and creativity about educational processes.

Since 2009, and up to the present, we have carried out various research projects in the Department of Psychology at the University of the Republic of Uruguay based on the models of the Fifth Dimension (5D) and La Clase Mágica. These models have inspired projects where we seek the development of children's imagination, integrating the creation of narratives, creative and collaborative processes, and the use of various technological tools in community-based and school contexts. During this time, we have implemented seven projects that prioritized working with children in vulnerable situations; in disadvantaged socioeconomic contexts; children with intellectual and motor disabilities; and, in recent years, with children from Latin American migratory backgrounds. In this chapter, we

will share reflections on our experience with this last population and how the activity system we built offers an opportunity for critical reflection and growth for all individuals involved (professors-researchers, university students, school teachers, and children). We reflect on our experience of working during the pandemic in a school that serves a high percentage of migrant children. In this school, we developed a multigrade, intergenerational, and intercultural classroom that provided an opportunity for critical reflection and intervention to reverse processes of educational disconnection.

The theoretical and methodological framework we present has guided the fieldwork of our projects in a continuous dialogue between theory and practice. We start from the idea that academic production must allow the creation and multiplication of knowledge. The work we do makes sense if it serves the communities and is carried out through dialogic mutuality, with the goal of improving living conditions and enabling a more dignified life for all individuals involved. We have created an interdisciplinary team for research and university outreach, where psychologists, educators, sociologists, anthropologists, along with university students—conducting pre-professional internships—come together to work with the community.

We work from a collaborative and situated research approach. Collaborative because it includes our interests and concerns as researchers, and also includes the interest of those involved in the research (children, university students, children's families, school teachers, and community members), promoting participation, commitment, and consensus for the various activities of the program. This work is also situated, as knowledge is local, critical, and partial—this is the ethical-epistemological commitment of our work, because, "the only way to find a broader vision is to be somewhere specific" (Haraway, 1995, p. 339).

In the last 6 years, we have focused on working with migrant children because the dynamics of human mobility in Uruguay have undergone significant changes. From being a country of emigration, it has become a country of transit and settlement for people, in particular from Latin America and the Caribbean. These individuals come from countries that did not used to be a typical migration pattern for our society (e.g. Cuba, the Dominican Republic, Peru, Venezuela, Colombia, and Haiti). This population has been "racialized," discriminated against, and "marked" by a large part of Uruguayan society, primarily due to the rejection of their phenotypic characteristics, educational levels, and fears of competition in the labor market (Koolhaas et al., 2017, p. 21). Although national

legislation aligns with international law (Law 18,250) regarding the conception of migration as a human right, there is still much to be done in terms of public policies, societal attitudes, cultural and educational practices, discourse, and commitments to ensure access and full enjoyment of rights for the international migrant population.

In Uruguay, according to data processed by UNICEF (2020), 3% of the resident population was born in another country, and within this population, 20% are children, representing 1.7% of enrollment in public primary education. Most of this population is concentrated in schools in the downtown area, and near the port of Montevideo. According to Decree 394/009, Law 18,250 on Migrations, migrant children can access the educational system at any time of the year, even if they do not have national documentation—this regulates and guarantees access, representing a significant regional advancement. However, this advancement also comes with challenges for migrant children in their schooling.

The school is the first institutional environment that most children encounter when they arrive in their new country. It is an institution that responds to hegemonic objectives and values, power dynamics, class and gender differences, and in some cases, establishes discontinuities between school practices and children's family practices.

Program Context

Since 2018, university researchers and professors have been working in a public school located in the central area of Montevideo—where a concentration of migrant population arriving in the country is found—with approximately 40% of migrant children in its classrooms. The downtown area of the city has the following characteristics: intense human movement, a high population density, the presence of government institutions, and the location of shelters and hotels (run by the Ministry of Social Development) that provide temporary accommodation for those in need, including migrant populations. The educational centers in the area are attended by children of diverse origins and contexts. School authorities and teachers identify this educational center as a "transit school," a factor that intensified fears of contagion during the spread of the COVID-19 virus. The school concentrated a multitude of sociocultural realities, forming a diversity of educational scenarios historically influenced by normative discourses, contexts of precarity, and the health protocols in place since COVID-19.

The population attending the school are dealing with:

- School disengagement in the context of the pandemic: approximately 15% of the total population according to a survey conducted in June 2020.
- A population of children and their families with diverse geographical origins (South-South migration, residential mobility within Montevideo and between departments, and migration from other parts of the country).
- The need for access to resources provided by the state for the organization of childcare and the material conditions of life.

During 2020, considering the changes in school practices brought about by the COVID-19 pandemic, we developed a specific support proposal for the school due to the worsening conditions affecting the children's school attendance and transportation. We worked with children aged 4–12 years, the age range served by the school.

At the beginning of June 2020, a gradual process of returning to in-person classes was implemented, with the government authorizing a staggered return to classrooms, dividing the total number of students into two groups attending school twice a week. Social distancing measures, allowed capacities, and other health recommendations led many schools to implement alternative modalities, creating different arrangements to reduce the number of students present in the institutions while addressing situations of greater vulnerability.

In this partial return, we started attending the school once a week, with the initial task of helping identify the children who did not return to in-person classes. This task was carried out in collaboration with the school's teachers and university students, as part of their pre-professional practice.

We found that the difficulty in returning to school for in-person classes l was primarily among families that had also not connected to the online classes offered by the school during the pandemic lockdown. These families lived in precarious circumstances: in deteriorated housing, in boarding houses, in overcrowded conditions, and with very low-economic resources. We created home visit teams with the participation of the physical education teacher, university researchers, and university students. Before making a phone call to the families or the main contact person, we visited the families' homes, brought school materials, and invited them to return to in-person classes. In addition to the regular

classroom sessions—offered twice a week—we offered another space for work and support led by university students and researchers, providing the opportunity for expressive and creative experiences related to the pandemic and COVID-19. We had the goal to generate inclusive educational processes, as we were trying to guarantee access, quality persistence, belonging, and full participation of children, regardless of their personal, ethnic-racial, social, economic, and cultural characteristics (Ainscow & Miles, 2008; Duk & Murillo, 2011).

We combined ethnographic records and participatory action focused on the reception processes of children in difficult situations of migration and were not engaging in school activities. Meetings with families, migrant children, and public school teachers allowed us to listen to their stories and observe their experiences related to both the tensions and joys associated with human migration and education during the pandemic. We have also studied national and international documents concerning the situation of migrant children and their connection, in recent times, with the pandemic. During public health emergencies—like the COVID-19 pandemic—we have witnessed an increase in difficulties for the migrant population. Given that a large increase in numbers of people infected with COVID-19 was the result of migrant mobilization, there has been an intensification of border control and closure as well as worsening working and living conditions.

In the multiple experiences that we have had in public schools, we have worked in classrooms where intercultural inclusion is a constant and complex task, developing narrative and collaborative proposals to promote encounters and recognition among children based on their differences. We work with classroom teachers and families to promote reflection on human migration processes and the importance of creating reception mechanisms (Da Silva et al., 2020). For example, when a new migrant child arrives at the school, in addition to the established administrative procedures, getting to know their educational background, facilitating their voice and travel experiences before reaching the school, and seeking alternative educational pathways is a joint welcoming task.

We understand interculturality from a critical perspective: a proposal that seeks to transform societies, institutions, and relationships, taking into account the historical and structural causes that support the colonial system (Walsh, 2010). A critical intercultural perspective requires sustaining the ongoing effort to support a transformation of the hegemonic-dominant

project centered on nationalism. We have worked to build an intercultural and participatory proposal in school spaces that enables the generation of citizenship processes with all children from a human rights perspective. For this, it is necessary to understand the repertoires of experiences and learning, listen to the children, and know the barriers and challenges they face in the daily life of uruguayan schools.

In the weekly space we implemented during the return to in-person classes in 2020, we were inspired by the Fifth Dimension Model, La Clase Mágica, and the University-Community Links (UC Links) network (https://uclinks.berkeley.edu/). During these weekly sessions, undergraduate students, majoring in psychology, promoted the involvement of teachers while conducting specific reflection activities with families for the return of their children to in-person classes.

During the pandemic process, we had the goal to build strategies together with the school to ensure the continuity of quality education for all children enrolled in the school center. The strategies built were developed in three lines of work: (a) monitoring and supporting the reintegration of children who had disengaged from the education system, (b) intercultural multi-grade and intergenerational workshops, and (c) diversity and health emergency, joint efforts in the new educational pandemic scenario. These lines of work were interrelated with the goal of facilitating the construction of a space for school belonging and enabling cultural resignification, coexistence, the recovery of voices, listening, educational trajectories, games, and learning.

Key Ideas: Monitoring and Support for Children Disengaged from the Educational System During the Pandemic

The context of the lockdown, health protection measures, and the suspension of in-person classes brought enormous challenges for educational systems. Health-related protocols had a significant impact on schools, leading to the implementation of emergency remote teaching and, subsequently, a gradual return of students to in-person classes with reduced attendance capacity. We observed that some children had stronger support networks, family presence, and protection, while others faced more complex social and family contexts—some lived in hotels and shelters, or in precarious

housing solutions such as boarding houses or over-crowded homes. Furthermore, these families—often single-parent households—had intermittent sources of income due to reduced economic activities given the impact of COVID-19, and in some cases, their income relied on the informal economy.

Children from these families had difficulties in attending virtual remote classes due to their limited access to material resources. This situation was a reflection of the unequal distribution of resources in our society, affecting educational paths, psychosocial development, and socialization processes, resulting in unequal conditions of accessibility and attendance consistency.

We developed a personalized support proposal as a way to reverse the processes of educational disengagement. As mentioned earlier, we made weekly phone calls and provided educational materials to children on a weekly basis when in-person activities at school were not possible. The return to in-person classes became a challenge again as children living in more precarious situations were hesitant to return. Therefore, we actively sought them out, negotiated their return, and provided specific support, such as school supplies, flexible schedules, and assistance to families with administrative or healthcare needs. Additionally, the school designed a weekly playful and creative space to welcome students and allow them to express pandemic-related experiences This space was named "the intercultural and intergenerational multi-grade workshop."

Key Ideas: Intercultural and Intergenerational Multigrade (IIM) Workshop

One of the initiatives of the project involved implementing a weekly workshop as a welcoming space for students returning to in-person classes. It was defined as an intercultural space, where the diverse cultural backgrounds of children and adults intersected. It was multigrade because it involved cooperation among children from early childhood education (4-years-old) up to the sixth-grade (12-years-old). It was also intergenerational since it included English and physical education teachers from the school, university students, university researchers/professors, and the children themselves. The workshop's central theme focused on the mobility of the children, who were integrated during the project period, both due to the vulnerabilities that were already part of their lives and those caused by COVID-19.

The proposal was based on the concept of "Childhood in Motion," which encompasses various circumstances of displacement experienced by children, whether it is international or within their own country, as well as the social spaces they navigate in their city (Leyra et al., 2014). Childhood in motion incorporates not only the mentioned diversity but also the unique travel histories of children and their families. These approaches were very informative since the population we worked with came from Latin American and Caribbean migration, as we explained above, but there were also children from Uruguay with mobility experiences within the country or in the city of Montevideo.

We worked on reconstructing a sense of belonging in the school space and re-establishing friendships among the children. The proposal was grounded in the Funds of Knowledge and Identity approach, which considers the historical and cultural resources of students and their families, their educational trajectories, and their resistance strategies (Esteban-Guitart & Moll, 2014). With this initiative, the idea was to create opportunities for communication and expression between children and adults through collaborative narratives that were captured in various materials designed in the workshop and in a final book featuring the children's creations (https://www.5duruguay.edu.uy/node/71). This book contains stories produced by the children in group settings during the workshop (Fig. 17.1), some of which were also represented and filmed to share with their families.

A total of 60 children attended the IIM workshop from August to December 2020. Over time, in-person friendships were rekindled, cooperative games were played, personal experiences were shared, and collaborative narratives were constructed. We constructed a plan with key axes and topics that we considered relevant to address, based on personalized meetings with the children and their families. In Table 17.1, we share a schema of the planning that was carried out.

For each topic, we organized 2 days of activities with the children, but the theme related to "the school we have and the school we want" generated a lot of interest, and we included a third meeting. For this activity, we started with prompting questions, such as: What is in the school that I don't find elsewhere? What do I find at school? What does school provide me? Who are we in the school? What I don't like about the school? How would I change the school? Then, we asked children to work in subgroups to create a map of the school and its most important surrounding areas. For the most significant physical places, we asked them to include important individuals, friendships, and so on. Finally, they gave a presentation

Fig. 17.1   Development of narrative for a collaborative book

Table 17.1   General planning of intercultural, multigrade, and intergenerational classroom

AXES	Presentation and creation of a meaningful circle	Identity practices	Cultural, geographical, and institutional backgrounds of identity	Social backgrounds of identity
THEMES	Sensory stations	Who we are and how to participate in the school	The school we have and the school we want	How I move, what my mobility means

about what they had produced, sharing each of their creations with the rest of the group.

