THE DNA OF TEACHING:

Exploring How to Weave Together Culturally Responsive and Sustaining Education and Curriculum-based Professional Learning

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Teaching Lab

AN EXPLORATION OF CULTURALLY RESPONSIVE AND SUSTAINING EDUCATION

At the beginning of the 2020-2021 school year, Teaching Lab embarked on a learning and exploration journey to bring a more explicit focus on Culturally Responsive and Sustaining Education (hereafter referred to as CRSE) into the professional learning programming we create and deliver across the nation. We learned with and from teachers, school leaders, and district and state education agency leaders. Our own personal experiences as students in our nation's schools also informed our work, as Dr. Vaishali Joshi, Senior Director, Impact & Innovations, reflected:

> ***[During my own K-12 experience as a student,] I can remember and consider all the ways I felt like an 'other' or an outsider and just longed to have my identity celebrated in a way that was not touristy—but rather to engage in learning that honored deeply who I am.***

We aimed to leverage the expertise and knowledge of CRSE researchers and scholars to support educators in understanding how to integrate CRSE into their instructional and leadership practices—in their use of high-quality instructional materials and associated teacher professional learning. The ultimate goal of this endeavor was simple, yet lofty: *Stop harming students and create classroom environments where all students thrive and receive joyful and rigorous instruction in identity-affirming spaces.*

What is Culturally Responsive and Sustaining Education?

The term Culturally Responsive and Sustaining Education represents a rigorous field of theory, study, and practices. In short, scholars agree that effective teaching combines academically rigorous content; social, emotional, and cognitive development; and culturally responsive practices (Ladson-Billings 1995; Gay 2000; Hammond 2016).

Scholar Geneva Gay continues to explain that it is: "...using the cultural characteristics, experiences, and perspectives of ethnically diverse students as conduits for teaching them more effectively" (Gay 2002, 106).

At Teaching Lab, we continuously revere and study the original scholars of CRSE, while also referencing the work of more recent researchers and practitioners, like Zaretta Hammond. For the purposes of our original learning agenda, we based our work on Hammond's view of Culturally Responsive Teaching as a means and approach for "building brain power" and encompassing the social-emotional, relational, and cognitive aspects of teaching and learning.

She states that Culturally Responsive Teaching is:

> ***An educator's ability to recognize students' cultural displays of learning and meaning making and respond positively and constructively with teaching moves that use cultural knowledge as a scaffold to connect what the student knows to new concepts and content in order to promote effective information processing. All the while, the educator understands the importance of being in relationship and having a social-emotional connection to the student in order to create a safe space for learning*** (HAMMOND 2015, 15)

We began with this overarching definition to drive our work because: 1) its inherent connections to learning science and 2) academic content, cultural responsiveness, social-emotional development, and building socio-political consciousness are tightly interwoven.

any student can learn anything

Enacting this definition requires us to critically understand and subsequently disrupt patterns of harm our country has inflicted on those most marginalized—particularly the communities of color that cascade through our education systems. In our work, we have come to understand and name that:

- Historically, curricula and instruction were deemed "high-quality" without considering culturally responsive criteria like student identity, culture, language assets, etc.

- Instructional materials and the associated supports we provide through professional learning need to be interrogated, supplemented, and, sometimes, completely revised to ensure all students can bring their unique experiences to learning. Teachers can and should honor and leverage these and students' identities to support intellectual and emotional development (Gay 2002).

- To remove barriers for all students to succeed, all educators must acknowledge the ways a history of white supremacy (Okun 1999, 2021) has perpetuated inequities in our education system, as well as confront their individual and collective roles in perpetuating a harmful dominant culture (Love 2019).

With these beliefs at the forefront, we began to look at the ways high-quality instructional materials and aligned professional learning contribute to–and perpetuate–white supremacy and racism so we could dismantle dominant conceptions of quality, redesign our professional learning, and ultimately, redefine quality.

This is because, as Tara McDonald, Partnerships Manager at Teaching Lab states:

"CRSE needs to be at the heart of what we do. ***We can't have equitable education without Culturally Responsive and Sustaining Education."***

The following describes what Teaching Lab did to enact these values and make progress against these goals.

"We can't have equitable education without Culturally Responsive and Sustaining Education."

TARA MCDONALD, PARTNERSHIPS MANAGER AT TEACHING LAB STATES

THE PROCESS OF LEARNING

Over the last year, we sought to answer several questions to better integrate a focus on CRSE into curriculum-based professional learning:

- What skills, knowledge, and mindsets do our team members need to create and deliver responsible and high-quality programming with our partners?
- What do teachers want and need?
- How can professional learning support teachers to enact Culturally Responsive and Susta-ining Education? What does professional learning need to include and focus on?
- What do instructional- and system-leaders need to learn and focus on to support teachers and change systems?
- How do we evaluate the success of our CRSE-focused work? What are the most commonly used CRSE evaluation measures in the field and do they work for us?

Our work fell into three major buckets:

1) Team learning
2) User-centered research to inform our work
3) Piloting of professional learning products, services, and tools

During the 20-21 school year, we engaged with teachers, school leaders, and district and state leaders through our CRSE-focused programming. Here is a brief summary of those with whom we worked:

MATH

152
K-12 teachers engaged in Math Bootcamps

from

53 schools across
14 districts in
6 states

ELA

72
K-5 teachers in the inaugural cohort of a CRSE-focused PLC

from

13
schools across New York City's District 11

STATE FELLOWSHIPS

120
District, State Education Agency, and Regional Service Center Leaders from across Wisconsin and Nebraska

Below, we describe in detail the major areas of work we undertook.

Team Learning

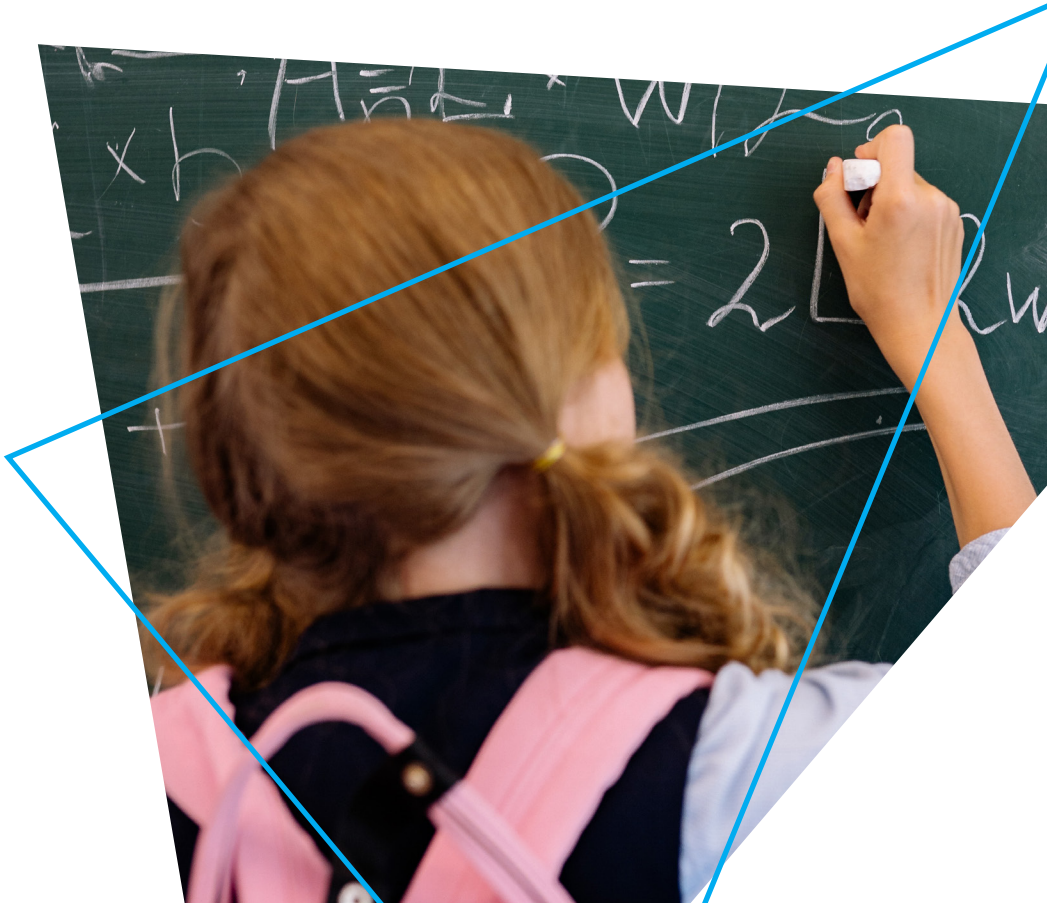
We set out to develop internal team capacity and knowledge grounded in the research base on CRSE, particularly the work of **Dr. Gholdy Muhammad**, **Zaretta Hammond**, **Dr. Sharroky Hollie**, and **Dr. Julia Aguirre**, in order to support educators to improve curriculum-aligned instruction for student subgroups, specifically Black, Latino/a/x, EL-designated, and/or students experiencing poverty.

