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pp. 47–72 in S. Seagroves, A. Barnes, A.J. Metevier, J. Porter, & L. Hunter (Eds.), *Leaders in effective and inclusive STEM: Twenty years of the Institute for Scientist & Engineer Educators.* UC Santa Cruz: Institute for Scientist & Engineer Educators. https://escholarship.org/uc/isee pdp20yr

Applying The Transformation Trifecta Model to an Organizational Diversity, Equity, and Inclusion Assessment

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Abstract

We describe how to facilitate an organizational Diversity, Equity, Inclusion (DEI) cultural transformation utilizing The Transformation Trifecta (TTT) leadership model which includes three steps: learn, integrate, act. The differentiator of this model is the integration step which is often left out of DEI education yet necessary since the majority of behaviors that propagate oppression are unconscious and manifest through implicit bias or microaggressions that are subtle yet impactful. It is necessary to engage an approach that goes beyond the thinking mind in order to shift underlying beliefs through rewiring neural pathways that inform the creation of new behaviors in response to embodying new information. This exploration applies the Transformation Trifecta model to the first phase of an organizational DEI cultural shift meant to increase inclusivity and belonging. Additionally, the exploration will include the research-backed education tool of backward design included in the Institute for Science and Engineer Educators (ISEE)'s Professional Development Program (PDP), which was an instrumental aspect in multiple authors' training and development. The Transformation Trifecta utilizes backward design in the assessment creation process in order to clearly articulate the desired outcomes and goals for behavior change. There will be a discussion of the top areas of assessment and benchmarks including: belonging, psychological safety, inclusion, growth mindset, equity, and equitable leadership development.

Keywords: affective domain, assessment, equity & inclusion, integration, leadership

1. Introduction

1.1 The Professional Development Program (PDP) legacy of inclusive education

Twenty years ago, the Center for Adaptive Optics (CfAO) was formed and with it came a mission to broaden participation in the STEM fields, under the National Science Foundation's (NSF) broader impacts criterion (Wilbert & Tedjasaputra, 2021).¹ Under the direction of Lisa Hunter, the community had to decide what that meant and how to accomplish that goal. In year one, the initial strategy on the path towards inclusive STEM participation was to engage staff aligned with the Institute for Inquiry at the Exploratorium. In partnership, an inquiry-focused workshop was designed for graduate students and postdoctoral researchers to explore STEM education and methods for improving undergraduate and graduate experiences at universities for a more diverse set of learners and learning experiences. Students were introduced to theories of education and curriculum design that emphasized acknowledging and building upon students' lived experiences, complex identities and their individual interests in science and engineering, and building a community of practice/community of learning. This resulted in the foundation of the Professional Development Program (PDP) that continues to this day (Seagroves et al., 2022).

Fairly early on in the program development, staff realized that the conversation about Diversity, Equity, Inclusion (DEI), later known as the Equity & Inclusion (E&I) theme in the PDP, needed to be more fully developed and discussed for there to be meaningful progress in the advancement of the goals of DEI in STEM. DEI-specific sessions designed by staff and participants were assigned research and theory articles to seed facilitated discussions on disparity in access and advancement in science, engineering and education fields. This included conversations about the differences between diversity, equity, and inclusion. The early DEI discussions were emotional and challenging for participants and staff. The larger STEM community was not discussing DEI in depth and there were few tools publicly available to use. Understanding which tools to use and directions to go was uncharted territory for the PDP community. In many ways, the PDP staff and participants were pioneers in STEM DEI discussions in their institutions. Overall, the PDP community was receptive to the conversations and were impactful at raising the awareness of such disparities within the STEM community but challenged to understand how to amplify voices of those coming from marginalized identities and reverse the trend of decreased representation at increased levels of STEM academic accomplishment. As the Institute for Scientist and Engineer Educators (ISEE) evolved, so has the discussion and practices around inquiry, equity and inclusion, and assessment. While DEI programs can take many different forms and have many different goals, from exposure to action, the ISEE PDP core developers felt their experience and expertise lent themselves to consumption and integration of social science research in activity design and facilitation rather than on interpersonal aspects of DEI which would lead to action. Thus, the decision was made, with intentionality, to focus equity and inclusion efforts on raising awareness of DEI literature and careful, practical application in the classroom.

¹ "Broader impacts may be accomplished through the research itself, through activities that are directly related to specific research projects, or through activities that are supported by, but are complementary to, the project. NSF values the advancement of scientific knowledge and activities that contribute to the achievement of societally relevant outcomes." The first two potential areas suggested include outcomes of research projects which address: Full participation of women, persons with disabilities and underrepresented minorities in STEM and/or Improved STEM education and educator development at any level.

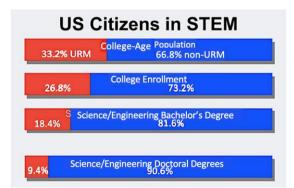


Figure 1: The underrepresented minority (URM) share of the college-age population, college students, those who earn STEM bachelor's degrees, and those who earn STEM doctoral degrees. Data of US citizens only.

In order to understand the importance of these conversations, the numbers help tell the story. Figure 1 (Seagroves et al., 2022) shows the distribution of underrepresented minorities (URM) in STEM fields. The Federal guidelines define underrepresented minority groups as Blacks, Latinx, Native Americans, Native Hawaiians, and Pacific Islanders. The top bar shows the distribution of the college-age population, comparing URM to non-URM students. There are 33.2% URM in the college-age population, 26.8% enrolled in college, 18.4% who receive a science/engineering bachelor's degree, and 9.4% URM who receive a science/engineering doctoral degree. This figure illustrates the drop off of URM in STEM due to systemic oppression. The history of slavery, white supremacy, and ableism lives on today implicitly, as well as explicitly, and is the pressing reason we convene this topic here.

Over the 20 years of the Center, the DEI discussions have been constantly evolving. In the current societal context of education disparities and economic and cultural inequities, the participants are better equipped to shape dialogue in their communities and academic fields. Participants have learned, designed and implemented strategies to facilitate inclusion and address inequities in STEM and in their classrooms and research labs. This continues to be the focus of ISEE's PDP (ISEE Themes, 2022). Some participants like Dr. Corrado have formed alliances with leaders in the field of DEI, like LiSára, Ivy Summer, and Dr. Kotadia. Together they have articulated the tools to develop the internal capacity of organizational culture to become more equitable and inclusive. In this way, they seek to unlock the true potential of organizations.

It is from this inquiry of how to successfully apply DEI as an ever-evolving vehicle to dismantle systemic inequity within organizations that the pathway forward may utilize the same principles of the PDP's research-based education methodology. A key theme that will be woven throughout this article is the importance of voices versus silence. If DEI conversations are not normalized within an organization, systemic oppression is being propagated. Oppression lives through silence. As we collectively expand the diversity of perspectives that are included and whose voices are heard, we expand beyond the cis, white, hetero, male narrative that dominates our society.

1.2 The authors' perspectives

We choose to add our names and perspectives in this article, as well as refer to you as "you," because systemic oppression is perpetuated in the dehumanization and silencing of those who are "othered." Much of academic writing serves to distance the reader from the author(s) and erase identity in service of perceived objectivity. This dehumanizes the process of writing and reading and is not, in reality, objective, for the reader has no means to understand the experiences and knowledge that the author brings (Goodman et. al., 2004). Instead, we will share our identities to truly engage a pedagogy of liberation (Freire, 2013). We are a group of women, LiSára (formerly Lisa Dennen Young), MA; Ivy Summer, MBA; Carley Corrado, PhD; Candice Brown, PhD; and Shaila Kotadia, PhD, with different backgrounds and preferences of how we are addressed, but a common purpose.

