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CHAPTER 9

BUILDING RESILIENCE THROUGH INTERPROFESSIONAL PREPARATION: A CASE STUDY AT UNIVERSITY OF CALIFORNIA BERKELEY

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INTRODUCTION

Our higher education systems play a critical role as developmental contexts for the individuals expected to work together to translate research for practice or to transform schools and other contexts of child development. (Masten, 2003, p. 172)

The needs of today's students and schools are complex and span intersecting systems—family, school, other child-serving institutions, community, and culture. Our increasing cultural, ethnoracial, and linguistic diversity, as well as pervasive societal issues such as poverty and the impacts of historic

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and enduring racial inequality, present many unique challenges. Schools have a long history of using interprofessional teaming structures (e.g., student study teams, Individualized Educational Program teams) to understand and attend to the holistic needs of individuals and communities the “traditional” approach has failed to serve. Newer frameworks designed to address public education’s most complex problems (e.g., multi-tiered systems of support, community schooling initiatives) have likewise promoted integrated supports and services planned, delivered, and monitored by transdisciplinary professionals. These efforts are laudable. To enact real change, however, such frameworks require that team members from different disciplines understand and agree on how to pool their resources and expertise as a “coalition of child-serving champions” (Lawson, 2004, p. 225). This is especially true if the aim of educators spans beyond addressing the most proximal needs of students toward tackling issues of equity and accomplishing overall systems change.

The degree to which traditional graduate training in education is siloed is surprising given the strong assertion that effective interprofessional collaboration is a necessary condition for responding optimally to complex student needs (Detterman et al., 2019; Mellin et al., 2011; Stone & Charles, 2018). Yet across the country, high school math teachers continue to be trained alongside other high school math teachers, and the same can be true of almost all their colleagues in the field. Cohort-based training programs and curricula that must be quite specific to the discipline in order to meet strict credentialing requirements contribute to this phenomenon, which remains true even in fields such as school psychology, social work, counseling and leadership where interprofessional collaboration is a key competency according to state and national standards and accreditation requirements (e.g., National Association of School Psychologists, American Psychological Association). If institutes of higher education are serious about preparing future educators to work together in search of novel solutions to complex problems, there is a need and an opportunity to begin this work during their time as students. Integrated pedagogical approaches and learning experiences are one way to establish pre-professional structures that contribute to the development of individual and ultimately organizational resilience. A small but growing body of literature indicates that organizational resilience in schools can promote adaptation and recovery, which can lead to improved structures and practices (Zadok et al., 2024).

The purpose of this work is to explore the ways in which being a member of an interprofessional learning space during graduate school creates the conditions to influence future interdisciplinary collaboration in practice. In this chapter we discuss the following research questions:

- How does the experience of interprofessional preparation influence graduate students’ knowledge and perspective about the potential of interdisciplinary collaboration to address complex equity issues?

- How does being a member of an interprofessional learning space illuminate the unique views and priorities of school psychology and educational leadership graduate students with respect to pursuing the goal of equitable education?

An earlier version of this chapter was presented at the American Educational Research Association (AERA) Conference: [Rosenthal et al. \(2023\)](#).

CONTEXT AND THEORETICAL BACKGROUND

Interdisciplinary Collaboration

The advantages of interdisciplinary team collaboration in education have been discussed for decades and are considered well established ([Janzen, 1979](#); [Kania & Kramer, 2011](#); [Waldron & McLeskey, 2010](#); [Woodland & Hutton, 2012](#)). Differences in training and role perceptions, contextual factors related to school settings, and confusing, sometimes contradictory professional mandates and priorities are among the factors that constrain collaboration and limit the effectiveness of interdisciplinary school teams ([Durlak, 2009](#); [Mellin et al., 2011](#); [Weist et al., 2012](#)). Given these complexities, and the trenchant siloes that persist within educational spaces, it is critical to examine protective factors that influence the effectiveness of interdisciplinary teams. Unfortunately, this empirical literature base is limited and has focused primarily on professionals working in the fields of health care ([Stetten et al., 2019](#)) and social work ([Anderson-Butcher & Ashton, 2004](#); [Ball et al., 2010](#); [Mellin, 2009](#)).

Studying the potential of collaborative structures within the context of social work, [Bronstein \(2003\)](#) defines interdisciplinary collaboration as, “An effective interpersonal process that facilitates the achievement of goals that cannot be reached when individual professionals act on their own” (p. 299). She identifies five key components of interdisciplinary collaboration:

- *Interdependence*: Clear understanding of each professional’s role and how to use them appropriately.
- *Newly created activities*: Programs and structures that maximize the expertise of each member.
- *Flexibility*: Interdependence and ability to alter one’s role.
- *Collective ownership of goals*: Shared responsibility at all stages.
- *Reflection on process*: Thinking and talking about collaborative interactions.