To do this, we established strong collaborative working relationships with several experts in the field, including Kao Moua Her and Dr. Julia Aguirre. Kao Moua Her is a Wisconsin educator who is part of a grassroots movement to train, coach, and support districts and schools to develop and improve systems for educational equity. Dr. Julia Aguirre, an author of *The Impact of Identity in K-8 Mathematics: Rethinking Equity-Based Practices,* is a professor of education whose work focuses on mathematics teaching and learning, culturally responsive mathematics pedagogy, and promoting access and advancement of mathematics education for historically marginalized youth.

Through the guidance of Kao Moua Her, Teaching Lab's State-level Team (consisting of professional learning content designers, implementers of professional learning, and leaders of teams) built knowledge of cultural responsiveness from a leadership lens. They engaged in team-building and learning activities, originated by Dr. Sharroky Hollie, called Validate, Affirm, Bridge, and Build (VABB™).

For the individuals participating, these activities helped reverse the illegitimate and negative effects done by the institutions of education and mainstream media. Additionally, after sessions with participants, Kao Moua Her supported the team in analyzing professional learning participant data through a protocol meant to deepen understanding of context in order to make meaning and reflect. Mandy Flora, Director, New Products & Services - State, reflected on the power of working with Kao Moua:

"As a woman of color, and someone who has a deep knowledge and passion for closing opportunity gaps, Kao Moua was able to review materials and give deeper insights through the lens of an end user. This ultimately led to a process for internal learning that would inform future design processes. [She] engaged directly with me and went through the Validate, Affirm, Build, and Bridge concept-based exercise. She made me a learner. She asked me to stop and write down ten strengths that I had, things like 'something others may not know,' or 'something that is part of your identity.' I wrote down things that are deeply personal to me and that don't often show up in workspaces. For me to be able to experience that, and for her to quickly see my humanity and to find connections to that and to my work, we were able to discuss bringing [forward] those strengths and assets, things that aren't normally in academic spaces; it was incredibly powerful."



Mandy then used these personal realizations to inform the design of State Leader professional learning, ensuring that participants in our session had a similar experience.

In collaboration with Dr. Julia Aguirre, Teaching Lab's Math Team (consisting of professional learning content designers, implementers of professional learning, and leaders of teams) conducted a study of CRSE and an audit of current materials to determine how to more intentionally embed CRSE principles into our professional learning content.

Additionally, team members engaged in an internal, collaboratively-led book study of Zaretta Hammond's *Culturally Responsive Teaching & The Brain: Promoting Authentic Engagement and Rigor Among Culturally and Linguistically Diverse Students* and attended a semester-long Culturally Responsive Education by Design PLC hosted by Zaretta Hammond, whose main goals were to collectively push our thinking and knowledge around CRSE and consider implications for our work. Throughout the course of three months, the team came together weekly after reading portions of the book and, in cross-functional groups, used various protocols to engage in discussions of the content. Each week, we formed role-alike groups to discuss implications, learnings, and questions specific to our roles.

Professional Learning Pilots: Services and Tools

We spent a large portion of our time and effort, alongside educators, creating and piloting tools and professional learning experiences that answer questions like: How do we adjust, adapt, and use OER (Open Education Resource) curriculum and associated instruction to stop violence against students, affirm student identities, and dramatically improve student experiences and learning?

Merisha Leak, Content Manager, underscored the importance of this work for Teaching Lab when she said:

"In some of the reports I've read, I see people saying things like, 'I just don't see CRSE happening [in my school],' and I'd like to get people to move beyond that to understand that [CRSE] is the fabric of teaching. It's not just checklist items that folks can embed into their system; it's just a part of what [teachers are] doing, and hopefully it becomes more inherent."

Throughout the year we collected data on teacher experiences and their mindsets, knowledge, and practice to learn from, inform, and refine our work. We leveraged several frameworks from well-established researchers in the field of Culturally Responsive and Sustaining Education to ground our work in professional learning with educators. In our math-focused professional learning, we reference and base our work in the 5 Equity-Based Mathematics Teaching Practices from *The Impact of Identity in K-8 Mathematics* (Aguirre, Mayfield-Ingram, and Martin 2013). In our English Language Arts-focused professional learning, we reference and leverage the Historically Responsive Literacy Model set forth by Dr. Gholdy Muhammed in her book *Cultivating Genius (2020)*. Specifically we:

- Carried out a pilot focused on Culturally Responsive and Sustaining Education and implementing the EL Education (EL) curriculum, or what we call a CRSE & HQIM PLC, with 72 teachers from New York City's District 11 (D11). Additionally, in the evaluation of this pilot, we piloted CRSE items from the Culturally Responsive Teaching Self-Efficacy scale.

- Revised our evaluation plan and identified areas and instruments to incorporate into the evaluation of CRSE teacher mindsets and practices for SY21-22.

- With the support and thought-partnership of Kao Moua Her, worked to infuse a culturally responsive focus into our State-level High-Quality Professional Learning Fellowship.

- Revised and developed Math Bootcamp professional learning sessions, aligned with Illustrative Math, EngageNY, and Zearn, focused on developing strong student mathematical identities and supporting teachers to engage in culturally responsive and equitable practices. We piloted these sessions with over 50 schools across six states.

More details on what we learned from each of these engagements are included below.

CRSE & HQIM PLCs

We designed a five session learning sequence to be implemented virtually in a Professional Learning Community (PLC) and ran a pilot of this with 72 teachers in grades K-5 from various schools across New York City's District 11 (D11), located in the northeast Bronx. The series was designed to equip teachers with the knowledge and skills to successfully implement CRSE in their daily instructional practices including planning, assessment, and student-facing instruction. More specifically, teachers learned to use each of their students' unique cultural identities and skill sets to improve academic achievement, cultural competence, and sociopolitical consciousness. They did so through a structure called Learn, Act, Change in which participants studied research and evidence-based practice (Learn), applied their learning to the planning of instruction (Act), and reflected on implementation and sustainability (Change).