As part of this article, Candice conducted interviews with the authors to provide you with a better understanding of the histories, perspectives, knowledge, and collaboration. The authors were asked who they are, how they came to work in the DEI space, and how they became collaborators. What follows below are brief excerpts from those interviews offered as lenses for which to experience this discussion.

We begin with LiSára's perspective, as she created TTT as the guiding framework of the transformational leadership model she developed called Leadership Liberated.

I come from lineages of medicine women and civil rights educators who worked alongside Dr. Martin Luther King, Jr. in the 1960s. Growing up in a family at the intersections of ethnicities, nationalities, immigrants, ages, races, socioeconomic statuses, genders, sexual orientations, religions, and political ideologies, I learned to value contradicting beliefs and the humanity in each.

After studying International Relations, I was America's first woman of color to graduate with an advanced degree in Forensic Linguistics. It is an applied field of sociolinguistics to the law and legal system. Meticulously studying the often unnoticed nuances of language from a systemic perspective granted deep insight in everything from culture and history to schemata and leadership ethos at every level, from the individual to international.

Combining expertise from academia, lived experience, and 15 years in this work globally, I developed a body of work to support individuals and organizational leaders unpack their understanding of systemic oppression, advance self leadership through doing so, and facilitate change within their lives and organizations to align with their values of inclusion, equity, and diversity. We [this group of DEI collaborators] do this because we want to create a society where people are safe to be themselves and bring forward their greatest unique contributions. —LiSára

Ivy Summer met LiSára through an online affinity group called The NEW Program, a leadership coaching and ancestral healing program for Black women "...what a powerful experience." Ivy joined LiSára's team when she created the Leadership Liberation Membership Community (LLMC).

Ivy Summer, a DEI Strategist and Consultant, started her DEI work at SFSU working with undergraduates to get them thinking about larger issues they would face in the workplace upon leaving school.

I set out to encourage others who identified with a variety of marginalized groups to be more involved in leadership. Slowly but surely, I worked [with the organization] to build a leadership team interested in diversity, and eventually established a team that had more trans, Black, non-binary, Asian, and queer representation-resulting in a team of as many marginalized identities as possible represented in leadership. I created dozens of allyship workshop event plans, each focused on historically oppressed groups and international awareness months/days of observance that any leader could take and facilitate in their communities. I did this so that anyone could do it because I can only speak from a Black lived experience, not Jewish, disabled, and other groups of which I wasn't a member. —Ivy Summer

Carley took the Leadership Liberated course taught by LiSára. Throughout the course, Carley was deeply touched by the level of psychological safety LiSára created which elicited a depth of conversation and experience of equity and inclusion that invoked breakthroughs and inspired action steps. "Safety has always been an issue in DEI, including for me personally, feeling safe to share authentically in professional settings. Additionally, I couldn't believe the stuff that would happen in other DEI workshops...divisive." Carley's experience with LiSára and her DEI course was transformative, spurring her to approach LiSára to partner in her organizational DEI work inspired by her earlier experiences with the ISEE PDP.

The Professional Development Program (PDP) got me thinking about DEI and discrimination bias for the first time. They brought the lens of the meta identity to me, which I hadn't experienced. This helped me to be a more conscious scientist and on a quest to continue to deconstruct my unconscious biases. It also made me want to give back. I became active in MARC, Minority Access to Research Careers, SACNAS, Society for the Advancement of Chicanos/Hispanics and WISE, Women in Science & Engineering. This is where I met Shaila [Dr. Kotadia] and we started an outreach program together with a significant DEI component. Discovering LiSára's work, particularly The Transformation Trifecta, was a huge next step upon my personal and professional DEI journey as it quenched my thirst for meaningful DEI conversations and inclusivity that is created by fostering safe, brave space for authentic sharing. —Dr. Carley Corrado

Dr. Kotadia's role in this article was in synthesizing this work while shedding the light of her perspective of having worked full time in the convergence of DEI and STEM for nearly a decade. Her experience in this space, currently as the Director of Justice, Equity, Diversity & Inclusion (JEDI) at Stanford School of Medicine, has led to her recognizing the importance of including the affective domain in DEI work and finding great value in LiSara's TTT and TTT Integration:

I started to do more DEI work in my scientific career. When Carley and I met during my postdoc and started the outreach program together, it was the first time I had a leadership role and was working more formally in this space. Later, when I started at Stanford, I worked with a group of graduate students on the Certificate in Critical Consciousness and Anti-Oppressive Praxis program (Karhson et al., 2021) that deeply transformed my experience working in JEDI. The TTT model reminded me of this program and the value of tying the affective and feeling components to action. Often in STEM, the intellectual [Learn] part is emphasized and then moves straight to the embodied [Act], however the resulting gap of internalization of the intellectual [Integrate] leads to unsustainable efforts. This is where I felt a deep connection to our group in synthesizing this paper. —Dr. Shaila Kotadia

Candice joined this group of women to collaborate on this article. She was an early designer and instructor of the Professional Development Program (PDP) doing her doctoral work in Education Psychology focused on ethnographic studies of students' learning to become members of communities of science.

I've been guided in my career inquiry to take a deeper look at whose voice counts, who tells the story, and how we can hear from more diverse voices so that we may break down the dominant narrative and allow "science's" voice to evolve. —Candice

Our co-author group's collective purpose is catalyzing organizational DEI transformation through creating a sense of communion in shared growth that liberates personal empowerment and collective leadership, especially of voices previously silenced, unlocking creative potential in service of planetary regeneration.

1.3 The Transformation Trifecta converges with the Professional Development Program

The Transformation Trifecta (TTT) is a transformational leadership framework designed to support organizational capability to authentically build an equitable, inclusive, and diversity-embracing culture that unlocks the full potential of your people and mission. It guides your organization with typical metrics like retention, engagement, satisfaction, and performance, and also includes your personal experience as a leader. The framework facilitates individuals to notice where they can stand fully as themselves in every area of their life and model the way for others to do the same. When people feel appreciated, valued, and experience freedom to express themselves authentically, innovation, happiness, and world-changing ideas become possible (Chapman & White, 2007).

TTT is applied to the DEI Assessment using backward design (Wiggins & McTighe, 2005), a foundational concept that the PDP teaches for curriculum design, meaning that rather than start the organizational training with a content focus, instead begin with the end: 1) Goals or standard and 2) evidence of learning/performance (metrics) to design the content to meet these goals. The first step of TTT, Learn, is used to design the DEI Assessment in partnership with the third step, Act, in which we define the evidence of learning and how to design measurement of performance in the teaching context, or behavior change in the organizational context, with the desired outcome being to create a more inclusive, diverse, and equitable culture with a greater sense of belonging.

Backward design is used to create the assessment so that the questions and reflections themselves are part of the learning process. It is a method of establishing the purpose of the DEI initiative within an organization, defining goals and desired outcomes directly related to an organization's values, and then designing a curriculum that facilitates the transformation of values into inclusive behaviors. This step occurs before choosing instructional methods and forms of assessment so that they are responsive to the organizational context. This is explored further in section 3.3, including the various categories to consider incorporating into the assessment: belonging, psychological safety, inclusion, growth mindset, equity, and equitable leadership development. Finally, there will be a discussion about designing metrics to monitor continual progress toward goals over time.

The backward design stages suggest a planning sequence (Wiggins & McTighe, 2005). The first step is to identify the desired results. This includes using the guide to establish curricular priorities for goalsetting and distilling down to the key most important shifts, or "enduring understanding," that will lead to the desired cultural shift. The next step is to determine acceptable evidence (metrics) of success. Finally, this clearly defined evidence is used to plan the learning experiences and instructions. Through this process of clearly defining the desired results in terms of behavior and metrics, the DEI Assessment is designed to uncover the current state in those areas and develop a pathway forward in response.