Bronstein also identifies four key contextual factors that can aid or constrain interdisciplinary collaboration: Professional role (values/ethics, respect for colleagues); structural characteristics (culture of the workplace,

administrative support/time/space); personal characteristics (trust, respect understanding and communication skills); and history of collaboration (earlier experiences in interdisciplinary settings).

Utilizing [Bronstein's \(2003\)](#) model of collaboration within a school environment, [Mellin \(2009\)](#) assessed the effectiveness of interprofessional team functioning in school mental health teams, examining the degree to which team members reported the presence of Bronstein's five key components of interdisciplinary collaboration. Results indicated that role interdependence and flexibility (i.e., the ability to "flex" into other roles) were highest (more likely to "always" be occurring), whereas reflection on process was the least likely of the five key elements to occur. The study also examined the degree to which contextual supports for "optimal" collaboration were present, and found that space to meet, positive relations among team members (stronger knowledge of others competencies and role expectations/fewer stereotypes and misconceptions about the other's role), and previous and positive experiences of collaboration were the strongest correlates of high levels of collaboration.

[Stone and Charles \(2018\)](#) explored the type of collaboration in place among school social workers, teachers, school psychologists, and principals. Study participants were asked to respond to a case study and indicate both how a student should be supported, and which staff members should be involved. Results indicated that there were no significant differences in how the "problem" was constructed, and the range of professionals who were needed was three to nine. Modes of collaboration were determined using an open-ended coding scheme, which revealed five categories: Initiator/coordinator (connects to resources or starts a dialog); assessor (gathers information); intervener (provides service or consultation); whistleblower (addressing detrimental practices); and collaborator (truly "joint" or "shared" work). Unfortunately, their findings suggest that coordinated, individual action is far more common (endorsed by 82%) than collaboration (endorsed by only 15%). Interestingly, although school support teams were noted by many, they were deemed to be only "potentially highly collaborative environments".

While focusing on good interdisciplinary practice in schools, both [Mellin \(2009\)](#) and [Stone and Charles \(2018\)](#) suggest that it would be beneficial to focus on how to achieve more truly interactive "teaming" in schools and that one way to do this is to promote these processes in pre-professional education. These authors were among the first to call for introducing interprofessional experiences into the professional education of school mental health professionals and the other professionals with whom they work. Among the options for achieving this objective are organizational efforts, such as cross-listing courses taken by students from different programs, and intentional fieldwork experiences that require students from different disciplines to collaborate on real world challenges.

Role of Pre-Service Training in Enabling Interprofessional Collaboration in Future Practice

Although not yet studied systematically in the field of education, other disciplines have demonstrated the value of interprofessional training at the pre-service level. A recent systematic review of 49 peer-reviewed studies of interprofessional experiences and service-learning outcomes embedded in nursing, social work, and medical programs at the graduate level reported positive effects on both the attitudes and knowledge of trainees (Stetten et al., 2019). Interestingly, the authors noted a lack of educational theory and no attention to pedagogy as characteristic weaknesses of this literature.

Within the realm of education, Pryzwansky (1996) was among the first to call for collaborative training approaches for educators and psychologists, saying, “If, indeed, it is expected that professionals will work together as colleagues, and on teams, then it seems logical that they should be given the opportunity to train for such a collaboration” (p. 68). Stone and Charles (2018) explored the type of collaboration among school social workers, teachers, school psychologists and principals with a focus on interactive “teaming” in schools, and proposed “pre-professional education” as one of the most effective strategies.

Finding faculty members who are interested in practicing interdisciplinary education is one of the main challenges experienced by programs seeking novel approaches (American Association of Universities, 2005). The American Society for Higher Education (2009) underlines the power of reflection and collaboration created among students while use of independent study, internships and experiential learning opportunities are maintained. Below we describe our effort to build interdisciplinary perspectives in graduate education courses.

INTERPROFESSIONAL LEARNING IN PRACTICE: A CASE STUDY AT THE UNIVERSITY OF CALIFORNIA, BERKELEY

The University of California, Berkeley School of Education has a long history of preparing professional students to provide direct care in schools, including in the areas of teaching, school psychology, and site and system leadership. Each of the BSE’s professional programs utilizes a cohort-based instructional model, in which students admitted during the same year take most or all their courses together. While the directors of these professional programs have a long history of collaborating to share ideas and resources and solve common issues that arise, they only recently attempted blending cohorts from various professional programs into a singular learning space over an entire semester by co-enrolling them in a specific course. Legal and Policy Issues in Urban Education is a required course that has been

regularly offered within the BSE's site leadership preparation program, the Principal Leadership Institute (PLI). The School Psychology program also requires its students to take a similar class, Legal and Ethical Issues in Education and School Psychology Practice. The directors of the PLI and School Psychology programs collaborated to merge the content of these separate courses into one course, that is taught by a lecturer who is trained both as a lawyer and as a school administrator.