Specifically, teachers pursued the following objectives:

HEAD:

- Build knowledge of Culturally Responsive Pedagogy (CRP) and Culturally Responsive and Sustaining Education (CRSE).
- Reflect and think of ways that CRP connects to the EL curriculum and New York's Culturally Responsive-Sustaining Education Framework.
- Use EL's Total Participation Techniques (TPTs) and protocols to support student agency and equity of voice.

HEART:

- Understand that strong instruction and access to culturally responsive grade-level work are the core of an equitable classroom.
- Understand that there is a connection between EL Education's Habits of Character and culturally responsive practices.
- Engage as a professional learning community to strengthen instructional practice and deepen critical consciousness.

HABITS:

- Continuously ground instructional decision-making in principles of effective and equitable instruction.
- Make use of strong frameworks for planning at both the unit and lesson level and understand that planning allows for intentionality in instructional decision-making.
- Engage in reflective lesson planning in order to prepare for effective and equitable instruction (in-person and virtually).

Participants reported positive perceptions of and satisfaction with the CRSE & HQIM PLC including being satisfied with the length of the entire PLC series as well as the duration of the sessions. For instance, in an end-of-session survey, over 95% of participants agreed or strongly agreed that the topics were relevant, facilitation was clear, the facilitators built a community of learners, they felt a sense of community in the virtual environment, and they reported they would apply what they learned in the following four to six weeks. Additionally, participants reported that the CRSE & HQIM PLC components of Learn, Act, and Change supported their learning. See more data below.

Evaluation Plan Revision

We reviewed our existing evaluation plan and identified areas in which we should incorporate the evaluation of CRSE. Specifically, we integrated CRSE-related outcomes in key areas of our School Year 20-21 evaluation plan that directly connect to our Theory of Evaluation (see below), specifically: participant reactions, participant mindsets, participant practice, and student learning experiences. First, we added items to our End-of-Course survey to understand participant perspectives on how well the course supported them in being responsive to students' backgrounds, cultures, and points of view.

Second, we researched reliable and valid CRSE scales for teachers and students. Based on this process, we piloted items from the Culturally Responsive Teaching Self-Efficacy (CRTSE) scale as part of the evaluation of the D11 CRSE & HQIM PLC pilot. Using the results, we identified items to incorporate into our twice-a-year self-reported educator surveys, which we will use in all of our partnerships this upcoming school year. Additionally, because we place a strong value on centering student voice and experience, not just in instruction but also in our research methods, we reviewed the Student Measure of Culturally Responsive Teaching (SMCRT) scale which is adapted from the CRTSE to understand whether and how students experience CRSE practices in the classroom. We added items from this scale to our twice-a-year Student Survey which correspond to our selected CRTSE teacher items.

THEORY OF EVALUATION

We will integrate a **CRT focus** into our evaluation of **participant reactions, mindsets** and **practices** as well as **student learning experiences.**

	Participant Reactions	Participant Knowledge	Participant Mindsets	Org Supports and Change	Participant Practice	Student Learning Experiences
What we're measuring	Participants believe PL is: high quality, relevant Net Promoter Score	Participants' content pedagogical content, and curricular knowledge	Participants' recognition of race and culture, expectations and beliefs, self-efficacy in implementing CRT practices	Lab Leaders lead learning Teacher owenership of PL Peer trust, connection, and social capital	Alignment of teachers' instructional practice to shifts and standards and CRT practices	Perception of learning environments Performance on class tasks and summative assessments
How we're measuring	End-of-session partipant survey End-of-course participant survey	Twice-a-year educator survey	Twice-a-year educator survey	Twice-a-year educator survey	Classroom walkthroughs Teacher evaluations results Twice-a-year educator survey Twice-a-year student survey	Student work samples Formative and summative assessments Twice-a-year student survey

State-Level Work & Culturally Responsive Lens

Our state-level fellowships support a variety of educators, including state and district leaders, Regional Service Center (RSC)[1] leaders, and school leaders, to shift the enabling conditions for High-Quality Instructional Materials (HQIM) and High-Quality Professional Learning (HQPL) across their state systems. Prior to this school year, Teaching Lab supported State Education Agencies (SEA) to build demand for HQIM and HQPL by developing their capacity. Our SEA partners experienced what high-impact math and ELA instruction and professional learning looks like and then produced context-specific action plans to achieve their state- or region-specific goals.

While integrating our learning on CRSE and curriculum-aligned PL into our state-focused work, we discovered a need to develop targeted and intentional support for culturally responsive leadership development. This occurred because as we explored integrating CRSE and curriculum-based PL into our fellowship sessions and had conversations with peers in the field, we revealed an opportunity to develop sessions that specifically focused on the needs of state- and system-level leaders. Our partnerships this year with Wisconsin and Nebraska presented the opportunity to pilot and study the infusion of culturally responsive leadership activities. We engaged in action research to make space for inquiry and iteration while responding to the existing state-partnership needs. The action research design pushed us and our SEA partners to study the current state of enabling conditions of culturally responsive professional learning and drove us to name the future state of this work.

[1] RSC is an acronym for Regional Service Center or Regional Service Agency or more broadly defined as an ESA (Education Service Agency). They support LEAs (Local Education Agencies) by providing services, often directly to schools. There are 30 states with Education Service Agencies, with varying structures for how they support the SEA (State Education Agency) goals and initiatives. They are typically regionally-divided throughout a state and serve multiple districts or counties with a variety of educational services.

Our action research included evaluating district & Regional Service Center (RSC) visions through a culturally responsive lens and the creation and piloting of four modules of activities focused on building culturally responsive leadership practices and mindsets.

The phases and associated activities represent what grew out of this action research approach while infusing cultural responsiveness into state-level leadership professional learning:

PHASE AND PURPOSE	ACTIVITIES & ASSOCIATED RESOURCES
Phase 1: Deepen conversations on racial equity with state-level leaders in sessions	To engage in this phase, Teaching Lab's design team revised readings, reflection questions, and pre-work activities to be leader-specific and attend to areas of cultural responsiveness most applicable to leaders' roles. As a result, the design team created a system assessment tool that leaders used to reflect and act in an equitable and culturally responsive way given the COVID-19 context. Using this tool, leaders reflected on various elements of equity pulled from "equity suggestions" from the article "Equity Literacy during the COVID-19 Crisis" from Equity Literacy Institute and determined if these elements were achieved, partially achieved, or not yet achieved. See Appendix A for the full version of *Equity Literacy During the COVID-19 Crisis: System Assessment.*
Phase 2: Study participant vision statements with lens of cultural responsiveness & equity focus	During this phase, Teaching Lab's design & implementation teams reviewed work products from participants with these questions in mind: • *Where does commitment to racial educational equity "show up" in visions for instructional excellence?* • *In what ways can Teaching Lab strengthen culturally responsive practices with leaders?* After reviewing work projects from participants and synthesizing the trends, the design and implementation teams created a resource to support those crafting visions in an effort to ensure leaders are working toward a Culturally Responsive Education system. This resource defines areas that are often considered when crafting a vision and names explicit and focused questions for guidance. See Appendix B for the full version of *Are We Working Toward A Culturally Proficient Education System?*
Phase 3: Intentionally build participant knowledge through focused activities to increase cultural awareness and the ability of state-level leaders to be culturally responsive	To engage in this phase, the design team connected cultural responsiveness to Teaching Lab's *Head, Heart, Habits, & Equity* framework in each improvement inquiry cycle designed to help leaders improve high-quality professional learning. As a result, we revised or created several resources that leaders engaged with during their fellowship sessions. These resources are intended to push leaders to first engage in self-reflection and instructional planning with a lens of cultural awareness and responsiveness in order to ultimately design professional learning for teachers that reflects these same principles. See Appendix C-F for the full versions of all resources.