TTT's three phase approach of Learn, Integrate and Act should also feel familiar to the PDP participants as it mirrors the PDP design process. New and returning PDP participants begin the week in a similar Learn phase with activities aimed at teaching and learning about science, engineering, and education through discussions, personal experiences, and readings. In the second part of the PDP workshop, students participate in a personal inquiry in science where they ask and answer their own questions about a scientific or engineering phenomena, this akin to the Integrate piece. PDP participants are challenged in this part of the workshop to think about how the inquiry experience challenges their previously held notions about science or engineering as well as their understandings about teaching and learning. Lastly, the final piece of the PDP experience is to design and teach using the principles

discussed and experienced in the workshop. Similar to the *Act* phase of TTT, participants are encouraged to assess their students as part of the design: Did their design accomplish the intended goals? The PDP designers, like the TTT designers, envision assessment as the "driver of iterative design and teaching" and is critical to program design from beginning to end (Hunter et al., 2015).

The focus of this article is engaging TTT, which incorporates backward design within its approach, and applying it to the DEI assessment process as the first step toward maximizing success in implementing cultural change.

2. The Transformation Trifecta (TTT) leadership model

2.1 Why The Transformational Trifecta model's differentiator "Integrate" step leads to authentic organizational transformation

TTT is designed to grow leadership capacity to navigate and facilitate the required shifts for sustainable cultural change in an organization. Thus, it is introduced to the leadership team before administration of the DEI Assessment as a foundational framework with which to synthesize understanding one's personal experiences and evolving leadership abilities throughout the process of assessment. The process of cultural change inside an organization begins at the inception of the assessment process. For leadership engaging directly with consultants and/or in-house DEI teams, the starting point is electing to begin an assessment and clearly communicating about it with the organization and outside stakeholders.

Let us name the elephant in the room: DEI is an uncomfortable and unfortunately controversial topic. A brief look into United States history clarifies why TTT is necessary now. If you consider the history of DEIB/DEI/JEDI (note that various letters are used in this work in different spaces. B stands for Belonging; J stands for Justice) in the workplace which began solely as diversity—it has a history of obligation and compliance. Companies engaged the work, in the form of trainings, to be legally compliant in accordance with Equal Employment Opportunity laws at the establishment of the Equal Employment Opportunity Commission as a part of the Civil Rights Act of 1964 in order to prevent lawsuits and settlements.

This helps contextualize the progression of diversity-getting more demographics beyond the white cis presenting male into the room-to diversity and inclusion-where the "diverse" people were actually included in the culture-to DEI-where said diverse folx² (Merriam-Webster, n.d.) experienced equal opportunity for the same outcomes their white cis presenting male colleagues experienced. This context also demystifies the lack of general enthusiasm with DEI initiatives: companies were not necessarily intrinsically driven by a moral compass, but rather motivated by potential negative consequences for not engaging in such trainings (cost of inaction - COI). In a country with countless examples of those with power expressing overt bigotry, racism, sexism, queerphobia, ableism and beyond, it is not difficult to imagine resistance to attending a training, let alone working to transform an organizational culture toward equity or inclusion. Hence, the box-check-as-diversity-work leads to no real change in organizational culture or employee experience.

"Systemic oppression is like air-if there is space for it, it will be there." —LiSára

Many well-meaning individuals of all demographics in the United States have been socialized with internalized beliefs about their inherent

 $^{^{2}}$ Folx = folks—used especially to explicitly signal the inclusion of groups commonly marginalized: Having women teach other women matters. Women of color. Transgender women. Disabled women. Gender-nonconforming folx.

worth and that of others and, in the context of organizational leadership, who and what needs to be considered in planning, decision-making processes, and daily activities at their organization. This is why we need a personal and organizational leadership model that creates transformation from the inside out.

A key differentiator of TTT is *Integrate* (Step II), which creates a pathway for internalizing the learning in order to become actively aware of biases and proactively address underlying beliefs of those biases. The majority of racism and oppression occurs unconsciously, as conveyed by the term *implicit bias* defined by the Merriam-Webster dictionary as "a bias or prejudice that is present but not consciously held or recognized." Thus to create real change, it is necessary to go beyond implicit bias training (Onyeador et al., 2021) and engage an approach in which intellectual information is internalized to meaningfully catalyze behavioral change.

2.2 What is The Transformational Trifecta model

TTT is a simple yet comprehensive three-part transformational leadership model to understand your learning, internal processing, and resulting actions as it pertains to one's personal growth. As applied to the organizational DEI Assessment process, it supports leaders in their learning, internal processing, and resulting actions around facilitating real and sustainable change toward a more equitable and inclusive culture where diversity is present and celebrated.

In TTT we say "Normalize the journey" (#NormalizeTheJourney) because building your leadership through strengthening your ability to navigate your own internal experience of dismantling systemic oppression while facilitating organizational change requires a new set of skills. Supporting teams and employees to navigate their own personal experiences within a changing culture requires an honest look at your own experience as a leader in relation to this topic. This is a topic that confronts deeply held assumptions about your identity. It is through navigating this personally that you gain the capacity necessary to support your team in the process.

The Transformation Trifecta (TTT) model, as shown in Figure 2, includes three steps:

- 1. Learn (intellectual)
- 2. Integrate (internalized)
- 3. Act (embodied)

This model is applied starting at Learn, the process of taking in information from an external input (for example, DEI assessment approach and results). Taking in new information could include the experience of cognitive dissonance - mental conflict caused by contradicting thoughts, beliefs and attitudes - and establishing a new, evolving relationship to the topic. The next step is to Integrate the new information through internal processing that allows you to relate the information to yourself and your experiences. It creates an understanding of prior personal behavior and how to better align your behaviors with your values to take greater personal efficacy and responsibility. This leads to the third step, Act, at which point your external output, or behaviors, may reflect the new integrated information. This creates better alignment within yourself, an experience of integrity, and a sense of fulfillment and empowerment to adopt new behaviors as a result of experiential learning. The process continues cyclically with new information. Each step is expanded upon in the next three sections as applied to the DEI assessment.

2.3 Application of The Transformational Trifecta model to the DEI Assessment

In order to apply TTT to the DEI Assessment, the first step *Learn* includes engaging backward design to clarify: 1) desired cultural outcomes and 2) evidence of learning/performance (metrics). The second step, *Integrate*, includes a process of physiological integration that leads to the development of new neural pathways and lasting behavior change. The third step, *Act*, includes defining the evidence

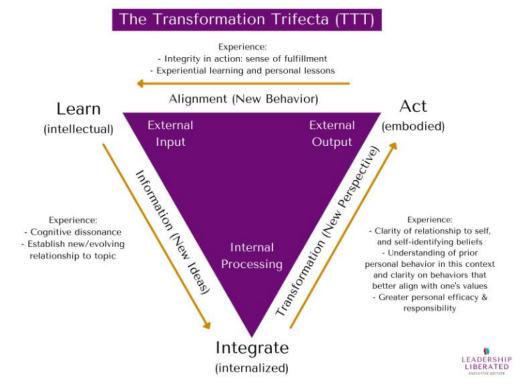


Figure 2: The Transformation Trifecta transformational leadership model. Each point of the triangle is one of the steps (*Learn, Integrate, Act*) with *Learn* being Step I. The arrows between each step show the process taking effect (Information, Transformation, and Alignment), with the bullet points outside of the arrow showing common attributes of the experience of each step.

of learning/behavior that would signal the organizational goals being met.

In the first step, data gathering methods are employed to investigate the key areas of intended improvement. The areas of investigation should be clarified (an example list is shared in Section 3.3) with clear quantitative and qualitative questions that will shed light on the current state in these areas. Varied data gathering may include: survey, town hall meetings, 1:1 interviews, and chat box and polling during virtual meetings and trainings, akin to PDP design with learners goals, interests, and values in mind (Seagroves et al., 2022).