For the adults who were part of this space, this was an opportunity to reconnect with their own childhood memories and experiences, but within the context of a different school. Both the workshop's meeting space and the book allowed a creative and humanizing process, enabling the recovery of the ability to create and express oneself in the middle of a complex social context due to the pandemic. These processes also demonstrated the importance of creating spaces for sharing feelings, questioning, expressing, and playing even in difficult times and served as a reminder to adults to not forget to be imaginative and creative in difficult times.

Key Ideas: Diversity and Health Emergency—Joint Efforts of School Teachers and University Members in the New Educational Pandemic Scenario

The processes of social precarity that many children experienced during the pandemic, and the resulting impact on school disengagement, prompted school teachers to devise alternatives in their daily work, both individually and collectively. This entailed a series of tensions regarding their educational roles, given the guiding suggestions from the public education authority that emphasized the importance of building relationships, empathy, and emotional support during the return to in-person classes (ANEP, 2020). In addition to efforts to implement remote teaching and the use of virtual platforms they were not accustomed to, they also had to provide emotional support, which made them realize their own need for support as well.

Our work in the university complemented the school teachers' efforts and led us to reflect on our own digital skills, the possibilities of peer support, and how the difficulties faced by many of the children we worked with in returning to school during the pandemic touched us deeply.

The life situations of the children that we had to support alongside the teachers shed light on how intersecting categories exacerbate vulnerability and violence experienced by many families. Vulnerabilities intertwine, and being a migrant is not a sufficient condition to determine vulnerability. However, being a migrant and of African descent with economic difficulties makes it more likely to have a precarious life. Butler (2010) introduces the notion of "precarious lives" (p. 71), understood as lives that are not

recognized within legal frameworks or as explicit beneficiaries of these frameworks. To understand this, it is necessary to analyze the relationship between regulations and the recognition of vulnerability. Those subjects that are not considered fall outside the legal framework, resulting in an unequal distribution of vulnerabilities; some lives are protected, while others are undervalued (Butler, 2010).

In addition to dealing with multiple jobs and the increased workload caused by the pandemic, school teachers had to cope with extreme vulnerability and violence in a school that lacked specific resources to address these issues. In other words, it does not have a professional technical team to support situations of violence, uprooting due to migration, family reunifications, or other complexities in the lives of many of the children. Despite this, it is worth noting the alternatives implemented to promote the educational continuity of children and reverse disengagement processes. These actions covered a wide range of activities, from home visits to printed materials provided to the children and recurrent phone calls to improve connections with family members and children, among other strategies. Once in-person classes were reinstated, specific support was provided to meet the needs of some families that were more affected by the pandemic-induced changes.

These actions reflect an interest in challenging the homogenization that often applies to children attending school, striving to prevent them from falling outside the boundaries of what is recognized, and pushing against the onset of precarization with determined efforts toward lives that do matter (Butler, 2010).

Discussion

The actions described in this chapter had the goal of diversifying responses to the educational situation experienced during the COVID-19 pandemic at the educational center where we work, which serves a diverse group of children, including a high percentage of migrant children.

Given the processes of educational disengagement that occurred during the return to in-person classes, we collaboratively built a narrative proposal that sought to create a sense of connection between children and adults, focusing on nurturing school membership by providing opportunities to express and share pandemic experiences and enabling creative and collaborative processes based on these experiences.

Intersubjective processes were manifested through the creation of a collaborative narrative that allowed the creation of the previously mentioned book created by the children, emerging from immersion in a space of play and fantasy. We understand intersubjectivity—following Rogoff's perspective (1993)—as a bridge in the interpretation of the same situation, arising in interaction not as mere consensus but as points of convergence and divergence. The notion of intersubjectivity is related to the construction of processes of understanding, the formation of shared meanings, and the promotion of mutuality in collaborative activities.

The design and implementation of the intercultural, multigrade, and intergenerational space, inspired by the Fifth Dimension Model and La Clase Mágica, allowed for reciprocal processes between adults and children, horizontal exchanges, and interconnection in the context of dealing with a public health emergency that impacted everyone's lives. Collaboratively, constructing a narrative that gave life to the proposal, enriched by Funds of Knowledge, understood as "culturally developed and historically accumulated bodies of knowledge, as well as the essential skills for family or individual functioning" (Moll, 1997, p. 47). The integration of the practices, norms, and strategic knowledge of migrant children into school life, the recovery of in-person encounters with games and expressive possibilities, enriched the educational experience, which had been burdened by fears and health protocols during the pandemic period.

Furthermore, the role of teachers underwent significant change during the pandemic, shifting from adherence to a traditional educational model that became exhausting for those who followed it during the crisis to a model that challenged this tradition, generating new ways to approach teaching and adapt to the needs of the population in the context of the pandemic. This change involved establishing alliances between teachers, families, and the research team, aiming to counteract the restrictive and normative results associated with the traditional educational model, which did not allow for specific responses to the difficulties of the pandemic.

This experience teaches us the importance of creating strategies that coordinate effectively to contribute to the holistic wellbeing of the entire educational community (school teachers, children, families, and researchers). In this context, it is crucial to value collective spaces for reflection, emotional support, and re-evaluating the role of teachers, with a focus on continuous and contextualized training, especially in the new scenario of hybrid teaching that has emerged with the pandemic.

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Educación Inclusiva en Uruguay: Creando Narrativas Colaborativas con Niños Migrantes Durante la Pandemia

Mónica Da Silva

Volver a la presencialidad luego de meses de encuentros virtuales resulta algo extraño. Estamos conmovidas y algunas hemos manifestado un poco de temor, aún no sabemos mucho qué pasará con la pandemia, volvemos de forma paulatina, con muchos protocolos, con tapabocas y existen muchas recomendaciones de cuidarnos de los contactos físicos, algo super difícil con las niñas y niños. Hemos preparado un set que tiene varios tapabocas para nosotras y las niñeces, alcohol en gel y guantes de látex. En el tiempo de virtualidad sabemos que hay niños y niñas que no se han podido conectar a las clases virtuales y no se pudo establecer contacto por ningún medio con sus familias. Estas situaciones son las más preocupantes, pues representan la cara más dura de la pandemia, el aislamiento y la desvinculación educativa. ¿Quiénes son esas niñas y niños? ¿Qué ha pasado con ellos durante este tiempo? ¿Cuáles han sido los esfuerzos de las maestras por contactarlos? ¿Qué podemos hacer para vincularlos al centro educativo? ¿Se está terminando la pandemia? Muchas

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preguntas nos hacemos y lo único certero es que tenemos que mantenernos juntas en la incertidumbre, nos invade cierta tristeza y decepción.

Nuestra primera reunión de planificación luego del tiempo de aislamiento nos encuentra con muchas emociones a flor de piel. Compartimos nuestras dificultades para transitar este tiempo en casa, la saturación de los cuidados de nuestros hijos, el trabajo virtual, estar todo el tiempo en el mismo espacio y el permanente acecho de la enfermedad en nosotras y nuestros seres queridos. Estamos conmovidas, cansadas de los protocolos en la universidad y tenemos cierta impotencia ya que en la escuela sólo podremos incorporar cuatro estudiantes universitarias, lo que cambia mucho nuestras posibilidades de trabajo. El sentido de nuestro trabajo está enlazado a la formación de las estudiantes y las posibilidades de integrarlas moldean también el alcance de la tarea por delante. Sentadas en círculo, con las distancias y los protocolos sanitarios que buscan protegernos sabemos que tenemos por delante una tarea de reconstrucción que tiene que ser respetando nuestros tiempos, acordamos ayudar respetuosamente sin estorbar y sin juicios sobre las decisiones que fueron tomando las familias de la escuela en estos tiempos de pandemia. Acompañar el retorno y crear desde la incertidumbre las condiciones mínimas para la revinculación educativa nos encuentra con el dolor, con la necesidad de renovar nuestra capacidad de creación. Se percibe la tristeza, pero también está la alegría de encontrarnos nuevamente mirándonos todas a los ojos.

Tomado de las notas de campo, escrito por una investigadora, Junio de 2020.

Introducción

La viñeta es extraída de uno de los diarios de campo realizados en el año 2020, en la tarea de retorno a la presencialidad en la escuela donde desarrollamos nuestro trabajo de investigación. Compartir esta viñeta nos permite mostrar un momento difícil de nuestra tarea, pero que también renovó nuestra capacidad de reflexividad y creatividad sobre los procesos educativos.

Desde el año 2009—y hasta la fecha—hemos desarrollado diversas investigaciones basadas en el Modelo de la Quinta Dimensión (5D) y la Clase Mágica desde la Facultad de Psicología de la Universidad de la República en Uruguay. Estos modelos han inspirado proyectos donde promovemos el desarrollo de la imaginación infantil, integrando procesos narrativos, creativos, colaborativos y el uso de diferentes artefactos

tecnológicos en contextos comunitarios y escolares. Durante este tiempo, implementamos siete proyectos donde se priorizaron el trabajo con niños en situación de vulnerabilidad, en contextos socioeconómicos desfavorables, con niños con discapacidad intelectual y motriz, y, en los últimos años, con niños provenientes de corrientes migratorias latinoamericanas. En este capítulo, compartiremos reflexiones sobre nuestra experiencia con esta última población y cómo el sistema de actividad que construimos es una oportunidad de reflexión crítica y crecimiento para todas las personas que lo integramos (docentes universitarias investigadoras, estudiantes universitarias, docentes del centro educativos y los niños). Reflexionamos sobre nuestra experiencia de trabajo durante el período de la pandemia en una escuela que trabaja con un alto porcentaje de niños migrantes. En ella desarrollamos un aula multigrado, intergeneracional e intercultural que se convirtió en una oportunidad para la reflexión crítica y la intervención con el objetivo de revertir procesos de desvinculación educativa.

El recorrido teórico y metodológico que presentamos ha guiado el trabajo de campo de nuestros proyectos, en un diálogo permanente entre la praxis y la teoría. Partimos de la idea de que la producción académica tiene que permitir la creación y multiplicación del conocimiento. El trabajo que realizamos tiene sentido si está al servicio de las comunidades y se realiza desde una mutualidad dialógica, orientada a mejorar las condiciones de existencia y a permitir una vida más digna para todas las personas involucradas. Hemos conformado un equipo interdisciplinario de investigación y extensión universitaria, en el que participan psicólogos, educadores, sociólogos, antropólogos, junto con estudiantes universitarios que realizan una práctica preprofesional.

Trabajamos desde un enfoque de investigación colaborativa y situada. Colaborativa, en la medida en que incluye nuestros intereses e inquietudes como investigadores y los de las personas involucradas en la investigación, (niños, estudiantes universitarios, familiares de los niños, docentes y miembros de la comunidad) promoviendo la participación, el compromiso y el consenso para las diferentes actividades. Situado, ya que el conocimiento es localizable, crítico y parcial; ese es el compromiso ético-epistemológico de nuestro trabajo. Siguiendo a Haraway (1995), "…la única manera de encontrar una visión más amplia es estar en algún lugar en particular" (p. 339).

En los últimos seis años nos hemos centrado en el trabajo con niños migrantes porque la dinámica de la movilidad humana en Uruguay ha sufrido un cambio significativo. De ser un país de origen de migrantes, se

ha convertido en un país de tránsito y asentamiento de personas provenientes principalmente de América Latina y el Caribe. Personas procedentes de países latinoamericanos de migración no tradicional para nuestra sociedad: Cuba, República Dominicana, Perú, Venezuela, Colombia y Haití. Esta población ha sido "racializada", discriminada y "marcada" por gran parte de la sociedad uruguaya, principalmente por el rechazo a sus características fenotípicas, niveles educativos y temores de competitividad en el mercado laboral (Koolhaas et al., 2017, p. 21). Si bien la legislación nacional está en concordancia con el derecho internacional (Ley 18,250) en relación a la concepción de la migración como un derecho humano, aún queda mucho por hacer en términos de políticas públicas, a nivel de la sociedad, en las prácticas culturales y educativas, en el discurso y en los compromisos para garantizar el acceso y el pleno goce de derechos a la población proveniente de la migración internacional.

En Uruguay, según datos procesados por UNICEF (2020), el 3% de la población residente ha nacido en otro país y dentro de esta población el 20% son niños y niñas, representando el 1,7% de la matrícula en la Educación Primaria Pública. La mayoría de esta población se concentra en las escuelas del centro de la ciudad y en las cercanías del puerto de Montevideo. Según el Decreto 394/009, de la Ley 18,250 de Migraciones, la población infantil migrante puede acceder al sistema educativo en cualquier momento del año, aunque no tenga documentación nacional. De esta manera, se regula y garantiza el acceso, lo que representa un gran avance a nivel regional, pero no está exento de desafíos para los niños migrantes en sus procesos de escolarización.