Math Professional Learning

Our more intentional focus on Culturally Responsive and Sustaining Education in Teaching Lab's organization-wide programming began with our math professional learning, where we developed sessions to deepen educator critical consciousness to dramatically improve student math experiences and student learning. These sessions, included as part of an introductory professional learning experience we call Bootcamp, provided educators an opportunity to dive deeply into the 5 Equity-Based Mathematics Teaching Practices (Aguirre, Mayfield-Ingram, and Martin 2013). More specifically, educators used these as a lens for examining their own identities and their students' in order to develop a vision for equitable and effective mathematics instruction in their classrooms. Notably, we have created Bootcamp sessions focused on implementing several different OER curricula, including Illustrative Math, EngageNY, and Zearn.

During these sessions, educators pursued the following objectives

HEAD:

- Build knowledge of NCTM's Mathematics Teaching Practices and how they strengthen instruction to meet the demands of college-and-career readiness standards.
- Use Math Language Routines, instructional routines, and strategies to accelerate learning to intentionally create entry points into the content to allow access for all.
- Understand that high-quality instructional materials support ambitious and rigorous teaching because curricular design principles align with the instructional shifts as well as frameworks for effective, equitable, and culturally responsive teaching practices.

HABITS:

- Continuously ground instructional decision-making in principles of effective, equitable, and culturally responsive instruction.
- Make use of strong frameworks for planning at both the unit and lesson level and understand that planning allows for intentionality in instructional decision-making.
- Engage in reflective lesson planning in order to prepare for effective, equitable, and culturally responsive instruction (in-person and virtually).

HEART:

- Understand that strong instruction and access to grade-level work are the core of an equitable and culturally responsive classroom that lives up to the Equity-Based Mathematics Teaching Practices.
- Engage as a professional learning community to strengthen instructional practice and deepen critical consciousness.

According to the University of Maryland's external evaluation of the 6-week virtual Bootcamp implemented with over 50 educators across the state of New Mexico, principals reported that, "Teachers were able to better connect with students as individuals and with their lives and cultures outside of the classroom by 0.22 standard deviations, equivalent to a shift from the 50th to the 59th percentile. Additionally, teachers' delivery of culturally relevant practices, including holding students to high expectations for learning, increased 0.26 standard deviations, equivalent to a shift from the 50th to the 60th percentile" (Blazar 2021). Additional data from this partnership is reported below.

User-Centered Research

One of the biggest problems we face in education is that research might point us in a direction of what works to improve student learning but teachers often find this research inaccessible; effectively implementing research is also determined by the local context. This is why we embrace a “for teachers, by teachers” approach to program design, i.e., if a teacher says what they’re learning in our sessions isn’t relevant or meaningful, it is on us, the designers, to change our approach.

In order to center our “for teachers, by teachers” approach and ensure our programming solves the most important challenges teachers face, we launched the Teaching Lab Teacher Advisory Board. The purpose of this group is to develop Teaching Lab programming, through fast user-centered design cycles, that is relevant, responsive, and accessible to educators. Members of this group span all grade levels, subject areas, and geographic areas. The Teacher Advisory Board is currently made up of 15 teachers across four states: Louisiana, New York, Ohio, and Pennsylvania, where we have partnerships. Two teach K-2, three teach grades 3-5, six are middle school teachers, and four are high school teachers. Additionally, seven teachers’ subject area focus is ELA and six focus on Math; the two K-2 teachers focus on both subjects.

In the Spring of 2021, we conducted focus groups with Teacher Advisory Board members to understand teachers’ understanding of CRSE and challenges with implementation so that we could begin to design programming to address opportunities teachers raise when infusing Culturally Responsive and Sustaining Education into their daily practice.

THE PATH TO UNDERSTANDING

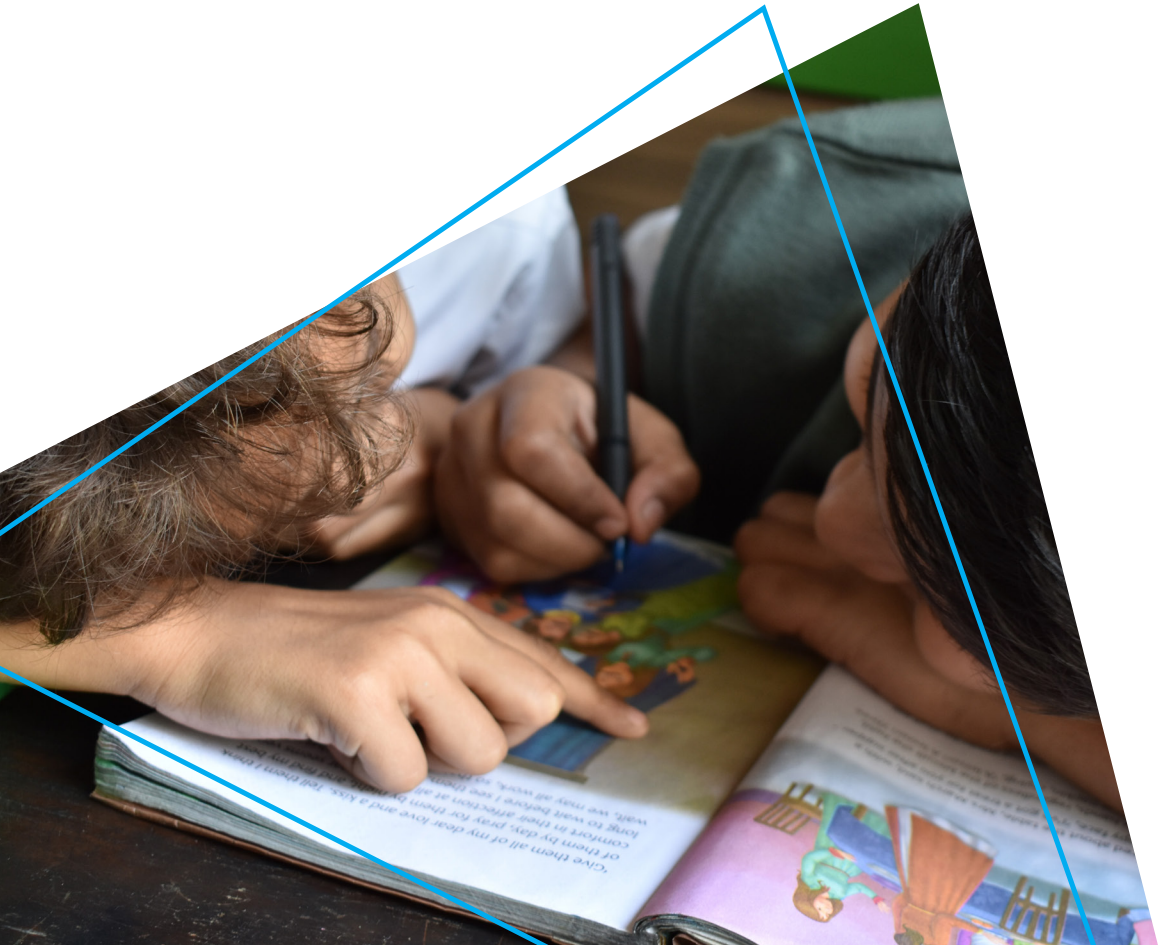
In order to build upon our research, we must properly unearth the seemingly disparate seeds of inquiry surrounding CRSE and develop them into practical and serviceable components within our programming and suite of professional learning services. The first step, however, is identifying the path to understanding: one that is efficient and high-impact, consistent with our lessons learned from this past year, and engages cohesively with our practice in the coming year. Below we outline several overarching themes that emerge that mark our path to understanding.