As the data comes in, a wide-array of perspectives is to be anticipated. Receiving this data can be emotionally intense and hence the middle of the assessment is the most challenging. This leads to the necessity of the next step, *Integrate*, which is the process of internalizing new information. By engaging this model over time, it creates a shift in perspective that enables empathy, especially with those of marginalized identities.

As many people in the organization experience this process at the same time, the organization grows in capacity to engage the next step, *Act*. This includes observing workplace dynamics, whose voices are heard, whose needs are prioritized, and the encouragement to have the difficult conversations that lead to dismantling patterns of systemic oppression in the workplace. This is just the beginning, as the completion of the DEI Assessment is the precursor for implementation.

The recommended time investment of the DEI Assessment through the TTT framework, including TTT Integration on the scale of the organization, is generally a 9-12 month process depending on the organization size and amount of time they are able to dedicate to it.

3. Step I: Learn

3.1 Why applying the Learn step to the DEI Assessment makes the DEI initiative relevant to your organization's needs while preparing leadership and staff to engage TTT in implementation

Many organizations that have sought DEI support have begun with an assessment as the first phase so they have a benchmark to measure progress as they implement the work. Many organizations also prepare themselves for the kinds of changes that will help them reach their named goals. However, what is often missed is the importance of preparing leadership and all relevant parts of the organization: employees/contractors and potentially stakeholders (i.e. a board) for what the assessment entails. Thus, as you will see, adequately equipping leadership to navigate leading in a more equitable and inclusive way throughout a DEI Assessment process is what creates the foundation for measurable improvement in organizational culture.

The DEI Assessment surfaces dynamics previously invisible or unaddressed. TTT provides the framework to develop leadership skills that support the assessment itself to be an integral part of the DEI cultural transformation journey while offering structure for what they will later roll out across the organization in future phases. This leading by example allows the entire organization to experience their leaders in new ways that can catalyze curiosity and openness to broadening their own awareness and behaviors. The organizational leadership team is the cornerstone of this transformation and their behavior shifts, aligned with their own values and sphere of influence, naturally inspires contribution organization-wide.

3.2 What are the Learn step objectives of the DEI Assessment that allow you to customize your DEI initiative

The DEI Assessment process begins by clarifying the context of the organization, the purpose of the DEI initiative and specifying the outcomes that leadership seeks to achieve. From there, the DEI Assessment is designed to be the big data-gathering first step that kicks off the DEI cultural transformation process by customizing the approach to be responsive to the organization's current context and needs. This baseline is a learning opportunity to build consensus to:

- 1. understand where progress is happening (and where it is not).
- benchmark the current state of DEI based upon standard metrics (refer to section 5.4) and define unique metrics for the organization's unique DEI goals.
- 3. identify underlying factors and the most important metrics as a means to monitor progress, iterate, and improve over time.

The first step of TTT as applied to the DEI Assessment is meant to engage the entire organization personally as a means of demonstrating that DEI is part of every interaction, communication, policy, and the underlying fabric of an organization's culture.

The organization is starting at *Point A* (current culture) and intending to arrive at *Point B* (desired future culture) through this TTT process. Some elements of the current culture are more obvious and the reason that the organization is seeking support. For example, low diversity, low engagement, high attrition, or a lack of a values-aligned brand identity. The initial motivation for this work is to improve in those areas, though it might not be immediately obvious what this improvement would look like in terms of cultural attributes.

During the backward design process, it's helpful to keep in mind that behavioral change occurs on three different levels: personal, group (interpersonal), and organizational (Ashkanasy & Dorris, 2017), all of which should be assessed. As an example, let us look at inclusion and belonging. On a personal level, it may present as confidence-most notably, not fearing negative consequences for voicing a contrary opinion. Between two or more people, inclusion and belonging often manifest in small or large meetings as consistent check-ins between two or more parties. This includes but is not limited to soliciting feedback and being authentically curious about perspectives that differ from one's own. On an organizational level, inclusion and belonging can show up in group projects, team meetings, and across the hierarchy of an organization by valuing and implementing diverse perspectives, with recognition of all contributors.

The DEI Assessment elucidates the current culture's characteristics, which supports identification of the root of the top challenges. Without a thorough assessment, you risk addressing the symptoms rather than the underlying factors, in which case those symptoms are likely to persist. TTT applied to the DEI Assessment reveals where to focus the implementation effort to get the greatest ROI.

3.3 Application of Learn to key areas of assessment so that you gather relevant data

Systemic oppression is by design and pervasive, as noted by LiSára's quote in Section 2.1, likening it to air. The assessment serves as a teaching tool to understand where systemic oppression exists and the spectrum of experience within the organization. It can be difficult to identify things like policies and microaggressions that perpetuate it. Microaggressions are insults rooted in stereotypes, directed at someone because of their membership within a marginalized group and challenging to measure because of seeming insignificance to the unaware leader that can be a factor in others not reporting the behavior. "People who engage in microaggressions are ordinary folks who experience themselves as good, moral, decent individuals. Microaggressions occur because they are outside the level of conscious awareness of the perpetrator" (Desmond-Harris, 2015).

TTT applied to the organizational DEI Assessment maximizes potential success in implementing cultural progress in the phases following the assessment. Its application includes internal operations such as team restructuring, policy documentation, internal communication, meeting structures, systems of accountability and reward, recruitment, promotion and onboarding, management for leaders who resist these cultural shifts, and more as it relates specifically to the organization.

Example Hypothetical Organization Spotlight: Learn

In a large organization where TTT was applied to a DEI Assessment, the top goal of their DEI Initiative was to build a diverse, inclusive and representative workforce including senior management and executive roles.

Hence the following standard areas of assessment were engaged (below). Additionally, there was specific attention to comparing the leadership to the "non-leadership" positions in all areas in order to shed light upon equitable leadership development that could support representation in senior roles.

Key standard suggested areas of assessment and their definitions are:

- **Belonging**: a feeling of being happy or comfortable as part of a particular group and having a good relationship with the other members of the group because they welcome you and accept you (Cambridge Dictionary, n.d.).
- **Psychological safety**: a shared belief held by members of a team that the team is safe for interpersonal risk taking (Edmondson, 1999).
- **Inclusion**: providing equal access to opportunities and resources for people who might otherwise be excluded or marginalized, such as those who have physical or mental disabilities

and members of other minority groups (Oxford Dictionary, n.d.).

- **Growth mindset**: belief that most basic abilities can be developed through dedication and hard work—brains and talent are just the starting point (Dweck, 2015).
- Equity: the situation in which everyone is treated fairly according to their needs and no group of people is given special treatment (Cambridge Dictionary, n.d.).
- Equitable Leadership Development: equitable access for underrepresented minorities and women to formalized career-enhancing development opportunities (Bailey, 2021).

Example survey questions for each of these areas and standard benchmarks are shared in Appendix A as well as a discussion regarding hiring a diverse workforce shared in Appendix B.

Upon gathering data that uncovers where marginalization exists within your organization, this intellectual understanding is made personal. To recognize that some individuals have suffered deeply, while others deny that marginalization exists, can evoke strong emotional responses and/or confusion that are a motivator to authentically engage in this work. Now it is time for the second step, *Integrate*.

4. Step II: Integrate

4.1 Why Integrate allows intellectual DEI knowledge to be internalized to lead to authentic and lasting behavioral and systemic change

There is a difference between intellectually understanding information and embodying the experience of it. In Greek, there is a word for exactly this: $\beta i \omega \mu \alpha$ (vioma). The translation translates directly to "the result of life," as distinct from the word $\gamma \nu \omega \sigma \eta$ (or gnónsi) which means knowledge in the intellectual sense. There's a big emphasis in Greece around víoma-you cannot possibly "know" unless you lived it.