La escuela es el primer ámbito institucional que la mayoría de los niños encuentran al llegar a su nuevo país. Se trata de una institución que responde a objetivos y valores hegemónicos, a relaciones de poder, a diferencias de clase y de género, y que en algunos casos establece discontinuidades entre las prácticas escolares y las prácticas familiares de los niños.

Descripción del Sitio

Desde 2018, profesoras e investigadoras universitarias hemos trabajado con una escuela pública que está ubicada en Montevideo (Uruguay), en la zona céntrica de concentración de la población migrante que llega al país, con aproximadamente un 40% de niños migrantes en sus aulas. La zona céntrica de la ciudad tiene las siguientes características: el intenso movimiento de personas, la gran cantidad de habitantes por metro cuadrado,

la presencia de instituciones gubernamentales y la ubicación de albergues y hoteles del Ministerio de Desarrollo Social que brindan alojamiento temporario a personas necesitadas, entre ellas la población migrante. Los centros educativos de la zona son transitados por niños de diversos orígenes y realidades. Autoridades escolares y docentes de la escuela caracterizan a este centro educativo como una "escuela de tránsito", aspecto que en tiempo de circulación del virus del COVID-19 intensificó el temor a los contagios. Concentró una multiplicidad de realidades socioculturales, conformando una diversidad de escenarios educativos históricamente atravesados por discursos normativos, contextos de precariedad y por los protocolos sanitarios vigentes desde el COVID-19.

La población que asiste a la escuela configura la siguiente situación:

- Desvinculación escolar en contextos de pandemia, aproximadamente el 15% de la población total según encuesta a junio de 2020.
- Población de niños y círculos parentales con orígenes geográficos diversos (migración sur-sur, movilidad residencial dentro de Montevideo e interdepartamental y desde el resto del país).
- Necesidad de acceso a los recursos proporcionados por el Estado para la organización del cuidado de niños y sostén de las condiciones materiales de la vida.

Durante el año 2020, considerando los cambios en las prácticas escolares generados por la pandemia de COVID-19, generamos una propuesta de apoyo específico a la escuela dado el agravamiento de las condiciones que sostenían la permanencia y el tránsito escolar de los niños. Trabajamos con niños de 4 a 12 años de edad que es el rango de edad que atiende la escuela.

A inicios de junio de 2020 se implementó un proceso gradual de regreso a la presencialidad, el gobierno autorizó el retorno escalonado a las aulas dividiendo el total de alumnos de las escuelas dos veces por semana. Las medidas de distanciamiento social, aforos permitidos y otras recomendaciones sanitarias, llevaron a que buena parte de las escuelas implementaran modalidades alternativas, generando diferentes ordenamientos que permitieran reducir la cantidad de estudiantes presentes en las instituciones y a la vez atender las situaciones de mayor vulnerabilidad.

En ese retorno parcial, comenzamos a asistir a la escuela una vez por semana, teniendo como primera tarea ayudar a identificar a los niños que no retornaban a la presencialidad. Esta tarea se hizo en forma conjunta

con las maestras del centro educativo y con el apoyo de estudiantes universitarios que se sumaron al trabajo en la modalidad de práctica pre-profesional.

Fuimos identificando que la dificultad de retorno a la presencialidad y revinculación escolar se ubicaba en las familias que durante el confinamiento en pandemia tampoco se habían conectado a los espacios virtuales ofrecidos por la escuela. Dichas familias vivían en condiciones de precarización: en viviendas muy deterioradas, en pensiones, en situación de hacinamiento y con muy bajos recursos económicos. Conformamos equipos de visitas a los hogares, integrados por maestra o profesora de educación física del centro escolar, las profesoras-investigadoras universitarias y estudiantes universitarios. Previa llamada telefónica a las familias o algún referente, nos acercamos al hogar, llevábamos materiales escolares e invitamos a que volvieran a la presencialidad. Les ofrecíamos, además del espacio curricular en su aula regular (de dos veces por semana, que era lo permitido), otro espacio de trabajo y contención con estudiantes universitarios y profesoras-investigadoras universitarias en el que se brindaba la posibilidad de expresar de forma lúdico-creativa experiencias y emociones vividas relativas a la pandemia y la enferm COVID-19. Teníamos la meta de generar procesos de inclusión educativa, tratando de garantizar acceso, permanencia de calidad, pertenencia y participación plena de los niños, independientemente de sus características personales, étnico-raciales, sociales, económicas y culturales (Ainscow & Miles, 2008; Duk & Murillo, 2011).

Combinamos registros etnográficos y acción participativa centrados en los procesos de acogida de niños en situación de movilidad y desvinculación educativa. Los encuentros con las familias, los niños migrantes y los profesores de la escuela pública nos han permitido escuchar sus relatos, contemplar sus experiencias vinculadas tanto a las tensiones como a las alegrías en relación con la movilidad humana y la educación en tiempos de pandemia. También se analizaron documentos nacionales e internacionales sobre la situación de los niños migrantes y el vínculo, en los últimos tiempos, con la pandemia de COVID-19. En el contexto de la emergencia sanitaria y social, hemos asistido a un aumento de las dificultades para la población migrante. Donde se puso el foco en la movilidad humana como una de las causas de la propagación del COVID-19, la intensificación del control y cierre de fronteras, el empeoramiento de las condiciones laborales, el repliegue de la vida cotidiana a la vivienda y la educación virtual de emergencia, que han precarizado aún más las condiciones de vida.

En la experiencia que compartimos en la escuela pública, hemos trabajado en aulas donde la inclusión intercultural es una tarea constante y compleja, desarrollando propuestas narrativas y colaborativas para promover el encuentro y el reconocimiento entre los niños a partir de sus diferencias. Trabajamos con docentes del aula y familiares para promover la reflexión sobre los procesos de movilidad humana y la importancia de generar estrategia de acogida (Da Silva et al., 2020)—por ejemplo: cuando los niños y niñas migrantes nuevos llegaban a la escuela, adicional a los procesos administrativos establecidos, también se generaron espacios para conocer sus antecedentes educativos, facilitar su movilización a la escuela, y encontrar alternativas educativas que brindaran una mejor experiencia para estos niños y niñas.

Entendemos la interculturalidad desde una perspectiva crítica, como una propuesta que persigue la transformación de *las sociedades, instituciones y las relaciones* teniendo presente las causas históricas y estructurales que sostienen el sistema colonial (Walsh, 2010). Una perspectiva intercultural crítica, requiere sostener el ejercicio permanente de apuntalar una transformación del proyecto hegemónico-dominante. Hemos trabajado para construir en los espacios escolares una propuesta intercultural y participativa que habilite la generación de procesos de ciudadanía con todos los niños desde una perspectiva de derechos humanos. Para esto, era necesario comprender los repertorios de las experiencias de aprendizaje, escuchar a los niños y niñas, y conocer las barreras y desafíos que ellos enfrentan cada día en las escuelas uruguayas.

En el espacio semanal que implementamos durante el retorno a la presencialidad en el año 2020, nos inspiramos en las propuestas del Modelo 5D, la Clase Mágica, y la red University-Community Links (UC Links) (https://uclinks.berkeley.edu/). Sostuvimos un espacio semanal con la participación de estudiantes universitarios de la carrera de Psicología y promovimos el involucramiento de las docentes, a la vez que realizamos actividades puntuales de reflexión con familiares para el retorno a la presencialidad de sus hijos.

Durante el proceso de pandemia buscamos construir junto a la escuela estrategias que garantizaran la continuidad del derecho a la educación de todos los niños que estaban inscriptos en el centro escolar. Se desarrollaron tres líneas de trabajo, (a) seguimiento y acompañamiento de revinculación de los niños desvinculados en el sistema educativo, (b) taller intercultural multigrado e intergeneracional y (c)diversidad y emergencia sanitaria, esfuerzos conjuntos ante el nuevo escenario educativo en

pandemia. Estas líneas de trabajo estuvieron interrelacionadas entre sí con el objetivo de facilitar la construcción de un espacio de encuentros de pertenencia escolar y que permitiera habilitar la resignificación cultural, la convivencia, la recuperación de las voces, la escucha, las trayectorias educativas, los juegos y los aprendizajes.

IDEAS CLAVES: SEGUIMIENTO Y ACOMPAÑAMIENTO A LOS NIÑOS DESVINCULADOS DEL SISTEMA EDUCATIVO DURANTE LA PANDEMIA

El contexto de confinamiento, las medidas sanitarias y suspensión de las clases presenciales generó enormes desafíos para los sistemas educativos. Los protocolos sanitarios generaron un gran impacto en la escuela, se implementó una enseñanza remota de emergencia y posteriormente un retorno paulatino de la asistencia de los niños, reduciendo el aforo. Pudimos constatar que algunos niños contaban con una red de apoyo, protección y presencialidad familiar más acentuada, mientras que otros niños tenían contextos sociales y familiares más complejos, residían en hoteles y refugios, o en soluciones habitacionales precarias: pensiones o viviendas ocupadas. A su vez, estas familias (en varios casos núcleos monoparentales) con ingresos económicos intermitentes por la baja de actividades laborales afectadas por la incidencia de la COVID-19 y en algunos casos su economía era sostenida por medio de prácticas informales.

Los niños de estas familias presentaron dificultades para sostener, dadas sus condiciones materiales de vida, la enseñanza remota virtual. De esa manera quedó con mayor visibilidad la situación de desigualdad y de precariedad de algunas familias evidenciando la distribución desigual de los bienes, que repercute en las trayectorias educativas, en el desarrollo psicoafectivo y en los procesos de socialización generando condiciones de accesibilidad y permanencia de forma diferencial.

Desarrollamos una propuesta de acompañamiento personalizado como modo de revertir los procesos de desvinculación educativa. Como se expresó anteriormente, realizamos llamadas telefónicas semanales y se les acercó a los niños materiales educativos de forma semanal, cuando no había actividades presenciales en la escuela. El reintegro a la presencialidad volvió a ser un desafío ya que los niños con vidas más precarizadas no retornaban, por lo cuál se fue en su búsqueda, generando acuerdos para su retorno y brindando apoyos específicos como materiales escolares,

flexibilidad en horarios y apoyos a la familia para facilitar trámites o asistencia en salud. A su vez, se diseñó en la escuela un espacio semanal lúdico-creativo de recibimiento y expresión de las experiencias y emociones en pandemia que le llamamos el taller intercultural multigrado e intergeneracional.

IDEAS CLAVES: TALLER INTERCULTURAL MULTIGRADO E INTERGENERACIONAL (IMI)

Una de las acciones del proyecto consistió en la implementación del taller semanal como un espacio de recibimiento a la presencialidad en la escuela. Se definió como un espacio *intercultural*, donde se entrelazan los diversos contextos de procedencias culturales de los niños y adultos; *multigrado*, porque se desarrolló un trabajo de cooperación entre niños de la educación inicial (4 años), hasta el sexto-grado (12 años); e *Intergeneracional*, considerando que participaron del aula las docentes de inglés y educación física de la escuela, estudiantes de psicología, las docentes investigadoras y los niños. El taller tuvo como marco central en sus actividades la movilidad de los niños, integrados en el periodo de realización del proyecto, tanto por las consecuencias de las vulnerabilidades que ya hacían parte de sus vidas, como las que fueron causadas por COVID-19.

La propuesta estuvo pautada en la idea de *Niñez en Movimiento*, que se concibe en las diversas circunstancias de desplazamiento vivenciadas por los niños, cuando se desplazan internacionalmente, o dentro de su país, así como los espacios sociales que transitan en calle en la misma ciudad (Leyra et al., 2014). La Niñez en Movimiento incorpora en su concepto no solamente la diversidad mencionada, sino que también el hecho de poseer en sus historias y de sus referentes familiares, las trayectorias propias de sus modos de desplazarse junto a sus familias. Estas aproximación resultó muy informativa debido a que la población migrante con la que trabajamos provenían de latinoamérica y del Caribe (como se mencionó anteriormente), pero también hubo participantes de Uruguay que habían vivido experiencias de movilidad migratoria dentro del país y/o en la ciudad de Montevideo.

Trabajamos en la reconstrucción de sentidos de pertenencia en el espacio escolar y recuperación de los vínculos de amistad entre los niños, fundamentando la propuesta sobre los Fondos de Conocimiento e Identidad, lo cual se basa en la consideración de los recursos históricos y culturales de los estudiantes y sus familias, sus trayectorias educativas y sus estrategias de

resistencia (Esteban-Guitart & Moll, 2014). De esa manera, la idea fue generar oportunidades de comunicación y expresión entre las niños y adultos, en un trabajo de narrativas colaborativas que se plasmaron en diversos materiales producidos en el taller y en un libro final con las producciones infantiles (https://www.5duruguay.edu.uy/node/71). Este libro recoge historias producidas por los niños en forma grupal en el taller (Fig. 18.1), las mismas también fueron representadas y filmadas para compartir con sus familiares.