Defining our approach, naming frameworks is a critical step.

Strategy is about choosing what to do and, importantly, what not to do. When it comes to CRSE, it is exceptionally important to define your terms, understand why you are choosing to align with certain frameworks over others, know your history, and cite your sources.

Teaching Lab was founded as an organization to transform teaching and learning in the content areas, specifically ELA and math. The majority of our team members are experts in evidence-based math and/or ELA practices as well as teacher professional learning focused on getting this evidence into daily use with educators.

We are also a learning organization and we understand that we stand on the shoulders of giants and that we do not have all of the answers. It is important in this work to stay humble and learn from the exceptional thinkers, researchers, and leaders that have come before us, like Geneva Gay and Gloria Ladson-Billings, all in the pursuit to try out new things in local contexts. For these reasons, we decided early on that our approach to Culturally Responsive and Sustaining Education would be grounded in the content areas. This would be Teaching Lab's niche. We then sought out experts who connected theory and practice around CRSE with learning in the content areas (as described above).



Additionally, we learned from experts in local places where we have partnerships. For instance, in order to support the leaders in our state-level professional learning, we partnered with Kao Moua Her, an expert in culturally-proficient leadership who partners with the Wisconsin Department of Public Instruction. She supported our team in learning how to effectively engage leaders in becoming more culturally responsive in their leadership to improve educational equity.

Our partnerships range from the formal, like our partnership with Dr. Aguirre to revise and review our math professional learning to truly ensure every teacher believes that every single student can learn high-level math, to the more informal, like team member-led book clubs focused on reading Hammond's *Culturally Responsive Teaching and The Brain*.

Through these partnerships, we learned we need to:

Know what we're talking about:
Definitions and frameworks are important to ground a team in learning and improving their work. Operating from a shared understanding promotes coherence and supports building a collective path forward. As a team, norming on frameworks and definitions allowed us to get clear so we could be clear with the teachers who engage in our professional learning. As Math Content Manager, Erik Reitinger named, "Infusing [CRSE] into our [professional learning] in a cohesive and explicit way also provides opportunities for teachers to experience what it may feel like to learn within a culturally responsive framework...We have a really unique opportunity to give teachers the experience of Culturally Responsive and Sustaining Education that they can then transfer to their own classrooms."

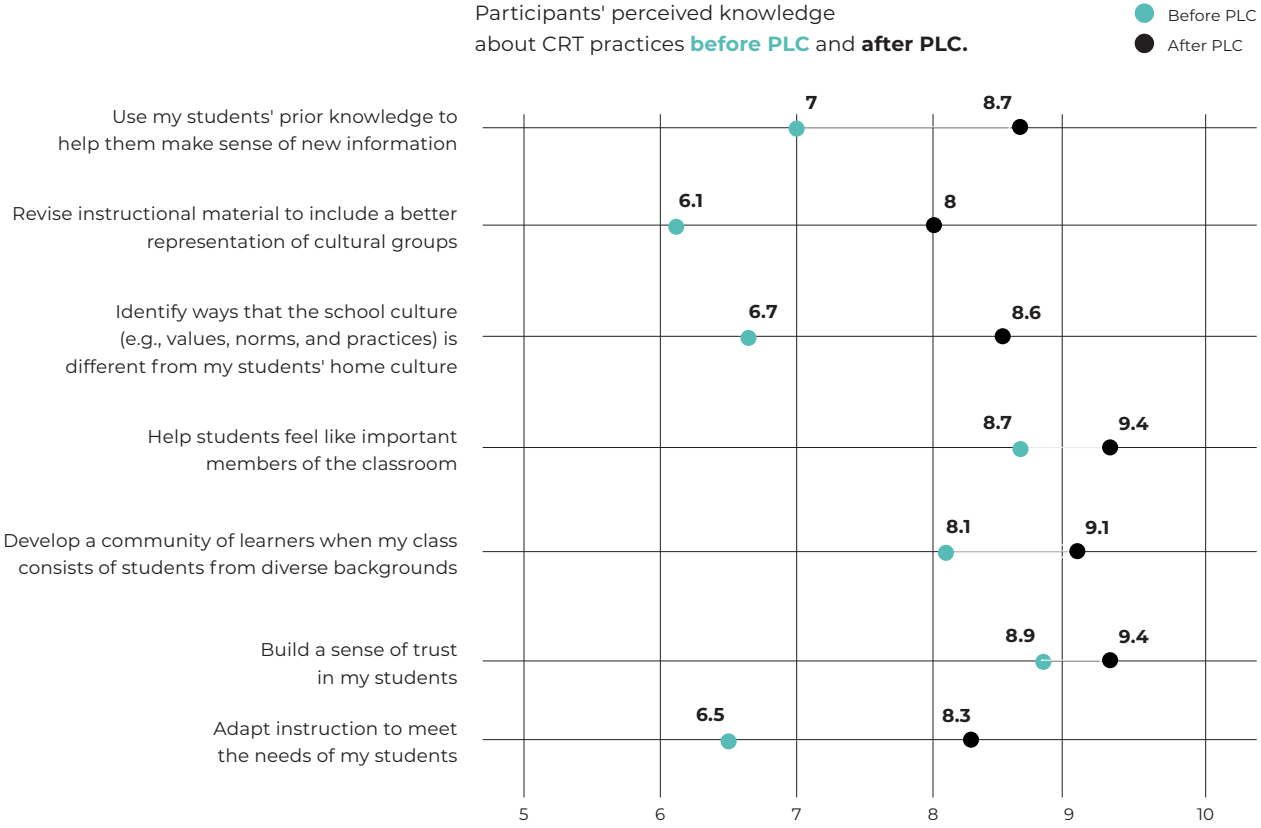
Focus on the goals, not what we've already done:
We work very hard to create best-in-class professional learning experiences for educators and leaders. It requires a special kind of vigilance to admit that what you've done before may not take you to where you want to go. One member of our math team said after meeting with an expert, "Maybe we should throw it out and start over." Given that students sit in schools across the country without consistently learning on grade level, it is important to be open to radically rethinking what we have done before in order to advance educational equity.

Get below the jargon:
Although definitions and frameworks are important, headline terms can be less important; for instance, if Teaching Lab uses the term "Culturally Responsive Teaching" and a partner uses "Culturally Responsive and Sustaining Education" but we are referencing the same history, researchers, and thinkers and using the same operational definitions, the headline terms can be adapted to align with the preferred language of the local context.