In certain fields, the importance of lived experience is emphasized and highly regarded. For example: if a surgeon aced their written exams in medical school but had only performed brain surgery three times, you may not hope for them to operate on you. However, in other areas such as DEI, the significance of *Integrate* can be overlooked. In an academic setting, intellectual knowledge is revered. The focus is often solely on the cognitive domain, which is an important aspect to address, and the affective (Wessels et al., 2018) and physiological domains (Van Der Kolk, 2003; Menakem, 2017) are generally unaddressed. In the words of author Myisha Hill, we must "live into the work" (Hill, 2020).

Not only can solely data-based DEI trainings not only lead to no significant change, but moreover lead to over-intellectualization, often a means of distancing oneself from feeling the depth of the topic. Rationally "debating," which is commonly socially acceptable – and often lauded in academia for its necessary role in the development of new theories and laws – shields oneself from the deeply confronting experience of examining one's own relationship to internalized oppression and associated emotions.

While we are not suggesting emotional group therapy sessions, shifting underlying beliefs to lead to behavior change does require deeper introspection. Thus, as we look at systems within an organization, we also review systems within the individual.

Physiology is the functioning within the brain and body itself and involves physical, neurological, emotional, mental, and chemical processes. Introducing physiology into this work can help people better understand their psychosomatic reactions during a time of, for example, divisive and triggering news coverage that colleagues may be expected to discuss in the workplace.

"Recent studies and discoveries increasingly point out that we heal primarily in and through the body, not just through the rational brain. We can all create more room, and more opportunities for growth, in our nervous systems. But we do this primarily through what our bodies experience and do—not through what we think or realize or cognitively figure out." —Resmaa Menakem, quote from My Grandmother's Hands: Racialized Trauma and the Mending of Our Bodies and Heart (Menakem, 2017)

Moreover, physiology provides systemic insights with the body and mind, just as reviewing systemic oppression seeks to help you understand specific processes within your organization, system or society. Because most never learn a systemic perspective, this parallel can support individuals and teams to better understand systemic lenses and holistic perspectives when addressing the wellbeing of your organization and everyone in it through your DEI initiative. Additionally, utilizing tools that employ physiology to improve neuroplasticity (discussed in 4.3.1) create a cutting-edge opportunity to uncover unconscious bias and understand how individuals function at work and in other areas of their lives as well.

Part of what makes DEI personal and subjective is that we all have social identities. Whether we choose to identify with them or not, they are present and people unconsciously operate by them in the workplace. When you consider your own identity, as "I **am** X," that is a much stronger form of psychological and emotional attachment (Ruiz, 2013) than "I like X" or even "I love X." Your identities may come with internalized unconscious attachments such as "I am white therefore I am more worthy of nicer things in life" or "I am an immigrant, so I have to assimilate."

Through expanding the capacity as leadership administering the DEI Assessment to share your humanity and personal experiences throughout this process, you build trust across the organization and invite an atmosphere that fosters real organizational transformation in behavior and in system's design. This type of leadership is developed through engaging TTT Integration.

4.2 What is The Transformation Trifecta: Integrate model that yields internalization of the intellectual

The etymological root of *Integrate* derives from Latin, meaning 'to make whole.' Analyzing, understanding, and optimizing systems requires learning to perceive the whole of said systems. Thus, in both personal and interpersonal applications, a holistic approach makes optimization realistic and possible.

TTT Integration is the internal processing required to internalize the intellectual and move toward authentic value-aligned action. Authentic means intrinsic — that one understands it to be part of who they are as a leader to show up, express, and act in greater integrity with their own named values. This is not about changing your value set, rather helping yourself understand how to better align with it based on the new information you are integrating.

Extrinsically motivated compliance-based actions are ineffective at creating culture change. As shown by a workplace study examining three employee test groups across industries: "...intrinsic motivation was associated with positive outcomes and extrinsic motivation was negatively related or unrelated to positive outcomes" (Kuvaas et al., 2017). Merely adjusting stated values or revising the mission statement will not change culture. Internalization of new knowledge so that members of an organization experience intrinsic motivation around this subject is what leads to cultural shift.

With TTT Integration, we bring into focus what is often unseen, like examining a specimen through a telescope...except the thing being examined is a part of you. As mentioned, systemic oppression is perpetuated in silence: cultural appropriation that removes indigenous names, faces and cultural nuances, original Black inventors most have never been heard of, underrepresentation in the media, important people and stories written out of history books, and more. Dismantling systemic oppression is a call back to acknowledging humanity, rehumanizing peoples who have been dehumanized (500 Women Scientists Leadership, 2020), and, on a personal level as a leader, normalizing the experience of your full humanity in the workplace.

Integration is the internalization of learned information that can rewire neural pathways that create new subconscious beliefs and corresponding behavior. It includes experiencing your full range of humanity—particularly through emotion and physiological response (Van Der Kolk, 2003; Menakem, 2017). While this is the most effective way to catalyze behavior shift which creates culture shift related to DEI, it additionally affects every other area of a person's life.

"When you change your emotions, you can change the expression of your genes (turning some on and others off) because you are sending a new chemical signal to your DNA, which can then instruct your genes to make different proteins—up-regulating or down-regulating to make all kinds of new building blocks that can change the structure and function of your body." (Dispenza, 2019).

Through TTT Integration, leaders are supported to personally connect to and experience their leadership around DEI topics in a way that utilizes their own drivers as motivation for taking personal responsibility in the application of this work to the organization at large. This prepares you to lead your people through the TTT Integration process, as shown in Figure 3. Through authentically engaging in this process, layers of oppression are liberated, leading to increased understanding, empathy, and allyship / accompliceship.

TTT Integration is a personal experience and highly subjective, based on your lived experiences, schemata, and how contextual factors influence your perception in the moment (Rey et al., 2017). TTT Integration objectively outlines five generally consistent processing phases, each including a tool to develop a competency (tool: competency). The five phases are: observation: awareness, acknowledgement: acceptance, compassion: forgiveness, trust: empowerment, and commitment: value-aligned action. They often occur in the order presented but may occur in any order. The following is an explanation of each of the phases.

A. Observation [releasing ignorance]: Awareness

Without knowing something, there is no power to address it. In the case of holding cognitive dissonance around a topic to avoid an uncomfortable truth, this is when you become aware of the cognitive dissonance.

"I didn't know," and "I don't know what to do" are easier to say than admitting that you do have an idea, and if you truly did not, you could just as easily Google search to find the countless vocabulary definitions, articles, and lists of things you can do based on a given scenario.

In order to access the awareness, you must observe yourself, notice where cognitive dissonance lies and, when you feel something within yourself that opts for confusion, pause: notice your pattern to keep you in perceived ignorance. Are you playing Devil's Advocate? Feeling confused? Getting overwhelmed? Experiencing anxiousness? Shutting down, tightening or tensing up? These are all indications from your mind, emotions, and/or body that you can observe to develop awareness.

B. Acknowledgement [releasing avoidance]: Acceptance

This is one of the most powerful points. This is where you penetrate the surface and become aware of how you operate, how you behave, and your deeper held formerly subconscious beliefs. The previous step, observation, now empowers you to acknowledge your experience. Acknowledging places where what you say might not match what you do can be challenging, but necessary in order to experience acceptance.

Acc eptance is simply acknowledging and welcoming the truth of where you are on your journey. Doing so gives suppressed emotions the opportunity to arise, e.g., fear of changing your actions based on your family beliefs, guilt for having more than, shame for feeling less than, blaming another for how you have come to act this way, anger and resentment. Anything can come up based on the life you've lived thus far.