Starting in 2019, two separate cohorts from each program were co-enrolled in the Education Law course over two subsequent years (with a one-year gap due to the global pandemic and the ensuing decision to not admit educational leadership students during the 2020–2021 academic year). Students attended lectures together, engaged in joint discussions, partook in hypothetical case studies, and completed a culminating project that required them to tackle the specific work of their discipline while also working collaboratively alongside the other.

Building on [Bronstein's \(2003\)](#) model of collaboration, we integrate [Edwards' \(2011\)](#) concept of relational expertise, which is “based on confident engagement with the knowledge that underpins one’s own specialist practice, as well as a capacity to recognize and respond to what others might offer in local systems of distributed expertise” (p.33). This concept is connected to relational agency, “a capacity for working with others to strengthen purposeful responses to complex problems” (p. 34). Additionally, given the implications of interprofessional preparation to address the needs of multi-system involved, marginalized students (e.g., students with disabilities, foster youth, LGBTQ+ students and those with other intersectional social identities), we likewise integrate [powell's \(2008\)](#) liberative practices of targeted universalism, which are based explicitly on equity and social justice. The study focuses on the following overarching inquiry: *How does being a member of an interprofessional learning space influence graduate students' knowledge and perspective about future interdisciplinary practices, and their identities as members in a “coalition of child-serving champions?”* ([Lawson, 2004](#), p. 225).

METHODOLOGY

The study was based on case study design, in which researchers focus on a unit study known as a bounded system ([Mills & Gay, 2019](#)). As [Merriam \(1998\)](#) asserts, researchers utilizing case study design investigate a unique phenomenon—in this case that of creating interprofessional learning spaces—in so doing providing knowledge about “atypical cases” (p. 33) that help to explore graduate students’ perspectives of interdisciplinary collaboration. This study also gives a descriptive illustration about the process of providing the graduate students with the opportunity of interdisciplinary collaboration. “Case studies are particularly valuable in program evaluation

when the program is individualized, so the evaluation needs to be attentive to and capture individual differences among participants, diverse experiences of the program, or unique variations from one program setting to another” (Patton, 2002, p. 55). The following steps were adopted from Mills and Gay (2019) and implemented in the research process:

- Research questions were determined
- Case under study was defined
- The theory development, including the conceptual and theoretical framework, in the case selection was determined
- Single case study design was chosen due to the nature of the collaboration amongst graduate programs and the interdisciplinary course designed
- Descriptive questionnaires were prepared to provide an overall picture of the students’ perceptions during the process, which was followed by face-to-face interviews to have a deeper understanding of their experiences as being a part of a newly implemented course, designed with the expectation to open interdisciplinary learning pathways.

Data Collection and Researchers’ Positionalities

First and second authors collaborated on the design and implementation of a graduate course and then initiated the co-enrollment of educational leadership and school psychology students as an experience in interprofessional practice. Each author brought decades of experience in their respective disciplines both as scholars and practitioners. Third and fourth authors joined this collaborative research team, providing support and collaboration in teaching and three rounds of quantitative data collection. The third author took the lead on qualitative exploration by conducting individual interviews with select students from the school psychology program. All authors collaborated on the data analysis as well as taking observational notes during the implementation of this interdisciplinary collaborative practice. Results from earlier phases of this project were presented at the University Council for Educational Administration and AERA conferences, which provided rich insights into the lived experiences of the participants and authors who served as stewards of practice in this innovative practice.

Measures

Using purposive sampling, all enrolled students ($n = 60$) were administered a descriptive questionnaire that asked about their experiences of

interprofessional preparation. Secondly, a follow-up study was conducted with three school psychology and two PLI students representing both cohorts; these students participated in a semi-structured interview in which they shared their perceptions and experiences as co-inhabitants of an interprofessional learning space. Two of the researchers were actively engaged in the implementation of this case study. Their roles as program administrators gave them the opportunity to interact with the students as well as the instructor of the course. However, these unstructured observations and interactions were not recorded as data collection tools. Researchers were able to reflect on these experiences when interpreting the descriptive data obtained in questionnaires and interviews.

Descriptive Questionnaire

Researchers asked closed and open-ended questions to illustrate the experiences of the graduate students taking the course together. Students were asked to indicate the extent to which this experience of interdisciplinary learning had an impact on their professional work (See [Tables 9.1](#) and [9.2](#)). They were also asked a series of eight questions with the goal of determining their perceptions of pursuing the goal of equitable education in the interdisciplinary learning space.