Fig. 18.1   Desarrollo de narrativas para el libro colaborativo

Al taller IMI concurrieron 60 niños y niñas durante el período de agosto a diciembre de 2020, en el que poco a poco se fueron retomando vínculos de amistad de forma presencial, se desarrollaron juegos cooperativos, relatos de vivencias y construcción de narrativas colaborativas.

Construimos un plan con ejes claves y temas que consideramos relevantes abordar, a partir de encuentros personalizados con los niños y sus familias (Table 18.1).

Para cada tema, organizamos dos días de actividades con los niños y niñas. Sin embargo, la temática "La escuela que tenemos y la escuela que queremos" generó mucho interés e incluímos un tercer encuentro. Para esta actividad, empezamos con preguntas orientadoras, tales como: ¿Qué encuentro en esta escuela que no encuentro en otras partes?, ¿Qué encuentro en la escuela?, ¿Qué me provee la escuela?, ¿Quiénes somos en la escuela?, ¿Qué no me gusta de la escuela?, ¿Cómo podría cambiar la escuela? Luego, le pedimos a los niños y niñas que crearan subgrupos para crear un mapa de la escuela y las áreas más importantes alrededor de ella. Para los espacios físicos significativos, les pedimos que incluyeran personas que consideraban importantes, amistades, etc. Finalmente, los estudiantes hacían una presentación donde compartían el trabajo que hicieron con el resto del grupo.

Para las personas adultas que formamos parte del espacio fue una oportunidad para conectar también con nuestros recuerdos de infancias y experiencias, pero desde la vivencia de una escuela diferente. Tanto el espacio de encuentros en el taller como el libro, permitió un proceso creativo y humanizante para recuperar la posibilidad de crear y expresar en medio de un contexto social complejo producto de la pandemia. Demuestra la

Table 18.1 Planificación general del aula intercultural, multigrado e intergeneracional

DIMENSIONES	Presentación y creación de círculos significativos	Prácticas de identidad	Trasfondo cultural, geográfico e institucional de la identidad	Trasfondo social de la identidad
TEMAS	Estaciones sensoriales	¿Quiénes somos y cómo participamos en la escuela?	La escuela que tenemos y la escuela que queremos.	¿Cómo me movilizo? ¿Qué significa mi movilidad?

importancia de generar espacios para compartir sentimientos, cuestionar, expresarse y jugar aún en la adversidad y nos recuerda al mundo adulto que no podemos olvidar la imaginación y la creatividad en tiempos difíciles.

IDEAS CLAVES: DIVERSIDAD Y EMERGENCIA SANITARIA, ESFUERZOS CONJUNTOS DE LAS MAESTRAS Y EQUIPO UNIVERSITARIO ANTE EL NUEVO ESCENARIO EDUCATIVO EN PANDEMIA

Los procesos de precarización social que atravesaron las vidas de muchos niños durante la pandemia, y el impacto que ello generó, hasta el punto de desembocar en procesos de desvinculación, llevó a que las docentes construyeran alternativas en su tarea cotidiana, de manera individual y colectiva. Esto implicó un conjunto de tensiones en relación a las representaciones sobre sus tareas educativas, dadas las sugerencias orientativas desde el organismo rector de la educación pública que enfatizaron la importancia de los vínculos, la empatía y la afectividad en el retorno a la presencialidad (ANEP, 2020). Además de los esfuerzos en la implementación de la enseñanza remota y la utilización de las plataformas virtuales a las que no estaban acostumbradas, las contenciones emocionales que debían implementar, las enfrentó a la necesidad de apoyos también para ellas mismas.

Nuestro trabajo desde la Universidad, se unió a los esfuerzos de las docentes y nos llevó a reflexionar sobre nuestras propias habilidades en el uso de recursos digitales, en las posibilidades de apoyo entre pares, y cómo nos conmueven las dificultades de vida de muchos de los niños con los que trabajamos en el retorno a la escuela en tiempos de pandemia.

Las situaciones de vida de los niños a las que tuvimos que acompañar junto a las docentes permiten dilucidar cómo se entrecruzan categorías que aumentan la vulnerabilidad y la violencia en las que están inmersas muchas familias. Las vulnerabilidades se imbrican, ser migrante no es condición suficiente para determinar la vulnerabilidad, pero ser migrante y afrodescendiente con dificultades económicas configura una vida precaria. Butler plantea la noción de "vidas precarias" (2010, p. 71), entendida como aquellas vidas que no son reconocidas en los marcos legales o destinatarias explícitas de dichos marcos. Para ello es necesario analizar la relación entre las normativas y el reconocimiento de la vulnerabilidad. En tanto, los sujetos no contemplados quedan por fuera del marco legal,

generando una distribución desigual de vulnerabilidades; unas vidas son protegidas, otras no tienen valor (Butler, 2010).

Las docentes, además de lidiar con el multiempleo y la sobrecarga de tareas provocadas por la pandemia, tuvieron que convivir con situaciones de extrema vulnerabilidad y violencia en una escuela que no cuenta con recursos específicos para su abordaje. Pese a ello, cabe destacar las alternativas implementadas para favorecer la permanencia educativa de niños y revertir los procesos de desvinculación educativa. Las mismas cubrieron un amplio espectro desde visitas a los domicilios de los niños; materiales impresos que se facilitaron a los mismos; llamadas telefónicas recurrentes para mejorar la vinculación con familiares y niños, entre otras estrategias. Una vez recuperada la presencialidad se realizaron algunos apoyos específicos, atendiendo a las necesidades de algunas familias que se vieron más afectadas por los cambios laborales impuestos por la pandemia.

Dichas acciones dan cuenta del interés por subvertir la homogeneización que se construye hacia los niños que asisten a la escuela, en un esfuerzo para que no queden por fuera de los márgenes de lo reconocible, tensionando el advenimiento de la precarización con acciones, en algunos casos denodadas hacia vidas que sí importan (Butler, 2010).

Discusión

Las acciones descritas en este artículo buscaron diversificar respuestas a la situación educativa vivida en la pandemia en el centro educativo en el que trabajamos y en el que asisten una diversidad de niños, entre ellos un alto porcentaje de niños migrantes.

Dados los procesos de desvinculación educativa que se registraron en el retorno a la presencialidad, fuimos construyendo de forma colaborativa una propuesta narrativa que intentó generar sentidos de conexión entre los niños y los adultos, buscando cultivar la pertenencia escolar, desde las posibilidades de expresar y compartir las vivencias de la pandemia y habilitar procesos creativos y colaborativas a partir de esas vivencias.

Los procesos intersubjetivos se manifestaron a través de la creación de una narrativa colaborativa que dio lugar al libro mencionado, que surge a partir de la inmersión en un espacio de juego y fantasía. Entendemos la intersubjetividad siguiendo la perspectiva de Rogoff (1993) como un puente en la interpretación de una misma situación, que surge en la interacción, no como un mero consenso, sino como puntos de

convergencia y divergencia. La noción de intersubjetividad está relacionada con la construcción de procesos de comprensión, la formación de significados compartidos y la promoción de la mutualidad en las actividades colaborativas.

El diseño y puesta en marcha del espacio *intercultural, multigrado e intergeneracional,* inspirado en el Modelo 5D y la Clase Mágica, permitió procesos de reciprocidad entre adultos y niños, intercambios horizontales y la interconexión en función de la elaboración de un acontecimiento sanitario que impactó en las vidas de todas las personas. Se habilitó la construcción de una narrativa de forma colaborativa que dió vida a la propuesta, nutrida de los fondos de conocimientos, entendiendo a los mismos como: "Los cuerpos de conocimiento culturalmente desarrollados e históricamente acumulados, así como las habilidades esenciales para el funcionamiento y bienestar familiar o individual" (Moll, 1997, p. 47). La integración de las prácticas, normas y saberes estratégicos de los niños migrantes a la vida escolar, la recuperación del encuentro presencial, con juegos y posibilidades expresivas, enriquecieron la experiencia educativa, que estaba cargada por miedos y protocolos sanitarios propios del período de pandemia.

Por otro lado, el rol de las docentes experimentó un cambio significativo durante la pandemia, pasando de una adhesión a un modelo educativo tradicional que en situación de crisis resultaba agotador para aquella maestras que lo seguían, a un modelo que desafiaba esta tradición, generando nuevas formas de abordar la enseñanza y adaptarse a las necesidades de la población en contexto de pandemia. Este cambio implicó la formación de alianzas entre docentes, familias y equipo de investigación, con el fin de contrarrestar los resultados restrictivos y normativos asociados al modelo educativo tradicional, que no permitían respuestas específicas durante las dificultades en la pandemia.

Esta experiencia nos enseña la importancia de la creación de estrategias que se coordinen de manera efectiva, para contribuir al bienestar integral de toda la comunidad educativa (docentes, niños, familias y los equipos de investigación que tienen parte). En este contexto, es fundamental valorar los espacios colectivos de reflexión, apoyo afectivo y reevaluar el papel de las docentes y enfocarse en la formación continua y contextualizada, especialmente en el nuevo escenario de hibridación entre la enseñanza presencial y virtual que ha surgido con la pandemia.

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The Wellbeing Club-Uganda: Facilitating Positive Wellbeing and Leadership Among Adolescents in Kampala, Uganda

Amy Vatne Bintliff, Zaharah Namanda,
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Norah Nalutaaya, and Wendy Wei Cheung

The outdoor space, which was connected to a nonprofit partner's building in urban Kampala, was filled with light as youth began to trickle in. Greetings from the facilitators and Kampala University undergraduate mentors were met with shy smiles. It was as if these adolescents, who had faced more than a year of COVID-19-related school closures and lockdowns, had voices that were out of practice. The adolescents did not know one another, as they represented eight schools within the region, but they looked around with quiet curiosity. Students' eyes lit up when they saw the banners, tables, and art supplies that

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had been carefully prepared in the "wellbeing center." Although outdoors, the grass-filled courtyard of the building protected the youth from the busy outdoor streets. The facilitators of the Africa Education and Leadership Initiative (Africa ELI), executive director, Zaharah Namanda; Dr. Peninah Beinomugisha, a professor at Victoria University; and Norah Nalutaaya, a Ugandan teacher and Africa ELI board member, were easy to spot as they wore matching white polo shirts. They were leading ten full days of a positive youth development curriculum, the Wellbeing Club.

On the first day of the club, participants were introduced to a mindfulness activity. Jeremiah shared that he was nervous when he first heard about the practice of mindfulness and its relationship to breath as he suffered from asthma. With a lot of empathy, one of the Wellbeing Club facilitators moved nearer to him, and together they slowly followed the other facilitator's voice as it guided students to focus on their breathing. Jeremiah followed the instructions carefully and by the end of the session, he was so excited by the positive results that he volunteered to lead the next mindfulness activity. Trevor, who was the youngest member of the club, could not hold in his joy while undertaking the mindfulness exercise. He said, "Mindfulness is so calming—it makes me relax and allows me to think over things that I give less attention to."

In southern California, University of California, San Diego (UCSD) Professor Amy Bintliff texted doctoral student Rebecca Levine, "They've started their day!" This moment had been in the planning stages for months and then suddenly, within 1 week of Africa ELI receiving permission from government officials to implement the pilot during the COVID-19 restrictions in Uganda, the pilot began. Amy received photos and WhatsApp texts from Zaharah and shared them with eight undergraduate and graduate students who had spent 6 months supporting this pilot program through curriculum co-design, Zoom meetings, and working on the corresponding research design. Excitement grew among both teams as the collective contributions between Ugandan and US team members were finally "live" in action.

INTRODUCTION: WHY WELLBEING? UGANDAN REFUGEE EDUCATION

At the height of the COVID-19 pandemic, with special permission from the local government and in the middle of 1 year of school closures, Africa ELI, a non-governmental organization (NGO) (https://africaeli.org/) supporting refugee youth in Uganda, in partnership with the University of

California, San Diego, (UCSD), hosted *The* for 25 Ugandan adolescents. The adolescents were selected to participate based on recommendations from local NGOs as students who could benefit from Wellbeing Club extra care and supportive programming. Africa ELI's mission is to "provide access to education by preparing young people to become leaders in their families and communities, engage in business enterprise, counteract inequalities, improve health practices, and work toward improving society for the benefit of all citizens" (Africa Education & Leadership Initiative, n.d.). A growing number of youth beneficiaries of Africa ELI are refugees from the conflict-affected areas of South Sudan. In 2020, Uganda hosted over one million refugees mainly from South Sudan, the Democratic Republic of Congo, and Burundi and the numbers continue to grow. Over 60% of refugees are under 18 years of age (UNHCR, 2020).