Teachers want and need knowledge building and practice opportunities related to CRSE

When given the time and space to engage in knowledge building, application, and practice opportunities, teachers report and reflect an increase in culturally responsive knowledge, confidence, and skills. In the evaluation of the inaugural CRSE + HQIM PLC series from our partnership with schools in New York City's District 11, participants reported **increasing their knowledge surrounding CRSE practices** after the PLC, especially those related to identifying differences between school and students' cultures, using students' previous knowledge to help make sense of new information, and revising instructional materials and adapting instruction with a CRSE lens

Participants' perceived knowledge about CRT practices **before PLC** and **after PLC.**



Additionally, participants expressed satisfaction with the series and its components. Specifically:

- **Over 95%** agreed or strongly agreed that the topics were **relevant, facilitation was clear,** the **facilitators built a community** of learners, they felt a sense of **community in the virtual environment,** and they would **apply what they learned.**
- **Over 90%** of teachers agreed or strongly agreed that they were **satisfied with the course** and that the **Zoom activities were well-designed.**
- **Over 80%** agreed or strongly agreed that the course helped them to **navigate online or hybrid learning.**

% That Agree or Strongly Agree

QUESTION	PERCENT
I am satisfied with the overall quality of this course	91.30%
The topics for this course were relevant for my role	95.65%
The Zoom meeting activities were well-designed to help meet the learning targets	91.30%
I felt a sense of community with the other participants in this course even though we were meeting virtually	95.65%
This course helped me navigate remote and / or hybrid learning during COVID-19	82.61%
I will apply my learning from this course to my practice in the next 4-6 weeks	95.65%
The facilitators facilitated the content clearly	95.65%
The facilitators effectively built a community of learners	95.65%

An external evaluation of services delivered to mathematics educators across New Mexico in spring 2021 conducted by Dr. David Blazar and his team of researchers demonstrated that, "Math teachers who participated showed substantively meaningful changes in their knowledge of math pedagogy, self-efficacy at delivering high-quality instruction, and self-reported practices related to high expectations for student learning" (2021). Specifically, the standardized change was approximately 0.35 SD, which means the average teacher moved from the 50th to the 63rd/64th percentile in the distribution of effectiveness (Blazar et al. 2021). Furthermore, the school teams that participated in focus group discussions with the external research team at the end of the training period described, "Strong interest in the content and materials, particularly around equity-oriented lenses about how to engage all students in the work, and scaffolds for accelerating learning" (Blazar et al. 2021).

During a focus group session with our Teacher Advisory Board, we learned that educators feel it takes time and work to really understand what CRSE is, unpack what is learned in PL, find ways to incorporate it into the curriculum and classroom, and engage in proper follow-up. One teacher highlighted this:

"I just think...a lot of times we attend PD, and there's never that concrete time to work with someone unpacking what was just done. For that real life practice in your classroom. It's a lot of theory, theory, theory, spirit, spirit, spirit, but [I wonder], 'How do I do this? [How do] new teachers [do this]?...What do I do with this information?' So allowing that time [is so important]. [We had] a great opportunity [during the PLC where the facilitator gave us] that time in groups to look at our lessons, look at our units to unpack it collectively with others within our district, because everybody has different experiences. So you gain a lot of knowledge that way."

"...everybody has *different experiences.* So you gain a lot of knowledge that way."

When they are given dedicated time in professional learning settings, we have seen a positive impact on educator mindsets correlated to increasing student outcomes. Results from the SY19-20 diagnostic and follow-up survey of 118 participants in both math and ELA PL indicate that participants either improved or maintained high scores on all constructs. Specifically, the percentage of participants who increased or maintained high scores was 86% for growth mindsets, 55% for having high expectations for all students, and 30% for recognizing race and ethnicity.

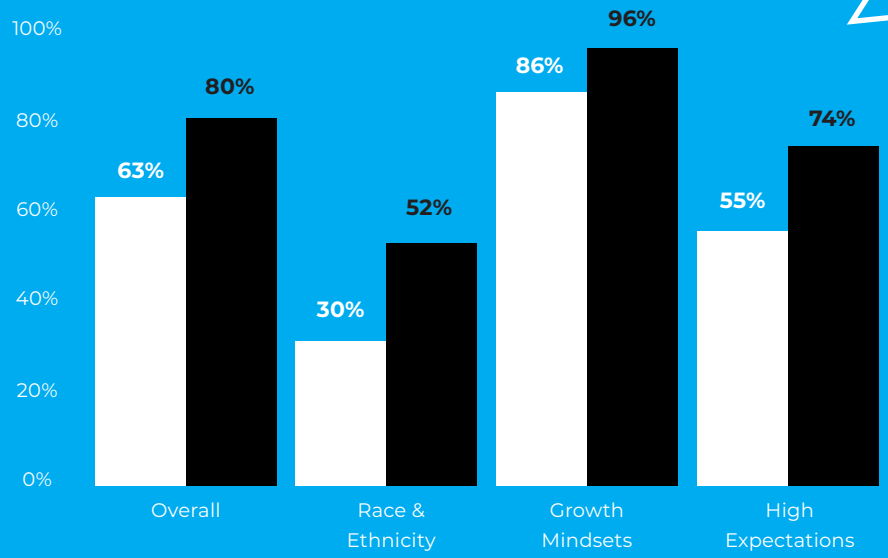
The percentage of educators who improved their equitable mindsets and beliefs or sustained high scores was even higher on all constructs for SY20-21 than in SY19-20.

The percentage of educators who improved their equitable mindsets and beliefs or sustained high scores was even higher on all constructs for SY20-21 than in SY19-20. Specifically, results from the the diagnostic and follow-up survey in SY20-21 showed that the percentage of participants who increased or maintained high scores was 90% for growth mindsets, 74% for having high expectations for all students, and 52% for recognizing race and ethnicity.

We hypothesize that a stronger focus on equity and cultural-responsiveness accounts for these increases in our SY20-21 programming vs. our SY19-20 programming.

Percent of Educators who improved or sustained high scores on equitable mindsets and beliefs

Percent of educators who sustained or improved scores on mindsets and beliefs in **SY19-20** and **SY20-21**



District & system leaders need dedicated and focused learning on cultural responsiveness.

Leaders need time and space to understand how they can and do play a role in dismantling oppressive systems and structures so teachers, the instructional materials they use, and their instructional practices can be culturally responsive. Through our iterative design process, we quickly learned that the approach we typically take to support system-level leaders would need to be different. For example, to support leaders in selecting HQIM, we build their math or literacy pedagogic content knowledge with powerful, hands-on experiences and supported action-planning. The State-level Design team tried to design professional learning content and experiences that would launch system-leaders into analyzing their curricula using culturally responsive scorecards. However, we learned we needed to support system-level leaders to build knowledge together, in context to their role as leaders, because as one team member posed, "Cultural proficiency looks very different for leaders than it does for teachers. Are we considering what it looks like for leaders to support this work? Are we considering what leaders need?"

In our work with state education leaders in Wisconsin, an end-of-year survey revealed the importance, from the leader's perspective, of dedicated time geared toward their unique roles. Specifically, 68% of participants agreed or strongly agreed that the discussions and session content on cultural proficiency/racial equity impacted their beliefs, behaviors, or actions as a leader.

As one participant reflected: *"These conversations continue to support me in broadening my knowledge base and give me resources to use with districts."* Similarly, another participant said: *"I moved the needle on learning and knowing about culturally responsive practices and the impact on beliefs and behaviors to engaging others in the conversation about these practices."*

We also learned that simply sharing with leaders, “Here is what teachers and materials need in order to be culturally responsive,” does not address the leader-actions necessary to shift mindsets and practices. Like all practitioners, district and state leaders need time to learn, reflect, apply their learning in local contexts, and reflect and learn again; i.e., leaders need to engage in cycles of inquiry that are symmetrical with teacher-level cycles of inquiry. Through various cycles of implementation, we learned that district and system leaders are best positioned to lead, model, and advocate for CRSE practices when they have the following supports in their professional learning program:

- Knowledge building on cultural awareness beginning with the individual before intergroup or systemic leadership reflections
- Specific examples of what it looks, sounds, and feels like to be culturally aware in HQIM/HQPL work from the leader-lens
- Strategic planning supports focused on impacting the instructional core, including: tools to support equitable visions of instructional excellence, change-management tools, and action-planning tools

Educators participating in our partnership work in Wisconsin were asked a series of questions about their mindsets toward instruction and students. The questions focused on four core constructs, similar to the teacher constructs described above:

- Recognition of race and culture
- Having high expectations and beliefs
- Holding growth mindsets
- Taking accountability for student learning.