Interviews

Researchers selected a purposeful sampling of students in order to “discover, understand and gain insights” about their perceptions and experiences ([Mills & Gay, 2019](#), p. 408). A letter was sent to identified graduate

TABLE 9.1 Impact on Professional Work (Year 1 Questionnaire Participants, n = 18).			
Please Consider the Degree to which the Combined Enrollment of Students in the Class might Impact Your Professional Work.	Significant Impact	Some Impact	No Impact
My understanding of the expertise I can expect in the other role. (Relational expertise)	3	10	5
My understanding of the constraints affecting people in the other role. (Relational expertise)	5	10	3
My understanding of the kinds of resources that I can seek from people in the other role. (Relational agency)	3	11	4
The practical options and limitations in pursuing support for students with special needs. (Relational agency)	6	8	4
The practical options and limitations in addressing issues related to student discipline. (Relational agency)	3	12	3

TABLE 9.2 Impact on Professional Work (Year 2 Questionnaire Participants, n = 19).			
Please Consider the Degree to which the Combined Enrollment of Students in the Class might impact Your Professional Work.	Significant Impact	Some Impact	No Impact
My understanding of the expertise I can expect in the other role. (Relational expertise)	13	6	0
My understanding of the constraints affecting people in the other role. (Relational expertise)	13	6	0
My understanding of the kinds of resources that I can seek from people in the other role. (Relational agency)	13	5	1
The practical options and limitations in pursuing support for students with special needs. (Relational agency)	14	5	0
The practical options and limitations in addressing issues related to student discipline. (Relational agency)	13	6	0

students to inform them about the purpose of the research and obtain their consent to participate in a recorded, semi-structured interview. Participants were reassured that their identities would remain confidential unless they wished to be identified by name or role. No real names were listed on any documents or data related to this research.

Interview questions were open-ended, so that students could share their reflections in a memorable and illuminating way. While interviewing, the researchers paid close attention to possible additional questions based on their observations, using reflective listening, remaining open and non-judgmental in the process. After each interview, researchers completed a “Contact Summary Form” as suggested by [Miles and Huberman \(1994\)](#) in order to highlight the main points of the interview. The following questions were asked during the interviews:

- How did this experience of interprofessional preparation influence your knowledge, perspective about your role and capacity to utilize your expertise as a school psychologist? Can you give an example of how you might utilize the expertise of the other, given what you know now?
- To what extent has your thinking about this interprofessional learning experience changed in the months since the course ended?
- Please share any anecdotes or critical incidents from your practice that have either confirmed or challenged the value of interprofessional collaboration.

- How did this experience of interprofessional preparation influence your knowledge and perspective about the potential of interdisciplinary collaboration to address complex equity issues?
- Based on your experience, what would you recommend to higher education leaders (program directors or department chairs) who design future interprofessional preparation opportunities in graduate education?

Participants

Participants were two cohorts of master's-level educational leadership students ($n = 47$; 17 in Study Year 1 and 30 in Study Year 2) and doctoral level school psychology students ($n = 13$; 4 in Study Year 1 and 9 in Study Year 2) enrolled at the Berkeley School of Education. Due to state credentialing laws, the educational leadership students have a minimum of five years' full-time professional experience as credentialed educators (e.g., teachers, counselors, speech and language pathologists). Meanwhile, the school psychology students include both individuals with significant former work experience and those recently graduating from college with a bachelor's degree. Fifty-eight percent of the combined cohorts identify as students of color. In all, 92% of enrolled educational leadership students and 87% of enrolled school psychology students responded to the online questionnaires. These roughly correspond with ethnoracial and gender breakdowns in each subgroup. In year 2, we conducted qualitative interviews with three selected school psychology students who were selected based on their unique perspectives as researchers collaborating with scholars both from the disciplines of school psychology and educational leadership. Their voices on interprofessional learning and collaboration will be shared in the remaining parts of this chapter.

Data Analysis

In the analysis of quantitative data, Statistical Package for Social Sciences (SPSS) was used. We coded each questionnaire. Of the 60 questionnaires administered, 37 were returned. A nonparametric crosstab and Chi-Square test was used to compare the responses generated with students' program affiliation (school psychology or educational leadership), determined through frequency and percent scores, which were calculated from the responses given on a three-point scale. These quantitative data provide an overall descriptive picture of the students' perceptions of their engagement in interprofessional preparation.

To analyze the qualitative data gleaned from semi-structured interviews, transcriptions were coded using Otter.ai, then clustered to determine prevalence and search for identifiable patterns in the data (Huberman & Miles, 2002). Excerpts were selected and placed in categories in line with the thematic connections within and across the transcripts (Seidman, 1998). Students' voices were used to describe their experiences throughout the analytical process.