It is important to establish the context of aspects of the Ugandan education system that were the impetus for this project on wellbeing. In Uganda, although primary school enrollment has improved, 52% of children do not complete primary school (National Education Profile, 2018) and only 34% of females and 45% of males complete senior four (Grade 11) (Odaga, 2020). Youth living in the Katanga, Kamwyokya,[1] and Kawempe neighborhoods where this group of students live, face a variety of challenges that perpetuate school dropout including poverty, disease, civil conflict, post-traumatic stress, and violence. Refugee adolescents have reported a variety of challenges to their wellbeing, including issues of community safety, food insecurity, and, as caregiver needs increased, feelings that they were not loved by their new caregivers (Meyer et al., 2019). Additionally, in one study, over 31% of youth (N = 457) from this geographic area suffer from suicide ideation (Swahn et al., 2012).

The COVID-19 pandemic exacerbated the issue of inequitable access to education in the Eastern region, with at least 49% of schoolchildren unable to access remote learning during school closures in 2020 (UNICEF, 2020). Whereas most students transitioned to studying remotely through TV, radio, newspapers, e-learning, and the internet, students without a household income to support internet access experienced a total stall in their formal learning due to the lack of digital aids and resources.

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[1] Katanga and Kamwyokya are commonly referred to as "slums" in research and Ugandan common vernacular because of conditions, such as poorly constructed housing units, poor drainage from flooding, a lack of clean water, poor sanitation, disease, and other public health issues in addition to those mentioned within the chapter.

COVID-19 also magnified gender equity gaps in Uganda and led to increased mental health concerns, especially for girls (Us-Salam et al., 2023). With homes replacing schools, refugees, especially girls, faced increased protection risks including higher rates of gender-based violence and child marriage (UNHCR, 2020). COVID-19 triggered an increase in persistent stress, anxiety, and depression symptoms. Additionally, Ugandan youth, both refugees and nonrefugees, reported mood swings due to hunger, depressed feelings, and pressure to have early sexual intercourse (Meyer et al., 2019).

At present, there are few interventions or out-of-school activities to attend to the psychosocial and emotional needs of adolescent youth in Ugandan schools due to a lack of school counselors and large class sizes (Otwine et al., 2018). Thus, understanding what constitutes child and adolescent wellbeing in all contexts is of paramount importance in order for Ugandan children to reach their full potential. Out-of-school programming provides unique opportunities to teach adolescents the and strategies associated with positive holistic wellbeing, so that they can advocate for themselves and discuss their needs with their peers and caring adult facilitators. Much like UC Berkeley's Y-PLAN supported professional and academic language development (Chap. 15), our partnership focused on teaching youth a language to discuss mental health and wellbeing while providing time for play, peer-to-peer relationship development, and art engagement.

Wellbeing is a multidimensional concept composed of varied definitions that generally focus on the quality of one's life and their life satisfaction. The participatory model that we use in the Wellbeing Club stems from over 30 years of research with women and vulnerable children in seven different countries. Through workshops, both formal and informal, researchers Amy Vatne Bintliff, Lori DiPrete Brown, Nancy Kandall, and Sophia Friedson-Ridenour (University of Wisconsin-Madison) asked women and children to describe their own wellbeing based on their daily lived experiences. (See "Wellbeing Principles and Practices" here: https://uclinks.berkeley.edu/chapter19). Informed by the theoretical frameworks of Bronfenbrenner's Ecological Systems Theory (Bronfenbrenner, 1974; Bronfenbrenner & Ceci, 1994), that recognizes the impact of relationships, context, and community on an individual, Sen's Capabilities Approach and Nussbaum's descriptions of quality of life and justice
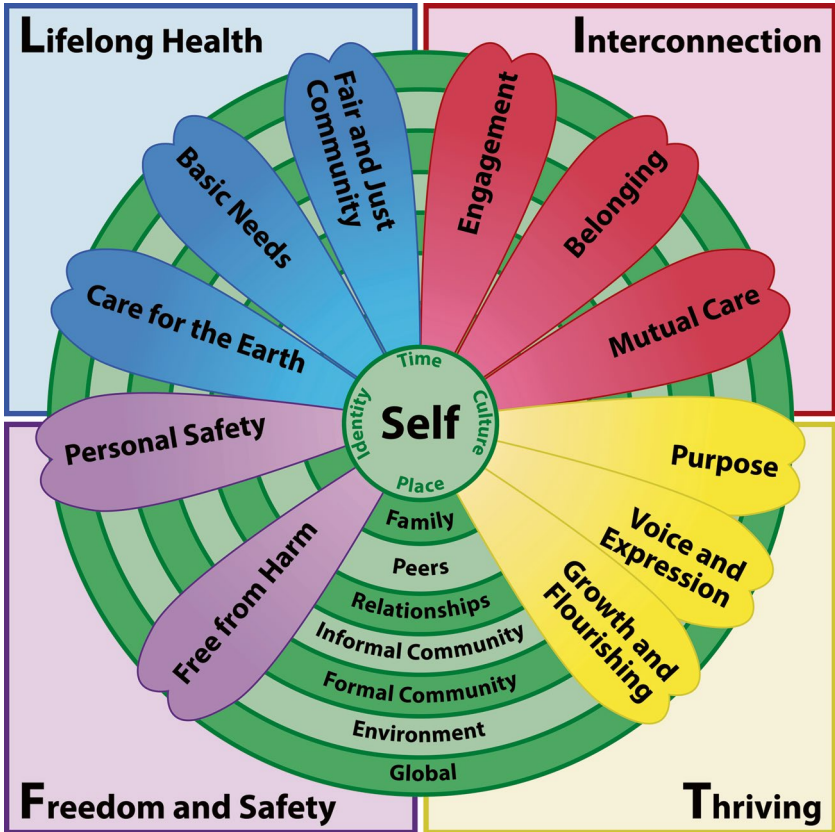
Fig. 19.1 The 4W LIFT Model of Wellbeing (see 4w, n.d.). The participatory model used to facilitate discussion and activities about wellbeing

(Nussbaum, 1995; Sen, 1993) which asks, "What is each person able to do and to be?," an initial model was developed (Vatne Bintliff et al., 2019) and then revised to incorporate easy-to-understand language for children and adolescents as you can see in Fig. 19.1.

The model differs from other wellbeing models because it incorporates aspects that were prioritized by women and children, including a fair and just society, environmental justice, and freedom from harm.

The Wellbeing Club-Uganda

The goal of the Wellbeing Club is to support adolescent wellbeing through a positive youth development curriculum that includes teaching the language of wellbeing through arts-based learning, peer-to-peer support, mindfulness strategies and community engagement projects. The Wellbeing Club-Uganda was born out of an international, cross-cultural research partnership which resulted from a connection between Amy Vatne Bintliff and Zaharah Namanda (co-authors of this chapter) at the 2020 University-Community Links (UC Links) Conference. (For more information about UC Links visit https://uclinks.berkeley.edu/). Amy and Zaharah both presented on issues of adolescent wellbeing and development. Post-conference, Zaharah and Amy remained in contact and began setting biweekly meetings to explore the potential of a collaborative partnership. The establishment of the Wellbeing Club-Uganda was grounded in cross-cultural pre-planning and co-design. From July to December 2020, Amy and doctoral student Rebecca Levine sent drafts of an 11-module curriculum entitled the Wellbeing Club to Zaharah who shared the curriculum with the Ugandan team. A series of six 90-min Zoom meetings provided space for exchanging cultural information, answering questions, and ultimately co-designing the curriculum to be used in a Ugandan context. Undergraduate and graduate students from UCSD were present in the Zoom meetings and heard Zaharah describe the challenges that the youth participating in Africa ELI face and the assets that they already have in place. Undergraduate students were able to ask questions which helped to shape their understanding of Africa ELI's overall goals and the daily lives of Ugandan participants.

Simultaneously, Amy hired undergraduate and graduate students to co-author a 216-page curriculum based on Amy's original dissertation curriculum which focused on wellbeing (Bintliff, 2019). Using small working groups and large team meetings, these student co-authors built upon the original curriculum by writing scripts for facilitators, mindfulness scripts, and vocabulary worksheets. Graduate students (Maxie Gluckman, Rebecca Levine, Patricia Hemans, Wendy Wei Cheung) shared their own expertise in international lesson design, trauma-informed care, mindfulness, and global gender equity. UCSD undergraduates, who themselves are adolescents under age 25, helped to share game ideas, wrote scripts, and contributed their expertise to the design of the club logo, banners, and t-shirts (Esmeralda Salas & Christian Demesa). UCSD students supported the

Africa ELI/UCSD co-design of a corresponding research study and learned the process associated with obtaining approval for research involving human participants. Students also participated in our co-design meetings that followed community-based participatory research (CBPR) methods (Israel et al., 2012). Africa ELI and UCSD teams collaborated on every piece of the research design. One undergraduate student said, "I really learned how to develop a study based on the needs of a community partner. This project has completely shifted the way that I think of research and has helped me to see that the purpose of research can be tied directly to on-the-ground programming in communities."

In this chapter, we briefly describe our practices and highlight undergraduate and graduate student involvement. Then we will provide examples of how 25 Ugandan adolescents benefited from learning the language of the wellbeing model and utilized strategies to support their holistic wellbeing both during the club and in their daily lives outside of the club.

Program Context

The day-to-day facilitation of the club was conducted by Africa ELI. Since Amy usually included mentors in the clubs in the US, and because UCSD undergraduate students could not be physically present in Uganda due to COVID-19 travel restrictions, Africa ELI hosted local undergraduate student mentors from Kampala University, a guest artist, and a mentor who herself was a refugee from South Sudan. These local mentors were guided by the Africa ELI team on the Wellbeing Club curriculum so that they could render support to the facilitators and youth. Every club activity required detailed attention; therefore, the mentors were instrumental in ensuring that resources were available and that each child had the necessary support to complete each activity. The passionate mentors were ready to form part of the Wellbeing Club with an expectation to learn, to support, and to be a part of the caring and transformative community.

Due to COVID-19 restrictions, the club was established in two out-of-school phases totaling ten full-days of participation in 2021–2022, plus 6 month follow-up interviews (Phase One: February 11–September 13, 2021; Phase Two: September 6–14, 2021; 6 month Follow-up Interviews: May 2022). In the next section, we discuss the pedagogical approaches that we utilized in the design and implementation of this UC Links program.

Acquiring the Language of Wellbeing: Pedagogical Approaches

Facilitating the teaching of new wellbeing vocabulary was an instrumental part of the club. Promising research indicates that adolescent wellbeing can be improved when students are directly taught the language of eudaimonic wellbeing (Ruini & Ryff, 2016). Eudaimonic approaches move beyond hedonic notions of wellbeing that mainly measure one's life satisfaction and happiness, and instead consider living life to one's full potential and learning and growing through experiences, both positive and negative. Eudaimonic approaches can lead to overall health benefits, especially if one is engaged and feeling purposeful (Ryff, 2018). The Wellbeing Club model is rooted in this eudaimonic approach.

In order to teach students this new language, we divided the model into the quadrants of lifelong health, human connection, freedom and safety, and thriving. Adolescents wrote words that they associated with each quadrant, worked in small groups to discuss, and then wrote or sketched additional ideas in their journals. Because subjective wellbeing is measured using "self," students created artwork that represented their identity, culture, the place they lived, and the time in which they were living. We then moved into discussing the spheres of influence that impacted their wellbeing and offered participants time to develop their own examples. Finally, we proceeded to define the 11 dimensions of wellbeing (the "petals" in the model). We used manipulatives, such as the petals drawn on paper that could be easily moved around, to consider each dimension. The process of modeling the language, taking notes, working in small groups with manipulatives, and providing space for adolescents to discuss the terms and concepts with examples from their own daily lived experiences was enriching for both participants and facilitators. Youth learned that they had similar visions for positive wellbeing and facilitators learned about the challenges the youth were facing. The process contextualized the language of the model and youth began using the dimensions of wellbeing in conversation with one another and with the facilitators.

Another pedagogy that supported students' embodied understanding of wellbeing and their wellbeing language development was the use of the arts, including visual arts, theatre, music, and dance. The club also facilitated further development of pride in one's identity through the painting of self-portraits. Self-portraiture can facilitate adolescents' self-reflection around issues of identity (Parisian, 2015) and can be a tool to reduce adolescent anxiety (Becerra et al., 2022). To prepare for the painting of their

self-portraits, students were introduced to acrylic paints and brushes and a Ugandan guest artist and mentor, Levi, helped them to co-create a self-portrait. The act of self-portraiture followed discussions about body image and identity stereotypes because youth were feeling more comfortable labeling and rejecting stereotypes and instead, had shifted to celebrating their own identities.