C. Compassion [releasing judgment]: Forgiveness

When unconscious emotions come to the surface, it is common to be in self-judgment. This could include making yourself feel wrong for your feelings, hopelessness, helplessness, righteousness, or anger. The pathway forward is practicing compassion for yourself. Giving yourself compassion for this experience of your humanity. Selfcompassion plants seeds of empathy and compassion with others. As you embrace all parts of you, it becomes easier to embrace the humanity of others as well.

D. Trust [releasing fear]: Empowerment

Experiencing compassion and forgiving yourself for internalized oppression creates space for two things:

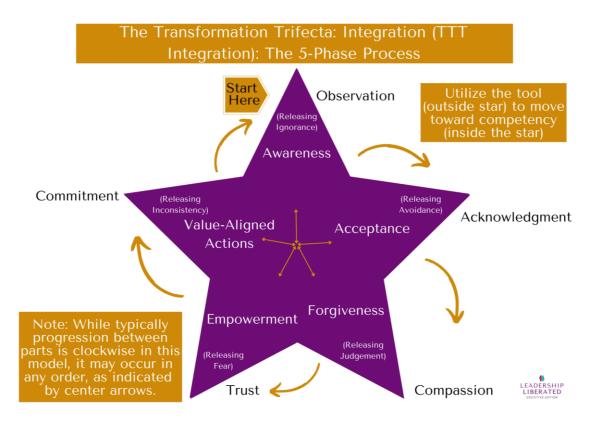


Figure 3: TTT Integration: The 5-Phase Process. This figure shows the five phases of integration. Engage TTT Integration by utilizing the tool of observation (written outside of star) to develop the competency awareness (inside of star). After this phase, standard movement is clockwise to the next phase by utilizing the tool of acknowledgement to develop the competency of acceptance, and so on. Note: Phases can occur in any order, as is demonstrated by the multidirectional arrows at the center of the star.

1. You free up the ample energy in your body that was required to suppress the emotions (Sarno, 2001).

2. You experience less fear around this topic because you worked through your own vulnerability in an empowering way. This builds your muscle of self-trust.

With additional energy accessible to you, you are able to experience more of your power and hence your empowerment. What does empowerment mean in this context? That you have cultivated confidence in your own self-leadership to traverse some of the deepest and most difficult topics, conversations and experiences to reach greater resolution within yourself. It is immediately applicable for how you can lead others inside and outside of the workplace.

E. Commitment [releasing inconsistency]: Value-Aligned Action

From this place, you can choose to show up more fully as a leader around sensitive matters. You get to look within at your values and decide what aligned action looks like without unconsciously protecting unresolved emotions within. You can further develop your intrinsically motivated and value-aligned way of practicing your leadership and leading by example.

As you gain a more nuanced understanding of how these operate within yourself, it becomes easier to both empathetically observe these experiences in others and create structures to lead your organization to its collective version of this. This grows an inclusive culture that fosters belonging.

4.3 Application of Integrate to the DEI assessment to allow the leadership to digest assessment learnings so they may discover the next action steps

TTT Integrate provides a guided path that may be accessed through a myriad of techniques for the organizational leadership to engage while administering the assessment. Their experiential understanding of integration will prepare them to roll out organization-wide TTT-integration DEI training and implementation in the phases following the assessment.

The key conditions that allow for integration are: 1) clear intention of integration, which can be more specific if the TTT Integration Phase (Figure 3) is identified (for example: Acknowledgement [releasing avoidance]. Acceptance); 2) attention is placed on your internal experience (body sensations and emotions) and not your thinking mind; 3) you consciously choose to go through the integration process rather than resist it. Resistance is typically enacted through the thinking mind, going over a story of defensiveness, and generally associated with having a fixed mindset (Dweck, 2015). This blocks integration. Use the three steps outlined here in a process such as outlined below.

Since DEI is a highly charged topic that often evokes emotional response, it is important to teach simple integration methods early on in the leadership training, as well as early on in staff-wide training.

Example Hypothetical Organization Spotlight: Integrate

Upon reviewing the DEI Assessment findings, it became clear that a full spectrum of experiences and viewpoints exists within the organization. This included viewpoints of those who have experienced oppression within this organization due to their identity, those who are invested in DEI but have not experienced oppression, all the way to those who feel threatened by this initiative and are very resistant to change. This is completely normal. It is also unexpected and upsetting to those who did not realize such discrimination exists—often those with most privilege are most surprised. Looking at the data that surfaces these issues is one of the most challenging stages of the process as it is evocative of strong feelings.

Some examples of integration techniques that we used include:

- 2-Question Check-In: This technique focuses on part 1 of TTT Integration: Observation. In the case that you notice that you are having an emotional reaction, pause. Notice the discomfort. Take deep breaths and put your hand on your heart. Ask these two questions: 1) How do you feel? 2) What do you need? After each question, pause, listen for a feeling response, then reflect that experience back to yourself. For example, upon asking how you feel, you notice sadness. Reflect back to yourself, "I see that you feel sad." Breathe, notice. Ask each question and reflect back a couple times. Notice how you feel after the process. You may feel lighter. Or you may recognize that you did not know how strong you felt and that an additional integration exercise would be supportive.
- Acknowledgement Exercise: In this 20-minute check-in exercise, a partner (fellow DEI initiative leader) and time-frame for the checkin are assigned. Participants are given a conversation template such as described here: the partners begin with a 3-minute centering practice to become present to their current thoughts, feelings and sensations in response to their current experience of the DEI initiative. Person 1 then asks Person 2: What has been your personal experience of the DEI Initiative? Person 2 shares for 3 minutes. Person 1 then gives reflections to Person 2 including: 1) Acknowledgement of their feelings / experiences (empathy); 2) Things they shared that you have either felt before or that inspired you; 3) No advice-giving. Then switch. After both rounds, each debriefs what they received from the check-in.

There are vast integration techniques that your organizational leadership team could be encouraged to engage in including yoga, taking a walk, time in nature, sound healing, guided visualization, exercise, breathwork, gazing at a beautiful view, or meditation. The important elements that make the activity an integration technique are the three conditions mentioned above: integration is the intention (specifically the TTT Integration Phase that resonates with your current experience), attention is placed on internal experience rather than thought, and you consciously choose integration rather than resist it.

One dynamic example of integration that our co-author LiSára uses with her clients is Sound Healing. Here is a more in-depth explanation of this technique and its impact.

4.3.1 Case study: Sound Healing

In employing TTT Integration, the intention is for you to experience a new perspective that unlocks new insights that ultimately lead to new behavior. Understanding the role physiology can play in facilitating this, we look to explore the example of sound healing, also known as sound therapy, that provides physiological experiences through evoking brainwave states that give access to information that lies beneath cognitive processing. Here we use certain frequencies to take brain waves into states of consciousness that you do not experience in your normal daily functioning without specific tools or substances that induce them.

For example, with binaural beats – 'bi' meaning 'two' and aural meaning 'ears'– two different frequencies simultaneously played in each ear can create these brainwave states (Reybrouck & Brattico, 2015), support calm if in a stressed state, and potentially contribute to self-awareness and subconscious reprogramming, among other benefits (Smith, 2019).

Experiencing a deeper level of self-awareness can create empathy toward another who is, for instance, part of a challenging dynamic, since it creates a shared human experience despite demographics, job titles, pay grades or location. We have not tested for this specifically but hypothesize that teams who experience this together over the long term would experience positive shifts in team dynamics.

Since integration operates through emotion and altered brainwave states that inform shifting physiology, rather than through the thinking mind, music may evoke such states.

Unlike the potential difficulty of a typical meditation, where one sits in silence with the challenge of quieting their mind that has been conditioned to daily overstimulation by devices, emails, schedules and other priorities vying for their attention, frequencies of sound give the mind something to focus on.