PERSPECTIVES OF GRADUATE STUDENTS ON INTERPROFESSIONAL COLLABORATION

In reporting on the findings of the study, we return to our two research questions, combining quantitative and qualitative findings from the descriptive questionnaire administered at the end of the course and the semi-structured interviews conducted with selected school psychology and educational leadership students from across both years. Echoing previous research on the efficacy of interprofessional preparation, the participants across both cohorts reported on perspectives about the potential of interdisciplinary collaboration to address complex equity questions and found value in this shared learning experience, as evidenced both through a quantitative review of students' responses to the questionnaire and in reflections obtained through the semi-structured interviews.

All 37 students who completed the online questionnaires across both years noted some and/or significant impact on their future professional work in at least one way, including in constructs we subsequently labeled in relation to what Edwards (2011) names relational expertise and agency. Across both course years, the data show general agreement that the course would influence participants' future work. Simultaneously, the results also indicate an increase in perceived impact between Year 1 participants and those enrolled in Year 2. In addition to the benefit of the instructor iterating between the two years, an important differential was the onset of the global pandemic during the second month of instruction in Year 1.

Table 9.1 captures the results obtained from Year 1 students. The first two constructs address what Edwards (2011) calls relational expertise, which is "based on confident engagement with the knowledge that underpins one's own specialist practice, as well as a capacity to recognize and respond to what others might offer in local systems of distributed expertise" (p. 33). Slightly more than half ($f = 10/18$) of the students reported that they believe their understanding of the expertise they can expect from those in the other role will have a moderate impact on their professional work, while three students mentioned significant impact and five noted no impact. Students' responses regarding their understanding of

the constraints affecting people in the other role break down as follows: Five students indicated that it might have a significant impact, while 10 indicated moderate impact and three indicated no impact.

The remaining three items were labeled by researchers as connected to relational agency, “a capacity for working with others to strengthen purposeful responses to complex problems” (Edwards, 2011, p. 34). Similar responses were given by students to the constructs “The practical options and limitations in pursuing supports for students with special needs” and “The practical options and limitations in addressing issues related to student discipline”, with three students rating each area as potentially having significant impact, three rating it as having potentially no impact and the remaining students indicating potentially moderate impact. The construct on which participant responses seem to lean strongest toward possible significant impact ($f=6/18$) centered on understanding the kinds of resources that can be sought from people in the role of the other. In addition to the six participants who rated this area for significant impact, eight noted moderate impact and almost a quarter of them ($f=4/18$) shared the belief that the shared learning experience had no impact. In all, there is no strong evidence of differential impact between what the researchers have labeled as relational expertise and what was labeled as relational agency (Edwards, 2011), indicating that students likely did not feel the course led to significantly more impactful capacity building in one area than the other.

Table 9.2 shows the ways in which students’ perceptions of the impact of the interdisciplinary learning space appeared to improve for those enrolled in Year 2 of the shared learning engagement. As can be seen in Table 9.2, all of the respondents in this year’s course indicated they believed their future work would be impacted in at least four of the five areas, with only one participant ranking one construct as having potentially no impact - the item asking their understanding of the kinds of resources that they can seek from people in the other role. Interestingly, this is the same item that was rated as more impactful by the Year 1 participants (see Table 9.1).

The majority of the respondents indicated they experienced significant impact on the items asking their understandings of: “The expertise I can expect in the other role” ($f=13/19$); “The kinds of resources they can seek from other people” ($f=13/19$); and “The constraints affecting people in the other role” ($f=13/19$). Similarly, 13 students also noted a significant impact in finding practical options and limitations in addressing issues related to student discipline. As for the item asking the practical options and limitations in pursuing support for students with special needs, a slightly larger majority of the students in Year 2 ($f=14/19$) asserted there might be a significant impact, while the remaining five noted moderate impact. These results seem to align with the open-ended questions included in the questionnaire, as well as with the interview data revealing the

significant impact seen especially in challenging issues such as special education and student discipline.

Although participants from both Year 1 and Year 2 came from the same case context, the increase in the number of responses rated as “Significant Impact” can be interpreted with attention to the interdisciplinary culture created within the participating programs of school psychology and educational leadership. It is noted that the more students became aware of the rationale of this model, the more they embraced the richness of it. To dig deeper into students’ experiences and give texture to the quantitative results above, we now discuss results of qualitative data.

VOICES ON THE POTENTIAL OF INTERDISCIPLINARY COLLABORATION

Interview respondents seemed to appreciate the instructor’s approach and the syllabus, which was set up in a way that allowed space for them to talk about critical issues in their attempts to serve students with the most effective means. When asked about the ways in which students made connections across disciplines, almost all the students interviewed emphasized the value of the authentic conversations that emerged during the group discussions and case studies. The following subsections provide insights gleaned from the interviews to provide texture to the constructs students who completed the questionnaire were asked to respond to.