We invited an artist, Levi, to the club to teach step-by-step drawing because we knew that not all of our students had experiences with art education. Our students did not all have experience with painting, so initially some students were heard saying, "I have never drawn anything good, I don't think I can do this," but as Levi moved around, youth gained confidence, held their pencils and drew and painted. It was so thrilling seeing their portraits; they were excited and couldn't believe they had done such tremendous work. "Is this my work?" Yvonne asked and she showed her portrait to her friend Tricia. "Of course it is and it's beautiful," Tricia answered in affirmative. Ester was thrilled too: "I must take this portrait and hang it in our living room, I need my father to also draw his self-portrait, I am going to guide him to draw." The self-portrait project supported the development of language from the model, such as self-identity, engagement, mutual care, and "voice" and expression. See Fig. 19.2 for a group photo featuring students working on self-portraits.

Please note that all caregivers and students consented for photographs to be taken and shared through the UCSD Institutional Review Board protocol.

Engaging Mind and Body through Mindfulness

Each morning, facilitators guided students through mindfulness activities that were written to correspond with the language of the participatory model. Mindfulness activities in the curriculum begin with exercises such as grounding, noticing of the breath, and body scans. These practices are common in Mindfulness-Based Stress Reduction programs for adults (Kabat-Zinn, 1990). Patricia Hemans, a UCSD graduate student at the time and a yoga teacher, also wrote mindfulness practices that are deeply connected with the 4 W (Women and Wellbeing in Wisconsin and the World) LIFT (Lifelong Health, Interconnection, Freedom and Safety, and Thriving) model. For example, in Module 3, participants are introduced to the spheres of influences in their lives. The mindfulness exercise in

Fig. 19.2 Self-portraiture. Students described painting their self-portraits as one of their favorite parts of the Wellbeing Club

Module 3 involves inviting participants to visualize people and places within their spheres of influence that are sources of support.

Black and Fernando (2014) argue that mindfulness practices can help children learn about the connection between the mind and body which enables them to feel calm, present, and connected to their current environment. Research on mindfulness in educational spaces, such as schools, has highlighted benefits such as improved grades (Bakosh et al., 2016), improved well-being (Huppert & Johnson, 2010), gains in executive function, such as behavioral regulation, metacognition, and global executive control (Flook et al., 2010), and decreased depressive symptoms and lower stress (Kuyken et al., 2018). In a recent literature review focused on adolescents, the majority of early adolescents in mindfulness research responded favorably to the practices and learned to use mindfulness as one of their coping strategies (McKeering & Hwang, 2019).

Mindfulness education programs are not without criticism, however. Critics argue that most mindfulness in education settings frame secularized discourse that are psychological, individualistic, and "effects-oriented"

(Ergas & Hadar, 2019). Others argue that mindfulness exercises without the "communal expressions of the roots of suffering" in Buddhism positions the practice as self-focused rather than offering insights on Buddhist teachings of ethics or interdependence (Simpson, 2017).

Although our mindfulness programs are secularized since we work with adolescents from a variety of religious backgrounds, the mindfulness practices are part of a greater curriculum that promotes social justice. Forbes suggests that social goals of mindfulness should be embedded in education. He writes that practices should be embedded within "critical, integral programs that uncover and resist dominant ideologies and institutions in which we swim and consciously help us heal and create new relationships that work towards optimal personal development and universal social justice" (Forbes, 2016, p. 355). Although we encourage youth to practice on their own, holistically we position the Wellbeing Club's mindfulness strategies as collective and collaborative because we begin by practicing together in relationship with one another intergenerationally as a practice of care as suggested by Roeser et al. (2023) and Weare (2023). We also work to embed mindfulness into our research practices to facilitate compassionate connection and to be open-minded when considering and discussing our individual and collective biases in our field work and our analyses (Orellana, 2020). Mindfulness is one component of the Wellbeing Club which is a curriculum inspired by social justice and equity that promotes student critical reflection on systemic injustices that impact their wellbeing, but also the wellbeing of their communities. As we describe in the next section, the curriculum is dependent on building positive compassionate relationships and youth-led community engagement.

Building Community: Talking Circles, Wellbeing Check-ins, and Community-Engaged Projects

Negative life experiences that participants face, such as poverty, a lack of access to education, or the isolation caused by a pandemic, can lead to increased risks of mental health disorders. However, having strong systems of support often mitigate such risks (WHO, 2004). One of the Wellbeing Club's goals was to rebuild peer-to-peer relationships that had been impacted by the COVID-19 lockdown and to support strong positive family relationships.

Community was built in a number of ways including the sharing of family-style meals and utilizing talking circles to provide space for student voice. The Wellbeing Club participants resided in the slums of Kampala (Footnote 1) where families were hardly able to provide two meals a day during the COVID-19 lock down, thus the Wellbeing Club provided breakfast and lunch in a "family-style" format. Imagine students having widely spread smiles eating a tasty balanced meal while having a discussion with their peers and sharing about their personal experiences and how the club has transformed their lives amidst the pandemic.

Talking circles, or peacemaking circles, are a type of dialogue structure that involves turn-taking using a talking piece to create equitable opportunities to listen and share (Boyes-Watson & Pranis, 2020). A talking piece is often an object found in nature, such as a stick or smooth rock. We used a passion fruit as it was a recognizable fruit readily available in Uganda. The type of talking circle used in the curriculum is historically rooted in the practices of Indigenous community building (Running Wolf & Rickard, 2011). Bintliff was trained in Minnesota, USA, through a restorative justice school-based grant in 2002 (Reistenberg, 2012) and found it a helpful way to build feelings of connectedness with adolescents in the Wellbeing Club. When teaching students about talking circles, we inform them that it is a practice that values respect: when you have the talking piece it is your turn to share, when you do not have the talking piece it is your turn to listen (for more information on conducting talking circles see Boyes-Watson & Pranis, 2020; Pranis, 2005 or livingjusticepress.org).

At first, students were very shy to share their thoughts and ideas, but as the talking piece was passed around the circle, the adolescents became more confident. The facilitators always said, "There are no wrong or right answers," which set a positive space for participants to speak up with confidence with no judgment. Culturally, in schools and in the community, adolescents in Uganda have very few opportunities to speak and be heard (Selvam, 2008). Self-expression through speech, therefore, was a new practice that the youth came to enjoy that broke their silence. This was evident in the way that youth attention and voice grew and progressed. They began deeply listening to one another and they said that the process helped them make new friends and built their confidence in public speaking and expressing themselves.

Another exercise that became very important was the wellbeing check-in process. In this exercise, youth were invited to look at a poster of the

4 W LIFT model and identify dimensions of wellbeing that have been a challenge for them and meet with other peers and mentors to discuss the challenges. They then were invited to identify dimensions of wellbeing that have been a strength for them and meet with other peers to discuss their strengths. This exercise enabled peers to feel less alone in their challenges and learn from their peers regarding their strengths. We trained facilitators in trauma-informed care practices prior to leading this activity as giving voice to challenges can be difficult the first time. Trauma-informed care includes recognizing that all participants may have experienced trauma, being patient and caring when youth are talking about traumatic experiences, believing youth, not probing for more details, as that can retrigger, and offering youth agency in what they share (for more trauma-informed care strategies see Jennings, 2019).

Another important pedagogical strategy in the Wellbeing Club was nurturing youth leadership through opportunities for them to engage in community wellbeing projects. Youth grew excited when presented with the invitation to choose community wellbeing projects they would lead. Each participant had a worksheet where they could complete the following sentence with a sketch or paragraph: I can support community wellbeing by _____. Participants had ideas ranging from visiting and cleaning homes for the elderly, orphans, and people living with disabilities, to cleaning streets and markets, planting trees, and advocating around youth issues, such as dropout prevention. Participants took time to deliberate on their ideas and a consensus on two projects was reached: (1) cleaning the nearby market and (2) teaching about COVID-19 prevention through posters left in the market, advocacy through writing, and performing skits to reach out to their fellow peers who did not have the opportunity to be part of the Wellbeing Club. One focus of the advocacy work was on teenage pregnancies and dropout prevention, a major challenge facing adolescents during the COVID-19 pandemic. "We have to reach out to our peers, they are faced with diverse challenges, we wish it wasn't a lockdown and we were allowed to meet them as a group, we would have shared with them much of what we have learnt. We hope this short play will be meaningful and will change someone's life," described Tricia and Yvonne as they composed their short play which they uploaded onto the Africa ELI YouTube channel. (You can access the Africa ELI YouTube channel here: https://uclinks.berkeley.edu/chapter19).

Key Ideas

When students explored a language of wellbeing through the arts, mindfulness, talking circles, and community projects, they grew in confidence, began advocating for their own wellbeing, developed resilience skills, and became leaders within their homes and communities. Most importantly, participants adopted a shared language to verbalize the strengths and challenges they faced and recognized that they were not alone. The impacts of this important process for building resilience are described below.

The Language from the Model Improved Students' Family Relationships and Leadership Development

Caregivers noticed that students were expressing themselves using language from the model. One student said that knowing the language helped her communicate with her father and that "He now knows me." Caregivers reported that students who had participated in the Wellbeing Club were acting more caring towards their siblings and that they were doing household chores without complaint. Some reported that students were taking on more leadership roles within the family. Caregivers expressed an interest in learning the wellbeing model too. To address this need, we are planning to build workshops for caregivers into Ugandan programming in the future.

Mindfulness Helped Regulate Emotions, Explore Purpose, and Connect Families

Mindfulness became an enduring habit for many adolescents and it helped them handle daily stressors and regulate emotions. Adam spoke about using mindfulness as a tool to regulate emotions once he returned to school post-COVID. He said, "In this program of wellbeing we learned this value. We learned how to control our souls, and our emotions, so when a teacher tells me something emotional I just calm down, take a deep breath and let everything go on." The practice also brought student in-the-moment feelings of joy. Jordan was happy and loved the mindfulness activity more than any other activities, saying, "Mindfulness has made me think and decide what I need to be in the future. I want to be a lawyer and now I confirm it." Flavia gathered her family members to share the mindfulness exercise before going to bed one night. Her caregivers and

siblings loved the exercise and agreed to practice every night before bed time. When we gathered for the second phase of the Wellbeing Club after 7 months, Flavia said, "We love the mindfulness activity, it has helped my mother, she had breathing problems. We normally share how our day was as we do mindfulness, it has brought our family together, and it's the last thing we do before we go to bed after our prayers."

Talking Circles and Wellbeing Check-ins Built Connections

Talking circles and wellbeing check-in activities were powerful aspects of the curriculum because they all focused on interconnection, relationship building, and feeling compassion for one another. Faith described her relationships with peers and her ability to feel connected, "I felt so attached to them-how they were talking. And I was like, 'Are they the same as me?'" One of the boys learned of sexual harassment and discrimination that the girls experienced on a daily basis and emotionally shared his feelings of compassion in his interview, sharing, "The talking circles were influential. The Wellbeing Club was my first time to get deep because we are taught about voice and expression. I learned about things happening to my sisters in the club and how they are treated in the community, which is not okay. Now girls look at you like you are their brother and you are someone who can help. And you need to help."

Community Projects Inspired Involvement

Through the community project, both mentors and participants began defining challenges their community faced and looking for a way to become involved in creating solutions. This became a powerful activity for the UCSD university mentors as they too were learning the language of the model and were completing 40 hours of volunteer field work, tutoring, and mentoring youth in local schools. UCSD students participated in the same wellbeing check-in process in Amy's classes as the Wellbeing Club-Uganda participants, which enabled the UCSD students to improve their own awareness of their holistic wellbeing. One UCSD undergraduate wrote, "By just naming my challenges and talking through them with peers helped me feel that I am not alone." Undergraduate students at UCSD became inspired when they saw the work youth have done in Uganda which has propelled them to become better mentors to the local youth they were supporting. UCSD undergraduates wrote letters of

support and encouragement to the Wellbeing Club-Uganda youth. Both youth and mentors became committed to sharing their knowledge about wellbeing with others. One Ugandan youth participant reported that the model helped her to counsel other peers when they were involved in conflict. She had the language to de-escalate them before they began to fight. In the same way, a UCSD student shared that the model helped them work through roommate conflicts peacefully and with compassion.

Discussion

Results indicate that the 4 W LIFT participatory model of wellbeing, and the Wellbeing Club curriculum, were successful tools to promote wellbeing among 25 adolescent participants living in low-income areas of Kampala, Uganda. The model provided a common language which enabled youth to describe their challenges and strengths. Through this community-based international partnership, we have been able to contextualize curriculum to meet local needs while simultaneously exposing US undergraduate and graduate students to Ugandan culture and the participatory model of wellbeing.