Like all practitioners, district and state leaders need time to *learn, reflect, apply* their learning in local contexts, and reflect and learn again.

	Average score, all responses		Matched sample (both Diagnostic & Follow-up)
	Diagnostic	Follow-up	% demonstrated improvement or sustained high score
Overall score	94%	97%	92%
Recongnition of race & culture	88%	93%	83%
Having high expectations & beliefs	92%	96%	75%
Holding growth mindsets	99%	100%	100%
Taking accountability for student learning	98%	100%	100%
	N=39	N=19	N=12

Notably, diagnostic scores were very high (>90%) for holding growth mindsets, taking accountability for student learning, and having high expectations and beliefs. Consistent with these results, some participants expressed that the partnership work confirmed their existing equitable mindsets, such as the participant who commented: *"I feel that the information shared confirmed my beliefs, behaviors, and actions as a leader."* As part of our ongoing revision of our internal evaluation plan, we will revise and test new items for mindset constructs for our state-level work in SY21-22 to avoid this ceiling effect.

Other participants expressed that given dedicated time and space on the topics of culturally responsive leadership and racial equity, they shifted their equitable mindsets in positive ways, including gaining a "broader perspective" and a "better understanding of marginalization and its impact." Other participants mentioned they gained a better understanding of the importance of necessary processes and enabling conditions for the adoption of high-quality instructional materials and high-quality professional learning that led to more equitable outcomes.

For instance, one participant said that they had gained "[a] greater understanding of the processes for materials adoption and materials-focused PL [and] deeper learning for CRP and Equity," which was echoed by another participant who expressed, "I gained a better understanding of the conditions necessary in leader professional learning that impacts equitable outcomes for students." Finally, building a community through fellowship with other leaders challenged them to analyze equity in their districts, as reflected in the following comment, "I appreciated the opportunities that pushed all of us to have challenging conversations and truly examine whether equitable opportunities and practices exist."

Ensuring strong Culturally Responsive and Sustaining Education across a system requires a cohesive instructional vision and aligned system of supports

Ensuring strong Culturally Responsive and Sustaining Education across a system is about all of the adults coherently building and bridging the provision gap: recognizing the responsibility to provide all students with equitable access to rigorous and deep learning opportunities lies with the system, not students and families. Teachers from Teaching Lab's Teacher Advisory Board commented that districts and schools have also recognized the importance of CRSE, but implementation remains challenging, especially when institutions, systems, and curriculum are not compatible with some of its principles.

A comment of one participant that resonated with others in the group was that "I see it [CRSE] everywhere, and at the same time nowhere because we're in conflict with... the way that learning is traditionally [or] has been traditionally done." Similarly, another participant commented that, "Everybody's talking the talk [about CRSE]," alluding to the fact that the 'what' is known, but the 'how,' especially from an institutional perspective, is unclear.

During our first focus group, we learned that teachers and schools have employed different strategies to learn about and implement CRSE, from diversifying materials and books to engaging in professional learning. At the same time, many challenges still exist when centering CRSE for teachers and schools, namely the time and work that is required in addition to willingness, amongst teachers and leaders, to change mindsets and practices. Other challenges include standards, curriculum, and assessments that are not CRSE focused, as well as separate professional learning for teachers, coaches, and administrators—in other words, a lack of coherence across a system. One teacher's comment illuminates this:

"...There's no coherence in the support from PD to the classroom. Because teachers are in the PDs, principals are in a whole other PD about leading the work... I just feel like there needs to be more collaboration at the same level of PD instead of... taking PDs based on the level that we're at... I mean, whether I'm a principal, I'm an AP, I'm a teacher, I'm a paraprofessional, I feel like every single person should be in a PD together, and collaborating on how to support this work in classrooms, as it pertains to student achievement. But I just don't feel like that's happening, at least in my district. I know it's not happening in my district. So when teachers go back to their buildings, and their principals say, 'Oh, how was PD?' And [a teacher says], 'Oh, [it] was great.' And then they're like, 'I want to do this or this or this in my classroom.' Some principals [respond], 'No, I don't know how to support that, or I'm not supporting that.' There's going to be pushback, and they weren't in the PD to hear about how to deal with that pushback. So like teachers are getting just the PD [that] is just so different across the board that there's no coherence in order to be collaborative."

These reflections underlie the importance of the leader-focused professional learning on how to create equitable and culturally responsive systems, which will continue to be a major focus of Teaching Lab's work.

There are several existing CRSE scales for teachers, but no single CRSE measure predominates in the field.

In order to know we are moving the needle on improving CRSE practices, it's important to have a plan for measuring whether or not CRSE is getting into practice. Through our evaluation plan efforts, we learned that self-reported scales for teachers vary greatly on their focus on CRSE outcomes and include a wide range of constructs, such as self-efficacy, teaching practices, outcome expectancy, preparedness, and disposition, among others.

We also discovered there are very few measures that focus on CRSE from the student experience perspective. Two scales, however, that are of particular interest are the Culturally Responsive Teaching Self Efficacy (CRTSE) scale for teachers, which has also been adapted for students in the Student Measures of Culturally Responsive Teaching (SMCRT). The items from the SMCRT correspond to the items in the CRTSE, which allow for triangulation of teacher self-reported self-efficacy and/or practice and student learning experience. Of the seven items that we piloted from the CRTSE using a retrospective pre-post design, we learned that four items showed the most growth, which were related to: identifying differences between school and students' cultures, using students' previous knowledge to help make sense of new information, and revising instructional materials and adapting instruction with a CRSE lens.

Going forward, although we have initially focused our research on self-reported surveys, we are also interested in learning about other methodologies such as CRSE-focused observations and text or content analysis of student-facing materials. See Appendix G for our working document that compiles existing scales and instruments for measuring Culturally Responsive and Sustaining Education.

THE JOURNEY AHEAD

While there is much to celebrate about what we learned and accomplished this year, we remain humble—our learning and growing will not and should not end here. As ELA Partnerships Manager, Mandi Van Dellen said, "What we can do in terms of integrating CRSE into our [professional learning] is draw awareness that this is ongoing work and not a 'one-and-done' conversation." As we plan for the future, several new questions have surfaced that we intend to explore in the coming year. Specifically, we are still wondering:

- **CRSE and Curriculum:** What is the right balance of supplementing curricula to make them more culturally responsive vs. supplanting materials with more culturally responsive content? How do we support educators to do this in a responsible way?

- **CRSE-focused Leadership:** How do we define and measure culturally responsive leadership and its role in impacting Culturally Responsive and Sustaining Education?

- **Professional Learning Facilitator Development:** How do we effectively develop PL facilitators to make the time and space and develop the strong relationships necessary to shift educator CRSE mindsets and skills?

- **Framework Coherence:** How do we support educators and leaders to incorporate a focus on CRSE into other frameworks they use to improve teaching and learning?

- **CRSE Evaluation and Measures:** How well do our CRSE evaluation items capture the outcomes we want to see in teacher CRSE mindsets and practices? What methodologies best capture CRSE-related outcomes (e.g., self-reported measures, student perspectives on teacher practices, classroom observations, etc.)?