Students in Year 1 seemed to be moving in between the degree of “some to none” when asked about their understanding of the kinds of expertise that can be expected from their counterparts. Year 2 participants revealed more positive responses as to their conceptualization of this case study and the ways in which the design and rationale has a specific purpose to create synergies of interdisciplinarity between the two groups of graduate students. As confirmed in both the open-ended questionnaire responses as well as through interviews, some of the school psychology students enrolled in Year 1 lamented not being informed about the nature of this design from the very beginning so that they could be more aware of the context in which they would be engaging. Stated one interview participant, “We all felt like the course was tailored to PLI students, and we were just kind of inserted into it.” Although students shared positive responses about the lecturer, they mentioned the idea of co-teaching opportunities in future years so that a leadership lecturer could partner with someone with a background in school psychology.

In line with the questionnaire item asking for students’ understanding of the kinds of resources they can seek from their counterparts, the three interviewed school psychology students noted that they found the

perspective of educational leaders very helpful in grounding the laws and the policies that they were examining. They all seemed to confirm that the course was comprehensive in terms of covering the law, which they had never been exposed to before. Though they expressed some hesitations as to how to make the distinction between what “They needed to know as a school psychologist and differentiate that from what principals needed to know” in the early phases of the implementation. The interprofessional expertise seems to have had a positive influence on the identity of the participants, where they started to seek out opportunities for interdisciplinary collaboration and networking. They also started to discover ways in which this practice could be enriched by involving other related disciplines, or as one of the students suggests:

I wanted to seek out a different group with different perspectives addressing, for example, [looking at the practice of] manifestation determination from the perspective of a special education teacher [as well as] the perspective of a speech and language pathologist, and then a school psychologist ... Thinking how we did that with the PLI folks in that law class. Now, I’m kind of seeking for that more. I think that’s kind of changed over the past four months. And I’m also thinking about [my] future work as well ... ‘Where else can I lean into to understand how certain professions careers, understand a particular issue that even school psychologists are also trying to understand as well?’ And how [I have realized the extent to which] there’s a lot to learn from one another. So, I think that’s kind of how things have shifted for me, since that class...

Theme 1: Constructing Collaborative Supports for Students with Special Needs

All the interviewed school psychology students implied the ways in which they became more aware of the value of restorative justice whilst having the opportunity to hear stories of action from students in the educational leadership program. The joint learning space helped them realize the ways in which they could incorporate restorative justice in their daily work as school psychologists, seeing it as an alternative way of doing things. Similarly, all the participants mentioned how they utilized their experiences in analyzing critical issues, especially regarding youth who qualify for special education. Excerpted below is a reflection on a class activity that was echoed in most of the interviewed students’ stories:

We spend a lot of time analyzing ... scenarios I remember, we were really reading deep into the educational code. What does it mean? ... What are some tips and some things we need to consider if a student has an IEP? ... What should we [know] law-wise ... [to sustain] restorative justice? That’s [one of the key takeaways] from that class ...

When asked to recall their memories of interactions with students from the other discipline, interview participants stated that all the interactions were pleasant. The school psychology students also noted that they were able to look at the context from the lenses of the leaders, who are not often given much opportunity to understand how to evaluate students' needs in order to understand the different classification categories designated by special education law. They also realized the dilemma school leaders potentially have by holding a very stereotyped understanding of what different classifications and diagnoses are and how they manifest in students. Said one interviewee, "There were conversations in which... it felt really productive to be in the same room with principals and to be able to say, 'ADHD can look like inattentive behaviors, but also like hyperactivity or both,' and like really talk through the complexity of how different disabilities can affect students." While they were able to share their knowledge as psychologists, they were also learning from the leadership students throughout the course and found it helpful to hear how school leaders think through different scenarios. Finally, one student pointed out the value in clearing up misconceptions and combining perspectives related to highlighting the assets of children.

... I feel like there's a misconception that school psychologists are the ones that make these decisions about special education eligibility, but I think that the way I've been trained is that it's a team decision. And so I'm thinking about how do you leverage your relationships with your assistant principal, Principal, and educators to think about how does everyone bring forth the strengths of a student that not only the school psychologist can see. So this is really to benefit the student. But I think it's like multiple perspectives are needed. And so this was like a class that framed that well, for me, by like, listening to other folks, rather than assuming like, I know XY and Z, they know XY and Z. So I'll let them kind of speak to what they know. And I'll speak to what I know. And rather, it was like a warping of information. Like I remember, one of the activities in the class like, or assignment was that we had to work as a group of like a mixture of like school psychologists, and also some of the PLI students. And obviously, engaging in different types of scenarios or hypotheticals. And we had to really think through some of these policies and how they're applied, how would we approach it? And so kind of that think aloud process with PLI students and with school sites, I think really helped shape the equity component of it, because I think we both each understand equity through different approaches as well.