When analyzing the components that facilitated the adoption of this language of wellbeing, it is important to consider the integration of community, mentors, facilitators, adolescents, and their family members. Although this program differs from others in the volume due to being an out-of-school program running on school breaks, it is similar to other programs in regard to the connections that continue to grow between all of the stakeholders. Our circle of contact with one another has become a complex web involving undergraduates at both Victoria University and UCSD, adolescents and their families, club facilitators who wrote reports and were interviewed for research, and the larger international team which is collectively analyzing data and gathering for UC Links events to share findings with the wider network. These multifaceted relationships that have been nourished over a 3-year period enable our team to flourish.

As the program continues to grow and seed new sites in Uganda, including a school-based partnership, we recognize that the essential components mirror those in the wider UC Links community: engaging youth in discussions about language in a variety of contexts, prioritizing youth voice and adapting to their needs; exploring concepts of resilience through mindfulness, art, and leadership activities; providing undergraduate and graduate students with opportunities to assist with research and programming; and exchanging ideas within an active global network.

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Transforming the Future:
Cultivating Seeds of Regeneration

Concluding Thoughts: Reflections on Resistance, Renewal, and the Future of Transformative Education

Jackson Gzehoviak and Micaela Bronstein

We sat around the long wooden table, computers open, each of us reading and writing at our own pace. The room was small and warm, the California sun beaming in through the windows, the quiet hum of students walking and talking outside providing a soundtrack to our work. Mara interrupted the silence with a casual, "So … what do you think of the edited volume?"

We looked at each other, each waiting for the other to speak first. This was our first day meeting with Mara, Marjorie, and John for this volume, and we were initially unsure how to jump into the work. We were brought in toward the end of the process, after almost 2 years of hard work that had been done by others; we were tasked with looking at the edited volume draft with fresh eyes, to provide feedback and insights. Where do we begin?

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INTRODUCTION

As two doctoral students at UCLA's School of Education and Information Studies, we have long been interested in how learning can be deployed in systemically oppressive settings to bring about change and justice for young people. It is this very interest that drove both of us to pursue our doctorates informed by our experiences as educators—Jackson's in Omaha and Lebanon, and Micaela's in New York City. The deeply embedded inequities within the education systems that we witnessed in these diverse contexts motivated us to spend the next few years of our lives asking: "Is something else possible?"

We were intrigued when we learned about the University-Community Links (UC Links) network and its breadth of interrelated programs, as they offer unique ways that communities, families, and schools, both K-12 and postsecondary, come together in the service of creating and building better worlds. (See https://uclinks.berkeley.edu/ for more information about UC Links programs and the global UC Links network.) In reading about and getting to know each program through this volume, we have learned about the singular ways that different communities have created these relationships and formulated social networks despite the fact that larger systems keep universities and their broader communities separated.

In this concluding chapter, we revisit some of the generative themes presented throughout the book, drawing connections and comparisons among them. We explore the chapter themes through the lenses of resistance and renewal, highlighting how rethinking learning in all its dimensions can help us reconceptualize education as a mediating tool for social change. We end with our thoughts on the greater significance of this work, what we can learn about the future of education and learning, and the inspiration we got as novice educational scholars deeply committed to the transformation of education.

This volume began with a discussion of seedlings—an account of the social history of the UC Links network and its various programs, each of which has taken root in an ecological context of its own, though all of them are deeply linked in their commitments to bridging some of the social divides so prominent in contemporary society. School life is generally separated from family life, and the gulf between universities and local communities is wide. These distances are especially stark in communities of color that are marginalized by ongoing processes of gentrification, systemic racism, and other forms of discrimination. Resisting the distance between town and gown, UC Links partners—higher education

institutions, K-12 schools, community-based organizations, and other institutions—developed and germinated ideas that sprouted into projects of university-community connection. Writing about the interdependent nature of plant life, Robin Wall Kimmerer (2013) reminds us that it is precisely this network-based relationship that enables many plants to thrive as a larger group. Just as seedlings grow into networks of mutually dependent plants, so too have the UC Links programs grown into mutually dependent communities of practice and learning.

The UC Links network is premised on the idea of expanding educational opportunities for young people by leveraging the multiple talents of multiple generations across multiple community groups—faculty, graduate students, caregivers, community leaders, K-12 students, and undergraduates, all joining together. This shift, coming together and partnership creation, was also fueled by constant and persistent blows to educational equity; the attack on affirmative action across California served as a catalyst for the formation of the network, underpinning the urgency with which a new vision must be fed and nourished. What the founding of the network shows is the unique contribution of communities in solidarity with one another to combat policies of exclusion and disenfranchisement. Certainly, the programs described in this volume are no substitute for the kinds of systemic policy changes that are needed in order to remedy these historical processes of marginalization. But they are worthy of attention, as they provide concrete examples of what re-conceptualizing education can look like when deeply rooted in social justice, resistance, and renewal.

Our participation in this project came at a critical time for us as second-year PhD students at the School of Education and Information Studies at UCLA. As we begin to narrow the focus of our research and think through the scholarship we want to engage with, learning about the UC Links network has given us much to think about.

As we reflect on the programs within the network, thinking through what we can learn from them and ideas we have about new visions for the future of education, we feel it is important to first reflect on how we got here, and how, in some ways, being part of this project has been the natural extension of our two educational careers, each of us searching for change along the way. We were also inspired by the testimonials in this volume, by the voices of those who experienced these new approaches to learning, and reading their own words allowed us both to also take a step back and think through our journeys more broadly. We think it is useful, therefore, to situate ourselves in this volume, and show how our own journeys led us to this work.

Micaela's Journey to Education

I found myself in the world of education somewhat accidentally. As an International Studies college student, I had mapped out a vision for my life working for the United Nations or perhaps going into the State Department and traveling the world. But then, as so often happens in life, sheer luck led me to my first education class, spring semester of my senior year. Scheduling and credit requirements took me to "History and Pedagogy of Alternative Education," and my life changed. I remember reading through the first few chapters of Freire's (1972) *Pedagogy of the Oppressed* and Dewey's (1916) *Democracy and Education* and I saw my entire life's vision, the one I had so carefully crafted around the "shoulds," go down a road I never even knew existed. This laid the first brick of my path.

Yet, despite this realization, I still felt that strong craving to travel, and it was this motivation that led me to apply for an English as a Second Language (ESL) teaching position in South Korea. Once again, I found myself in an education environment somewhat accidentally. The 18 months I spent in South Korea solidified not only my love for education but my passion for working directly with students and young people. Second brick laid.

When I returned to the US, I had yet another chance encounter with education; I was back living with my father and needed a job, badly. An old friend from high school shared a post on Facebook about a preschool that was looking for teachers. I reached out, had an interview, and a couple of months later I found myself the assistant teacher to a class of 15 3- and 4-year-olds. Brick number three.

I spent four incredible years working as a preschool teacher at a Reggio Emilia early childhood center in Lower Manhattan. And it was in those years that I realized that those accidents, those chance encounters with education may have been my intuition, my subconscious leading me down the path closest to my heart. The alternative approach at the Reggio school led me to further investigate the idea of alternative education at Casa Sula, a school in Costa Rica loosely inspired by notions of unschooling and freedom-based learning. It was at Sula that I saw the bridging of alternative education theory and practice, and I experienced non-directive education that centers young people's voices and respects their autonomy. And while I was really enjoying my time there, November 8, 2016 (the day that Donald Trump was elected as president in the United States) led me to yet

another pivot; it was time for me to go back to school and apply some of my real-world experiences into learning about how to make education—and in my young, idealistic mind, the world—a better place. With more bricks laid, the road was taking shape.

I went to graduate school for International Education, where I examined the intersections between human rights, social justice, and education, specifically looking at the relationship between education and immigrant rights and where I began to ask myself some of the larger questions that remain present in my current path: Can, and should, education play a bigger role in shaping society? I carried this question with me as I stepped into my next role, working at a college access program for youth of color from low-income communities in New York City. This job allowed me to dig deep into the stark inequities plaguing the country's largest—and most segregated—school system, and after 4 years I followed the road back into academia, where I currently find myself.

These experiences, along with my intersectional identity as a queer bilingual Latina, and my own journey as an immigrant student in New York, have led me to a life of searching for something new. The transformation of education is the umbrella within which I operate and it is what motivates me every day to continue to learn, investigate, and fight for a brighter future. And when the opportunity arose to join the UC Links edited volume team, I saw it as a way to continue investigating my burning question: is another way possible?

Jackson's Journey to Education

I began my journey in education while I was still in high school, working with a refugee resettlement agency tutoring English to newly arrived refugee families in Omaha, Nebraska. When I began that work, I knew, sort of instantaneously, that I wanted to continue doing it for the rest of my life, in some form or another. During my undergraduate time at Harvard, I got involved in several teaching gigs, some of which were working in refugee communities and programs. I'd spent time in high school and college pushing away the idea of being a teacher, thinking I wanted to do something 'outside the norm,' that teaching was too obvious a choice for me. But it was after my first summer working in Lebanon as an Education Coordinator with an NGO providing English language classes to Palestinian refugee youth that something clicked into place. I stopped fighting the teaching urge, enrolled in a teacher education program at

Harvard's Graduate School of Education, and began my career in earnest after graduation.

I taught for several years at a high school newcomer program in Omaha, Nebraska, where I learned what it meant to be gifted sacred time in the classroom with amazing young people seeking asylum or being resettled as refugees from Afghanistan, Bhutan, Burma, El Salvador, Guatemala, Honduras, Mexico, Somalia, South Sudan, Sudan, and Syria. My mind whirled those years—with ideas and questions and theories about language, identity, and the labels we give to students. And just as my mind whirled, so too did my heart, as I got further and further embedded and interconnected in the incredible lives of the students I worked with. I saw injustice after injustice—from ethnic cleansing campaigns, genocides, and wars that brought refugee students to my room, to ongoing struggles to make ends meet, to escape violence and discrimination, that led others to seek asylum. And the injustices were ongoing in the United States—students whose on-the-job injuries at meatpacking plants went untreated for fear of deportation, students whose families were either killed, absent, missing, or estranged, and students who faced abuse at the hands of loved ones upon migrating to this country. And as these things happened, I saw how ill-equipped our school system was to handle these problems. Our singular focus on a traditional version of education was woefully inadequate for these brilliant, bright souls.

After a few years, I transitioned into teaching social studies at another local high school, and it was soon after I started working there that I began to realize just how much I missed working in refugee education, in ESL in particular. I put the thought aside, but when the pandemic hit, I began radically rethinking what I wanted for my life. The trials and troubles students faced in the US education system, after enduring so much already, led me to refocus on those questions swirling around in my head during my early years of teaching: How can we rebuild curriculum in a way that is relevant, democratic, and of immediate use to young people? What would it mean to radically accept natural language use in ways that made ESL programming obsolete? How could we incorporate health, wellness, and love into a pedagogy whose ultimate goal was a critically conscious classroom that seeks justice just as much as it seeks 'proficiency'? All the while, my continued experiences in Lebanon with Palestinians every summer further informed this need—a *global* need, to reconsider the possibilities education affords us.

With these goals in mind, I began a doctoral program in the School of Education and Information Studies at UCLA with a thirst for conversations that anchored me in this pursuit of justice, all the while exploring and celebrating the languaging and identity practices of refugee and asylum seeker youth in the United States. These are the experiences that have led me to where I am today, excited to take part in this edited volume and to learn from the programs in the UC Links network that are re-imagining what learning can look like—both through pedagogy and through community.

REFLECTIONS ON RESISTANCE IN THEORY AND PRACTICE

As is shown in our own pathways into education, we were interested in looking for new ways to think about learning. We both spent a lot of time searching for and thinking about models of transformative learning throughout our first year as PhD students. We have discovered theories and scholarship that have helped us to frame challenges within education and to dream of something new. And this project has kindled a particular academic spark, motivating us to pursue a more in-depth reflection on theories of resistance as they pertain both to the programs in this volume and to learning more broadly. We hope our brief meditation on resistance scholarship at the end of this volume is helpful for readers who want to take theory into practice, as has been done throughout the preceding chapters.

We see in the UC Links programs in this volume a unique contribution to how community-based initiatives and community-university partnerships in learning can be truly transformative. The introduction to this volume outlines how *resistance* is at the heart of each of the UC Links programs as they unite people from diverse backgrounds across diverse institutions in authentic and meaningful relationships based in learning. We view this process of resisting the expectation that learning be asocial and divorced from the heart as a form of *renewal*. Resistance creates unique opportunities for the renewal of communities and of learning, as the various parts of this volume reflect. At the same time, many scholars have theorized about what resistance means conceptually. Working on this project has led us to read further about resistance and to reflect on how it is used within these chapters in different ways. Our reflections on theory help situate the chapters of this volume in an important genealogy of intellectual thought about resistance, and to connect theory and practice.

What follows is a brief exploration of some of the key ideas that have supported the resistance work of scholars and practitioners, along with our own thoughts about how the UC Links network fits within these concepts.