- **Ongoing Team Learning:** What ongoing learning structures best support internal and external-facing teams to build their capacity to improve Culturally Responsive and Sustaining Education and leadership?

Our team feels compelled by the work ahead of us as we know that our journey is just the beginning. “It's a call to action that needs to be realized,” said Vaishali Joshi. She adds, “It can feel like another ask for teachers and so it's really important to integrate these practices into the DNA of teaching so that it doesn’t feel like an add-on. A teacher in any Teaching Lab session and engaging in any work with us should feel like it's alive. And that means ensuring that at any point we engage with a teacher, they can see and feel and understand how the principles of Culturally Responsive and Sustaining Education are integrated into our professional learning and our programming and that then they can integrate a similar approach into their daily practice.”

“

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”

-VAISHALI JOSHI.

ABOUT TEACHING LAB

Teaching Lab's mission is to shift the paradigm of teacher professional learning for educational equity. Founded in 2016, Teaching Lab aims to achieve its mission in the U.S. by scaling equity-driven and evidence-based professional learning to thousands of educators across the nation. We partner with teachers, schools, districts, and states to integrate curriculum-based professional learning and Culturally Responsive Sustaining Education practices and build local capacity for continuous improvement.

The core of our work is a belief that stronger professional learning for teachers can dramatically improve student opportunities and equitable outcomes. Research suggests that effective professional learning incorporates four critical components:

HEAD:
Core academic content embedded in high-quality instructional materials and aligned to research-based practices. Teachers deserve daily access to instructional practices based on research. Deep curriculum and lesson study allows teachers to grow their content and pedagogical knowledge over time and spread that knowledge to their colleagues.

HEART:
Teacher-led communities that build both social capital and buy-in. Teachers deserve to feel motivated and supported by their peers to learn and grow. In teacher-led communities, educators are more likely to buy into their own development and work collaboratively with their colleagues to improve instruction.

HABITS:
Structured and repeated cycles of inquiry in the classroom. Teachers deserve to learn from their efforts. Repeated cycles of inquiry afford teachers the time and space to reflect, incorporate new learning into practice, and verify changes to instruction using analysis of student work.

EQUITY:
All of Teaching Lab's work is in service of racial educational equity, which we define as "raising the achievement of all students, while eliminating the racial predictability and disproportionality of which student groups occupy the highest and lowest achievement categories." Teachers advance educational equity when they embrace culturally responsive sustaining education and put lasting strategies in place to ensure every student learns at the highest levels, including multilingual learners and students with disabilities.

Theory of Action

Teaching Lab's theory of action is built on the premise that educators at all levels of a system are responsible for supporting all students in meeting high academic standards and achieving their dreams, especially students who "have faced educational inequities, resulting from systemic oppression, racism, outdated policies, lack of resources, and other factors."

More specifically, if...

- Students build knowledge of the world, read meaningful texts, express ideas through speaking and writing, solve complex problems, form strong relationships with adults and peers, and learn "how to learn";

- Teachers use high-quality instructional resources in ELA and math, engage in culturally responsive practices, receive ongoing support aligned with Head, Heart, Habits, and Equity, engage in ongoing learning which deepens their content knowledge and pedagogical content knowledge, and receive opportunities for teacher leadership;

- Instructional Leaders (e.g., coaches) use professional learning sessions, observations, common planning time, and coaching to support teachers and establish a collaborative community of professionals;

- School Leaders increase school capacity, aligned with evidence-based Enabling Conditions, to support teachers to deliver high-quality instruction through the use of high-quality instructional materials;

- School System Leaders create a coherent system of instructional support to facilitate teacher development (e.g., allocate time and resources for teacher development); and

- State Leaders establish an instructional vision, provide funding to school systems for high-quality instructional resources and aligned professional learning, and create and disseminate capacity-building opportunities and tools to support school systems in executing on academic plans,

then...

- Upon graduating from high school, students will be innovators and leaders of their own learning; students will be prepared for college and career; and students will be ready to pursue their greatest dreams.

Cycles of Inquiry

Teaching Lab leads educators through cycles of inquiry which are derived from an improvement-science cycle and include the following steps:

1. **Identify Needs:** Facilitators or Lab Leaders (teacher leaders and coaches) create a community and use research & local data to identify a common problem of practice.

2. **Study:** Teachers deepen and refine understanding of research-based practices embedded in curriculum.

3. **Plan:** Teachers plan for upcoming instruction based on new understandings.

4. **Teach:** Teachers try out practices in classrooms and collect student work.

5. **Analyze and Discuss Evidence:** Labs reconvene to analyze student work and plan adjustments to their instructional practice.

Equity-Driven Mission

Core to Teaching Lab's mission is improving outcomes of historically marginalized students through equitable instruction, including students experiencing poverty, students identifying as Black/African American or Hispanic/Latino, English learners, and students with disabilities. Due to our equity-driven mission, Teaching Lab focuses our support on systems where at least 60% of the student population is experiencing poverty and/or 60% identify as students of color.

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ACKNOWLEDGEMENTS

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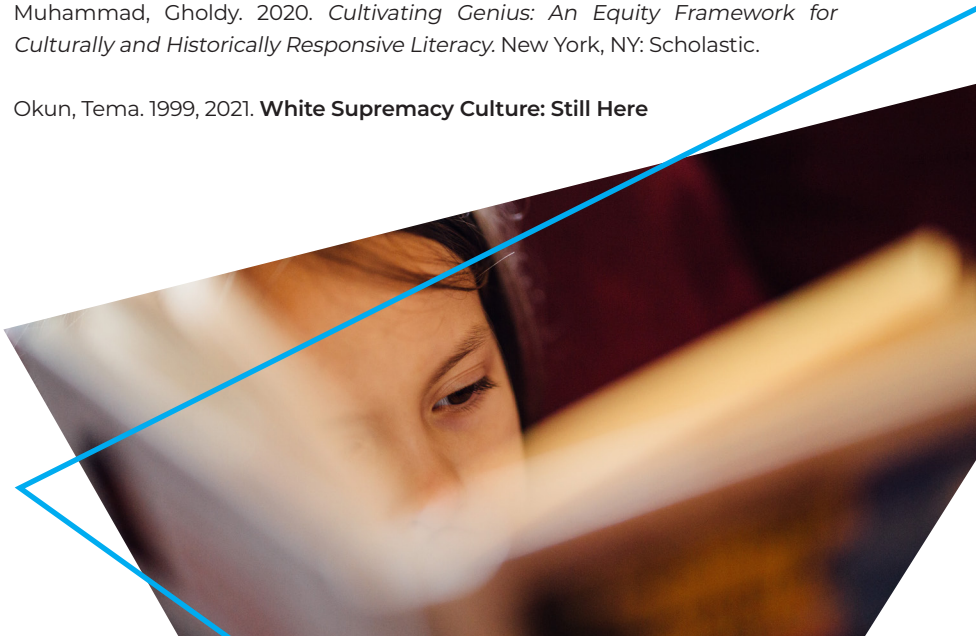

APPENDIX

A: Equity Literacy During COVID 19

B: Vision Resource: Are We Working Toward a Culturally Responsive Education System?

C: Unit Unpacking Templates **ELA** | **MATHS**

D: Guidance for Leaders:

Planning for Evidence Collection & Implementation

E: Pre-Reading Activities to support *Courageous examination and reflection on how collective roles in the education system contribute to or support inequitable practices*

F: HQPL Improvement Action Plan Example

G: Resources for the Evaluation of Culturally Responsive Teaching