Theme 2: Co-Constructing an Equity Centered Approach to Student Discipline

As noted above, restorative justice was a salient content topic for the school psychology students. All the participants' interviews indicated that

interaction with their counterparts from the other discipline enabled them to look at the prescribed procedures and regulations in an analytical manner, which also helped them to visit certain necessary steps in the implementation along with the scenarios they may encounter at the school setting. In other words, interviewees realized the ways in which putting policy into practice requires a critical look, leaving space to make sense of the law in conjunction with disciplinary actions. One of the students illustrates this phase as a novice school psychologist with these words:

[what if] a student is present in possession of some kind of substance or with alcohol, then we need to punish them or discipline them in this way. It's really written out very strictly, in a disciplinary way ... we're trying to become a school psychologist, it's easy to just follow what the book says or the manual says or what the law says, and then [you] lose the critical lens and then lose the ability to think critically ..."

Theme 3: Creating Synergistic Interdisciplinary Priorities for Equitable Education

The participants who responded to the questionnaire and shared their experiences during the interviews emphasized the value of this interdisciplinary experience in enabling them to put themselves in the role of their counterparts in the other discipline from the basis of equitable education. Both school psychology and educational leadership students not only made sense of the content that was covered in the class but also visited that content from the lenses of their counterparts. Their responses in the quantitative and qualitative results echoed each other in that they illuminate both what content they possess firmly in their existing repertoires and the perspectives that arise only when coupling the various roles performed in a school context.

Participant responses showed they were able to isolate both areas of professional congruence and those in which their professional training to date had set them on slightly different paths, illuminating potential implications for future interprofessional preparation learning spaces. Participants were asked to indicate whether the views and priorities of enrolled school psychology and educational leadership students were similar ("on the same page"), somewhat different, or quite different on eight separate constructs.

While responses to some constructs—such as "Interpreting legal requirements or district policy in handling student disciplinary matters" or "Considering issues of equity within the context of the Legal and Policy course"—showcased that school psychology and leadership students largely shared the same views and priorities, other constructs illuminated areas of difference in views and priorities.

Chi-Square analysis showed that three constructs, “The scope of the school psychologist role in the school (assessment, testing, consultation with teachers, policy setting, etc.)” ($p = .03$); “The role of the school administrator in working directly with school psychologists” ($p = .02$); and “The role of the school administrator in supporting teachers’ work with school psychologists” ($p = .00$) generated statistically significant findings in terms of different perceptions. As for the item asking their perceptions of “The role of the school administrator in working directly with school psychologists,” 75% the leadership students ($f = 21/28$) noted that they share same or similar views with school psychology students” while 55% of the school psychology students ($f = 5/9$) concluded that PLI and school psychology students expressed “somewhat or quite different” views or priorities. This result is similar to the item asking their perceptions of “The role of the school administrator in working directly with school psychologists”, where 88.8% of the leadership students (24/27) noted that they were “on the same page with school psychology students” but less than half of the school psychology students (4/9) confirmed to be “on the same page” with leadership students. For the item, “The role of the school administrator in supporting teachers’ work with school psychologists”, 77.7% of the school psychology students ($f = 7/9$) expressed holding somewhat different views or priorities from their administrator colleagues, whereas 81% of the leadership students ($f = 22/27$) believed that psychologists and administrators were “on the same page”.

School psychology and educational leadership students echoed each other during the interviews, all appreciating the opportunity to interact across affinity groups and discuss issues of equity and diversity from interdisciplinary lenses. While school psychologists discovered new pathways in school administration, which extended on a spectrum from recruitment of teachers to implementing equity centered actions, educational leaders learned how they can seek help from school psychologists when responding to issues of equity. Their responses can be categorized under the predetermined category of “pursuing the goal of equitable education for all children”, where their learning spaces open alternative pathways to sustaining equity within the school context. As revealed in this excerpt:

We’ll be talking about equity in recruiting teachers of color, or equity in sustaining teachers of color... We, from each of our perspectives, have our own understanding of what is the most salient topic about equity, from school psychology, we’ll be thinking [whether] there’s over-representation of certain ethnic racial groups in certain IEP programs. And that’s what we are focusing on. And it’s valuable to hear [from site-based experiences] ... asking ourselves as to [how we can] collaborate on [creating] a school environment [which is] more equitable and more inclusive...

The majority of the participants appreciated the readings, giving them the lens of equity. They had the opportunity to dive more deeply into these

issues through dialogical methods designed by the course instructor. All mentioned the extent to which they realized the need to look at the issues of equity from the basis of fundamental theories (e.g., critical race theory). School psychologists mentioned how powerful the voices of equity heard in the learning spaces were, providing them the perspective to understand multiple layers in the decision making process rather than following solely the legal “script” [by the book].