Resistance has become an increasingly popularized buzzword in the social sciences, and the field of education is no exception. Academic buzzwords are the product of the intellectual zeitgeist of a particular period of time, but they also shape and form further iterations of intellectual trends. Buzzwords also live outside of academia, in pop culture, in politics, and in the media. As Andrea Cornwall (2007) notes, "buzzwords get their 'buzz' from being in-words, words that define what is in vogue." While her argument is tailored to the field of development studies, the 'buzz' of the word *resistance* amounts to much the same thing in the field of education. So, what's in a buzzword? In particular, we wonder, why has resistance become re-popularized in contemporary literature? What led to it? And how does it connect more specifically to the programs discussed in this volume?

We find that resistance literature is neither new nor unique—scholars have written about various forms of working around or against the status quo for decades. We turn to the heyday of resistance theorizing, seeing in its roots particular pieces of resistance that we think can carry us into the future. Perhaps the most relevant resistance 'turn' in social science literature began as radical educators reformulated structural analyses of schools through neo-Marxist lenses in the 1970s (Giroux, 1983). Scholars like Bowles and Gintis (1976) considered schools to be institutions whose primary purposes were to produce the various labor needs of the capitalist market. Thus, the structure of schools *corresponded* to the labor market. While an explanation of the deeply political nature of schools was certainly needed, theorists such as Henry Giroux (1983) and Paul Willis (1983) made important critiques of this overly structural view of the educational system, which have important implications for how we think of resistance within the UC Links network.

Giroux challenged this overly structural view by asserting the importance of young people's *agency* within school systems (Giroux, 1983). Theories of reproduction did not often engage with the transformational possibilities that are made manifest by the agentic power of individuals working together to make change. Sociocultural theories of learning and interaction, however, posited how individuals co-construct their social worlds through interaction and mutual meaning-making. We believe that this emphasis on individual agency is important, especially as it is articulated throughout these chapters; the power of people to make changes to

systems through their everyday choices is considerable. We note, however, that some attention to individual agency does not take away communal power. Our aim is not to take up a Western focus on individualism. But the structural views on education forwarded in the past too often erase and render invisible local communities of individuals as powerful agents of change. We see individuals working together in community as powerful because of the relationality baked into these connections. We think that returning to the original threads of these theories of resistance can give us analytic clarity for understanding acts of resistance today.

Such a view on resistance is foundational to our understanding of how the UC Links programs have been able to accomplish what they have to date. Neoliberal systems of power and control that have shaped the cleavages between town and gown do not fully account for the full range of interactions that occur in communities, in the in-between spaces where people meet each other and form new partnerships. While the social distances between universities and communities persist, they are not merely *reproduced* without change, which is precisely the critique of overly deterministic reproduction theories that scholars like Giroux and Willis offer. This means that these distances, these relationships, *can* be changed. University-community partnerships have re-figured the connections between scholars, K-12 practitioners, young people, their caregivers, and communities as one way to begin to dismantle the hegemony inherent in those systems. In re-making and re-formulating what partnerships can look like, new bonds form, and resistance has been paired with *renewal*.

Bringing together the actions, beliefs, and commitments of individuals from multiple social groups creates a new group culture, which works to constitute its own identity outside of the influence of the dominant group (Giroux, 1983). Such community cultures are powerful agents of change. They are made more powerful by the strength of their common values and political commitments.

From our perspective as readers on this project, we were excited to see in the UC Links programs a commitment to equitable distribution of power across generations, to valuing language and its creative possibilities, and to bridging social gaps in ways that promote joy, play, and positive relationships. As Audre Lorde said, "Without community, there is no liberation" (Lorde, 1984, p. 2). Across the various program contexts, when people come together to form diverse partnerships, they create new forms of community that are only possible through a measure of trust, goodwill, and common belief in their power to make change.

The kinds of resistance we explored in theory are echoed in our very own practice. In the case of our own team working on this volume, we are each differently positioned within higher education—from full professors to program directors to graduate students. In most settings like this, such positioned identities result in hierarchical distributions of labor that maintain and uphold particular power dynamics. The kinds of resistance we explored in theory are echoed in our working process. Our editing process was rooted in getting to know one another, building relationships of care and respect that are not in keeping with typical hierarchies in academia. We worked as equals, sharing ideas, and variably taking up roles as experts. We engaged in a dialogic process of learning and meaning-making, iterating on one another's ideas in a way that created further meaning-making propositions one after the other. In this sense, our work process embodied the kinds of relationships that *resist* norms of hierarchy, and in the work, we initiated a sense of *renewal* of what collaboration can look like. The programs outlined in the volume center collaboration and intergenerational learning as ways to transform education, and these processes were mirrored in our own experience working together. We were, therefore, able to witness theory in practice: how individuals use their agency to create new relationships based on an ethic of love within Western hierarchical institutions.

We return to the roots of resistance theory to center its key tenet of honoring youth agency. We argue that what makes resistance possible is not just agency, but the community relationships young people develop and enact in opposition to oppressive hierarchies. We argue further that *love* must be at the core of these relationships. hooks (2000) described how holding an ethic of love is essential in the fight against systems of domination which rely on the separation of people from each other—an ethic of love is a critical antidote. Living an ethic of love enables us to develop stronger bonds with each other, and such forms of community are the embodiment of this love. In essence, loving relationships can be a form of resistance in and of themselves. Our working process shows what is possible when groups of people from different positionalities embrace an ethic of trust, love, and play through collaborative, intergenerational efforts, just as the other chapters do.

It is clear in the writing of this volume that there is so much love throughout these programs. The roots of resistance theory remind us that young people are agentic individuals. We see the relationships and love that come out of this agency are also key ingredients to what makes

resistance powerful. Relationships in the UC Links partnerships are forms of resistance because they resist the calls toward hierarchy and separation of people along class-based and racialized lines, which are inherent and necessary in the dominant systems of racial capitalism and coloniality of our time (Quijano, 2007; Robinson, 2000/1983)—but not in the systems we might imagine, and begin to bring into being. Relationships of love, of creative joy and change, lead us to renewal.

Future Thinking: Transformation through Resistance and Renewal

The power of this edited volume lies within the possibilities it presents for what learning can look like. Each chapter unveils what has been often hidden: Educational systems in the Western tradition have worked hard to hide from their purview the ways that people learn and live best—in communion with one another, in dialogue with one another, in playing with one another. Each program's chapter exposes that which has most often been pushed to the margins, what has for so long been set apart from what has come to stand as the norm of technocratic, rugged individualism of Western school culture. This volume allows us to embrace the concept of re-imagination, and gives us permission—as university and community educators and scholars of all kinds—to more firmly and confidently step onto the solidity of what we have longed for: bringing into sharp focus a new vision for education. The programs in the network are concerned with the broader issues of oppression, dispossession, and disunity we have sketched, but they take up these concerns in ways that are appropriate for their local contexts. Thus, one of our main visions for the future of transformative education is to see partnerships built around issues that are meaningful at the local level, and which have global relevance as well.

Learning *can* be different from how it has generally been approached in Western education—as individualistic, as standardized, as disconnected from others, as valuing adults' voices over young people's. We embrace the idea that education systems can shift away from perpetuating social inequities and replicating societal hierarchies, as has been the case for decades in Western education, teaching, and learning. We can have classrooms and programs that center student voices like UCLA's B-Club, if we can learn as teachers and administrators and educational planners to loosen control, trusting in the learning that happens in all places where people

interact. We can center creativity, and multi-modal self-expression, as Berkeley Y-PLAN, English Media Club in Augsburg, and the San Francisco Bay Area Critical Digital Literacies programs demonstrated, if we re-vision our assessments and learning products along meaningful, relevant lines of thinking. We can elevate the value and importance of play, as in the La Mia Scuola è Differente initiative in Italy, if we trust pedagogically in the ability of play to produce important learnings. We can center the needs of the community and create a bridge between schools and their communities, as illustrated by Math CEO and Beta Lab Links, if we are proactive and creative in our partnerships, entering them with a sense of humility, openness, and mutuality, and if we attend to the local nature of social networks that are unique to each region. We can root education in social justice and equity, as they do in the Shere Rom Project in Barcelona and La Clase Mágica in Seville, as well as the program in Uruguay, if we continue to fight for the ideals of justice in politically embattled school districts. We can have culturally sustaining pedagogies and methodologies, as demonstrated by San José Y-PLAN, and we can conceptualize how we approach literacy education through the importance of language and culture like Corre la Voz in Santa Cruz and Community Based Literacies in Santa Barbara. We can make all subjects culturally responsive, like Nuestra Ciencia in San Luis Obispo. And we can center the importance of wellbeing, as seen in the Wellbeing Club in Uganda. All of this is made possible when trust is built between communities, coupled with strong and open lines of communication and the valuing of one another's ideas, including and especially those of children and young people.

We can transform our approach to learning and education by resisting traditional, oppressive systems of the past and renewing our commitment and our efforts to create something new. The programs showcased in this volume demonstrate just some examples of what this renewal can look like. We live in a society that is grounded in binaries. We want ideas to be neatly packaged for us with clear-cut labels and categories, as a part of the long tradition of Western positivism that obsesses with classification and identification. But the programs of this volume have shown us the magic that emerges when we embrace the unfinished nature of pedagogies and accept a messy and spiraled way of being that is continuously in flux. The UC Links model of connecting universities and communities is just *one* way to bridge the divides between the multiple parts of our local communities, not the only way. We can take the lessons here and apply them in multiple other, creative ways to building and bridging partnerships of all

kinds—between kids across towns, between adults and kids across nations, between worksites in the same city, between humans and our more-than-human relations, between ourselves and the lands and waters we live on and with.

Our hope for the future of education—and of our world—is to embrace these community-based alternatives of learning as possible roadmaps for something new. Practices of the past are not working to create equitable learning for all kids.

As we write this conclusion, the world around us feels tremendous pain. As you have read throughout the chapters of this book—from Uruguay to Italy to Uganda, UC Links participants are often impacted by interlinked systems of colonial oppression and violence and their ongoing legacies. And in the United States, many participants have migration stories that are linked to similar stories of displacement that are often less recognized by the general public in the West. The scars of colonial and imperial violence color the lives of many in our network, and they call us to think more deeply about what it means to be in relation with one another. Jackson's own experiences with Palestinians in Lebanon, and the deep relationships they have there, are especially relevant in this moment. The ongoing genocide in Palestine has been devastating to so many. It is the strength of Jackson's relationships that has made these events so deeply personal to them. At the same time, these relationships are also foundational for how we move forward—they let us reach out, send love, and hold each other amidst the horror. It is not lost on them that these relationships, forged despite vast physical and social distances, represent a similar form of resistance to the one we have been describing throughout this conclusion. Oppression is ongoing, and so too is the steadfastness of our solidarity. The events of the last months compel us to ask—what do we do in the face of such massive forces of oppression? How can we renew ourselves in our relationships and commitments to each other? Perhaps it is not enough, and yet, we take heart in our kinship, knowing that in times of sorrow and pain, we at least have each other.

As we finish this writing, we, Jackson and Micaela, reflect on what we want our futures to look like, and what we hope learning in relationships can look like in the service of a brighter future.

How can learning move forward?

We believe that process is one of continually trying to grow upward and outward, one step at a time.

We continuously commit and recommit to valuing play, love, and relationships, always asking if our practices are working to serve communities.

And when things seem broken, unjust, and beyond repair, as we've learned from these chapters, we commit to continuing to put one foot in front of the other, and always try new ways of doing things: new ways of relating to each other, new ways of communicating, new ways of organizing our way of life, new ways of talking to and about each other, new ways of teaching, and listening, and learning, and loving. We aspire to always return to the core commitments—as outlined in this volume— as we grow forward.

We commit to finding alternatives, never shying away from the awesome challenge of going back to the drawing board and seeing what we can come up with.

As we have seen through the chapters of this book, there is hope, beauty, and brilliance in the alternatives. These programs offer something new, something different, a different approach to learning than what has most conventionally and historically been done in Western schools, and through this commitment we see that there is potential, and there is hope. Of course, as seasoned educators we know this is not easy. There are no simple recipes or formulas to transform education, no easy-to-follow blueprints, and we do not claim to present one here. For us, this volume demonstrates the possibilities that can arise from trying alternatives. There are ideas germinating all around us. And by bringing forth the alternatives, by bringing them out from the margins to shine brightly under the sun, for all to see, and to share with one another, we are able to reimagine and move ahead with hope, passion, and excitement for what may lay ahead. This volume serves as a crucial reminder that through the many challenges that exist in the world, through the pain and darkness that is too often surrounding us, there are always communities of people working to bring the light forward. As bell hooks said, there are radical possibilities of resistance in marginality.

And so onward we go!

We take heart in the relationships we have, in the wisdom of young people, and in the community we've built. Together, we work to regenerate possibilities; we continue to hope, to try, and to play, to renew visions and forge new pathways for transformative education.

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[1] Note: Page numbers followed by 'n' refer to notes.