Experiencing sound healing that is designed to shift brain wave states in ways that can create deeper self-awareness is a powerful tool for you to connect with your feelings and your in-body sensations. It helps with self-regulation, for example noticing anxiety and bringing yourself back to homeostasis so that you can carry on with your work as a leader, especially in the middle of a meeting, tight deadline, or high-stakes situation. Because many experiences with identity are tied to this work, there are often visceral feelings or unresolved trauma that can come up. Having a modality that connects you with your body without having to relive any traumatic scenario (Menakem, 2017) is powerful for maintaining psychological safety in the workplace while experiencing liberation inside of yourself.

Moreover, the right sound can predictably change the tone in any room where it is played. Just as no movie would be scary without its accompanying soundtrack of jarring sounds, various sound frequencies can support reduced stress reduction and calm for all (Joudry, 2018). This translates to greater receptivity to engage not only the work of DEI, but overall individual contributions in their organizational roles.

5. Step III: Act

5.1 Why Act following integration of learning is most impactful to create a pathway toward meaningful change

It is when new behaviors emerge from the learning and integration process that a round of the growth process has resulted in a step forward toward liberating your own leadership. TTT invites reflection upon your values and opportunities for application so that you may discover how to take a step forward that is meaningful in your context. This work is never prescriptive since integration includes a process of digestion and application to your own situation allowing for authentic behavior change that emerges from an inner shift rather than "performative allyship" or other surface-level action. Each person who changes an aspect of their daily habits locally contributes to systems change and cultural transformation systemically over time.

5.2 Prioritization of Act based on DEI Assessment findings

The Act phase of the DEI Assessment involves preparing for implementation by identifying and prioritizing the organizations top opportunities for growth while also taking "low hanging fruit" actions. This process includes distilling the assessment data with care to center the voices from those who carry marginalized identities. The Integrate phase which precedes this phase allows a deeper understanding within the leadership team to emerge. The Act phase entails organizing and categorizing the data so that the underlying root causes emerge from this process. The distillation into the top 3 breakthrough objectives most important to address the root cause are often identified by a DEI consultant or in-house DEI professional. Each breakthrough objective will cover an array of specific issues (as exemplified in Table 1 below) so that at the completion of the DEI Assessment, there is a clear focus to guide the next phase, Implementation Planning.

Concurrently, the Act phase is a great time for organizational leaders to take personal actions. These "low hanging fruit" actions are responsive to your new DEI knowledge that is integrated, aligned with your own values and sphere of influence, and resulting in small wins that build momentum for the larger changes to come. Examples that leaders we have worked with have done include adding the option for employees to add their pronoun in their signature block, using more inclusive and empathetic language to company-wide communication, speaking up as an ally in a large meeting where that is typically not done, or adding a feelings check-in at the meeting start in order to bring more humanity / connection to the team. These small, simple examples have a reverberating impact in showing that change is coming.

5.3 Application of Act by creating breakthrough objectives that address root challenge in response to DEI Assessment

Internalizing what has been learned from the DEI Assessment process and then putting it into practice (Act) can result in incremental changes that signal the organization is increasingly prioritizing and making progress in its DEI journey.

Example Hypothetical Organization Spotlight: Act

The DEI Assessment findings help the organization to identify their key DEI strengths and opportunities for growth. In this example, their top strength was the org-wide support of the DEI initiative as gleaned from the survey and Town Hall meetings. While there was a wide array of challenges to meeting their top goal, they were distilled into the 3 top breakthrough objectives that were aimed at addressing the underlying root issue blocking achieving their DEI top goal. Each breakthrough objective included a bulleted list of the challenges, what success looks like, sub-objectives, tactics, and discussion points to be investigated. For example, one of the breakthrough objectives that would support the realization of their DEI Initiative top goal was "Hire a more diverse workforce." Below in Table 1 is an example of one bullet (of many) from each category. More details on how to increase organizational diversity through the hiring process is shared in Appendix B.

The DEI assessment results will easily provide a long list of bullet points to be prioritized into a short list of top sub-objectives to guide the next phase of the initiative. The tactics were gathered from the DEI Assessment findings, but not yet considered as this phase is about clarifying the top 3 breakthrough objectives that address the root of the issue underlying the top DEI initiative goal.

Act following integration supports the distillation of root causes and a mindset that will lead to creative solutions that come from shifting perspective during which new neural pathways are developed and may become established with repetition. This process leads to embodying a more nuanced understanding of what belonging, psychological safety, inclusion, equity, growth mindset, and equitable leadership development are and the most impactful areas to *Act* to increase them in the context of your organization.

5.4 Measuring progress of Act after the DEI Assessment

In order to measure progress toward stated goals, metrics aligned with the breakthrough objectives are necessary. For example, an organization may want to measure employee experience, company makeup (e.g., diversity among board members), and various aspects of the employee lifecycle (i.e., recruiting, interviewing, hiring, promoting, etc.), as guided by backward design. The six foundational metrics (shared in section 3.3) create a baseline to identify gaps / top areas for action and shed more light on the additional survey responses designed to measure unique DEI goals that are inextricably related to these fundamentals.

The two most common and effective ways to measure progress and to identify areas for improvement Table 1: An example of one of the three breakthrough objectives that was distilled from the DEI Assessment shown with examples of each subcategory.

Breakthrough Objective: Hire a more diverse workforce

Challenge:

• A lack of a diverse workforce leads to a lack of perspectives resulting in less creativity, innovation, and product and service inclusion.

What success looks like:

• Hiring a more diverse workforce including race and ethnicity, gender identities, sexual orientations, disability, and additional marginalized identities.

Objectives:

• Create a more inclusive recruitment, interviewing, and hiring process.

Discussion Points:

• How are our core DEI values and expectations communicated in the interview process?

are to conduct surveys and/or personal interviews. A Gartner survey (Romansky et al., 2021) found that "setting goals and tracking DEI progress through metrics" was the top priority for DEI professionals in 2021. For almost every question on a given survey, there should be a corresponding benchmark that represents the goals an organization is trying to achieve. This is a step beyond solely measuring representation, but instead taking into account personal experiences across various demographic groups.

In 2015, Culture Amp & Paradigm committed to an open-source collaboration to create a Diversity and Inclusion Survey (Culture Amp & Paradigm, 2015) that was designed to be the highest standard for measuring employee experience across various factors of DEI (as defined in Section 3.3). Tens of thousands of responses to this survey across industries and over time has resulted in standard benchmarks for the following metrics: belonging, psychological safety, inclusion, equity, and growth mindset. Please see Appendix A for more information on these metrics. One additional metric that we focus on in our approach to DEI assessments is equitable leadership development.

6. Conclusion

6.1 Next steps toward implementation after the DEI Assessment

Upon completion of the DEI Assessment (the first phase of a DEI Initiative) by utilizing backward design and applying the TTT framework, DEI strengths and opportunities for growth within an organization become clear, as well as prioritization of the areas to focus. While there are generally many different areas included in the opportunities for growth, the underlying themes and root issues will emerge, signally the most important area to focus during the subsequent planning and implementation phases.

We want to re-emphasize that many emotions arise in this process of bringing challenging areas out from under the rug of unnamed, unacknowledged systemic oppression. This is why TTT Integration was developed so that it is understood that this is all part of the process and there is no rush. By continuing to engage the process and strive for consistency in alignment and forward momentum with the DEI values and goals, layer by layer, Leadership Liberated is created over time for the benefit of everyone involved.

6.2 Connections to the ISEE PDP and putting TTT into practice

What does this all mean for the ISEE PDP community? Some of the key principles of the PDP are design, diversity and equity, and assessment. The strategies for designing and facilitating productive, healthy, resonant DEI discussions outlined by the authors embody these key PDP principles and put them into practice toward educating members of an organization to create a more inclusive culture.