One of the school psychology students related her experience in the case study’s interprofessional learning space with her experience in the more traditional assessment course (taken only by school psychology students). Throughout her journey as a graduate student and a practitioner as a school psychologist she asked herself the following question:

If equity is my priority, how do I use these tools that are very imperfect in a way that is equity focused to the extent possible!

This was echoed in the voices of all the participants as well as implied in the open-ended responses of the questionnaire. They seem to be conscious of their own professional development in the interdisciplinary space, which seems to cultivate their identities as equity centered leaders and school psychologists. The following excerpt is heard in most of the voices of the participants, indicating their passion to make a change in the lives of children and families:

... Rather than assessment, ideally, that’s how I would imagine our role as school psychologist and if we’re trying to be equity focused, we need to shift our energy into something that I think would produce even greater outcomes for students ... indirectly work with principals and administrators ... seeing the dynamics of [relations among] school psychologists, with principals, assistant principals and teachers...

Finally, one participant explained how the experienced raised their awareness of systems issues and the value of collaboration that supports equitable outcomes:

...I feel like that has shifted from, I would say, it was this class that made me think about other dimensions in which school psychologists operate within a system. And I really feel, and maybe this is also an influence of my own, like advisors work and things like that. But it’s more about shifting away from like student focused, I think outcome, and thinking about like educators, leaders, and how school psychologists can engage more in consultation and collaboration. Rather than assessment, ideally, that’s how I would imagine our role as school psychologist and if we’re trying to be equity focused, we need to shift our energy into something that I think would produce even greater outcomes for students and indirectly working with like, principals, and like

administrators. And I'm just like reflecting also..., on my experience of working in schools, and like, seeing the dynamics of other school psychologists, with other principals, assistant principals and their teachers. And I feel like there's always a disconnect with that, especially in special education. I think that there's a perception that like school psychologists are the ones that are supposedly making these decisions ...

Significance

This body of work aims to contribute to the understanding of interprofessional pre-service preparation as a precursor to transdisciplinary collaboration in service of students not typically assured success by existing school systems. The opportunity to conduct multi-year, cohorted questionnaires and semi-structured interviews with participants during their pre-service experience adds nuanced texture to an emerging theoretical framework for how to facilitate early opportunities for interprofessional collaboration praxis. This inquiry into interprofessional preparation also carries significance for policy and practice, helping to inform future pre-service design principles, and the local and state policies (e.g., credentialing, professional standards, collective bargaining agreements) that enable these.

Also significant is the need for ongoing, practice-oriented research. These types of studies provide unique insights into how interdisciplinarity could be incorporated in graduate programs with an equity conscious perspective. Further studies could explore the ways in which interprofessional preservice programs can be designed and nurtured. Signature pedagogies that cultivate interprofessional collaboration can be formative experiences in the training and development of leaders and school psychologists who will channel their expertise into schools. The lived experiences of the lecturers and program administrators supporting interprofessional learning could also be collected to illuminate how to integrate an interdisciplinary perspective during graduate training that cultivates the conditions by which future practitioners prepare to make change in the lives of teachers, children and families. Finally, future studies could survey graduate students who have had these kinds of experiences once they have begun working in K–12 settings and collect their stories. Their reflections may illustrate how shared, interprofessional learning experiences influenced their approach to the work when enacting equity focused practices to make change in the lives of children. Questions designed to flesh out how the experiences shaped not only each professional's approach to their own role, but also the shared work of building healthy systems that contribute to organizational resilience, would provide valuable insights for graduate training programs.

FUTURE DIRECTIONS

...the exercise of resilience is always a dynamic process in which people interact with other people interpersonally or through social structures and institutions. (Moñivas, 2024, p. 40)

The complex challenges facing education are greater than ever and adversity abounds in a system that is influenced by current social, economic and political influences. Although the literature on what kinds of systems are more likely to bounce back from adversity is far less robust than the literature on what kinds of individuals may do so, contemporary resilience frameworks have evolved significantly over the past few decades in ways that can and should inform the work of those inspired to transform educational systems (Moñivas, 2024). Graduate programs can expand their impact by providing powerful learning experiences with interdisciplinary components. Interprofessional practices are needed to prepare future education leaders to be transformative leaders who possess the vision and skills needed to create new systems with structures for sustaining resilience. This chapter provides an exemplary example of what it looks like to incorporate interprofessional collaboration as an additional, powerful design principle that can be incorporated with other leadership development models such as powerful learning experiences (Young et al., 2022). We envision the role of interprofessional pre-service education as one way to set the stage for transdisciplinary collaboration that supports organizational resilience by building capacity to adapt and support change during challenging times.

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