Moreover, the strategies have been designed, tested, revised, and enacted into practice by an alum of the PDP program. The designers of the PDP are knowledgeable, motivated, and engaged in the ongoing practice of DEI professional development. They understand the necessity in providing training which recognizes and combats microaggressions, implicit bias, and stereotype threat (McConnell et al., 2020). The processes and products, while developed in collaboration with other experts in the field of DEI, include foundational elements backed by the research and development that is foundational to the PDP community, the PDP ways of knowing, and the community of practice. While backwards design is discussed in the PDP as it applies to science and engineering education design, the authors assert that the tools of PDP can and do have new meaning and usefulness when applied in organizational contexts to support DEI transformation. Furthermore, the authors contend that effective and transformative DEI design in broader organizational contexts, like STEM education, requires intentional, locally created assessment working from the end goal forward, as in backward design. In the context of this paper and the work in the domains of DEI, similar principles can be applied and, as the authors have proven through their own work, be extremely successful in creating safe, communitycentered, inclusive environments within organizations. DEI work that focuses on educating and involving leadership in the design of the assessment tools, integration, and end goals is a key precursor

to achieving real equity and inclusion in an organization. DEI in STEM and organizations, writ large, needs to move beyond checking a box and doing things "to people" and into more authentic discussions grounded in participants' lived experiences. This is still an evolving edge that TTT helps to make more explicit and accessible in ways that offer benefits to the PDP community of STEM educators, in addition to the industry of DEI organizational transformation.

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Appendix A

Standard benchmarks for measuring employee experience across various factors of DEI based on a survey administered to tens of thousands of employees across industries (Culture Amp & Paradigm, 2015). We additionally recommend considering Equitable Leadership Development as one of the foundational metrics. While it was not included in Culture Amp & Paradigm's study, a discussion of its importance is included below.

Belonging

An 80% benchmark score for the statement: I feel like I belong at my organization. According to the surveys, women of color and the LGBTQ femininealigned individuals tend to score 10-15% lower than the highest-scoring group (straight white men). The primary goal related to this metric is to minimize the gap between the lowest- and highest-scoring groups.

Psychological Safety

A 70% benchmark score for the statement: I can voice a contrary opinion without fear of negative consequences. Groups that are proportionately underrepresented or feel subject to be stereotypes naturally face more challenges to speak up. A plenteous 78% of white men feel like they can voice a contrary opinion while only 56% of Black women feel the same way.

Voicing a contrary opinion can lead to difficult conversations depending on a group's sense of psychological safety. One reason these conversations are challenging is because not everyone has the language and/or tools for communication in response to conflict that's based around identity. Thus, as a result of establishing shared language, tools for communication, and continuous experience navigating such discussions, the prevalence of difficult conversations over time is a key performance indicator (KPI) of improvements in psychological safety within a group.

Inclusion

A 60% benchmark score for the statement: Perspectives like mine are included in decision making. While a leadership team may not represent every employee, it is imperative to make decisions with the support of underrepresented employees. It yields a stronger sense of inclusion that results in higher engagement and retention. The goal is to leverage perspectives and voices that ideally match the organization's customer base. Every point-of-view needs to be acknowledged in the same way that the team creates space for everyone to share new ideas or first-draft thoughts that may not be optimal or executed. Part of building a more psychologically safe space for brainstorming and problem-solving means asking for more information about how each point-of-view is developedeven if it is a point-of-view with which other staff or leaders disagree. It could look like advocating for a colleague who has not had an opportunity to join in the discussion to actively participate. A discussion does not equate to agreement, but moving the conversation forward can help to develop a better understanding of how each member of the organization thinks about issues, objectives, and goals. Some alternatives to this survey question include: If I express a different point-of-view, it is acknowledged and appreciated as different. Or, If I express a different point-of-view, it is acknowledged as different rather than right or wrong.

Growth Mindset

An 82% benchmark score for the statement: My organization is committed to people improving their talents and abilities. It's critical to consider how the statement is framed or what description accompanies it on the survey. This is an example of how to create more context for participants to consider the depth of their organization's commitment to its people's personal and professional development: "Not only does my company believe that people can greatly improve their talents and abilities, but it also invests in them." Open-ended notes may be available for respondents to share additional thoughts.

This is about assessing the organization's growth mindset. Staff should know that their skills are not fixed at their current level forever. Any concern with meeting this benchmark can be addressed in evaluating key areas of opportunity including:

- The frequency of feedback cycles (e.g., employee reviews)
- The kind of messaging employees are getting about performance and feedback

• The practice of decoupling performance conversations from those about feedback and development

Equity

A 56% benchmark score for the statement: Administrative tasks that do not have a specific owner are fairly divided. Instead of asking directly about microaggressions—which can be triggering—respondents typically perceive administrative tasks as actionable, personally relevant, and easy to remember.

Action that results from intellectual understanding and embodied integration may be measured by an assessment that measures behavior change.

Equitable Leadership Development

Systemic equity is defined by "...the transformed ways in which systems and individuals habitually operate to ensure that every learner (leader)–in whatever learning environment that the learner (leader) is found–has the greatest opportunity to learn enhanced by the resources and support necessary to achieve competence, excellence, independence, responsibility, and self-sufficiency...for life" (Magdaleno, 2016).

The frequency of conversations among leadership about the prevalence of difficult conversations within their organization is one measure of growth in the realm of equitable development. Concrete practices that both afford leaders the opportunity to engage in equitable leadership development and measure its progress can help gauge its magnitude of growth. For example, leadership meetings in which a team can dynamically examine their values, privileges, and biases (i.e., who is excluded from, yet directly impacted by, processes that incorporate organizational decisions?). Creating protocol to ask these important questions can reveal how well the team's intention is matched with the actions they are taking.

Other examples of these practices include creating a vision (statement) for equitable leadership and

criteria for fulfilling their vision. Much like the performance review process for employees at a given organization, leaders who set recurring meetings to review how they measure up against preset criteria specific to their equitable leadership goals are most likely to sustain ongoing equitable leadership development with the benefit of increasing the diversity of their executive leadership team which has huge implications throughout the organization.

Appendix B

Example of Act: More Diverse Hiring

The following discussion could lead to a Breakthrough Objective to support an organization's goal of increasing the diversity of its staff and/or leadership. Consider the employee experience through their entire lifecycle-recruiting, interviewing, hiring, promotion/progression. When an organization experiences a growth spurt, it faces the dilemma of finding qualified candidates while simultaneously committing to promoting diversity within its applicant pool. Before and at the precise moment an organization realizes it needs a new role that owns a specific set of responsibilities, it becomes evident that those responsibilities are shouldered by other employees in the meantime. Current employees temporarily own these responsibilities and related tasks that have little or nothing to do with their own core responsibilities. At that point in time, all employees really wish the organization would swiftly hire someone designated to take the responsibilities that aren't related to everyone else's role-a type of pressure on the hiring team that leads to the prioritization of filling the role regardless of DEI goals in the hiring process. It is fairly common for the first qualified candidate to be hired for a new role when the organization has a set amount of time before it begins to experience considerably negative effects on organizational productivity. However, as a result of Integrate, the organization's leadership and/or hiring team may naturally ask itself questions like

these with respect to *Act* metrics that support progress:

- Do we set expectations around promotions and progression (including performance reviews, compensation, and raises) in recruiting and interviewing new candidates?
- What is the process for asking for a raise or promotion? Is it based on tenure or deliverables, or something else? Why? Is that clear throughout the interview process?
- How is performance evaluated? Do we evaluate how well employees embody our organization's core DEI values, or is the evaluation based on only/also other aspects? How are these expectations communicated in the interview process?
- When it comes to performance reviews, compensation, promotions, and/or upward mobility at our organization, what do employees believe should be evaluated that currently is not taken into account?
- How do we discuss pay equity and embody pay transparency within our organization?