RESEARCH AND DEVELOPMENT CENTER ANNUAL REPORT

BACKGROUND

In 2009, Iowa Senate File 470 created the Iowa Research and Development Center for Education Innovation at the University of Northern Iowa (UNI). The goals for this Center, as outlined in Senate File 470, were the following:

1. To raise and sustain the level of all PK–12 students’ educational attainment and personal development through innovative and promising teaching practice;
2. To enhance the preparation and professional competence of the educators in this state through collaborative inquiry and exchange of professional knowledge in teaching and learning; and
3. To focus on research that transforms teaching to meet the changing needs of Iowa’s educational system.

In April 2013, UNI received a $2 million award from the Carver Trust to establish the Center for Educational Transformation (CET), an entity intended to fulfill the Iowa Research and Development Center for Education Innovation mission. On October 24, 2013, the Board of Regents, State of Iowa, approved the CET, and Phase I commenced, the Carver Trust grant concluded. In 2018, the CET entered Phase II, and on August 1, 2018, Dr. Lisa Hooper began her tenure as the Richard O. Jacobson Endowed Chair for Research and newly hired director of the CET.

Mission & Vision

The originally established mission for the CET is as follows:

The CET serves as Iowa’s PK–12 education research and development center, supporting and conducting transformative education research, promoting physiological and psychological health, building collaborative relationships across Iowa, and sharing innovative research-based best practices to inform policy and drive practice.

In 2019, the CET mission expanded to PK–20 education. This change reflects the centrality of postsecondary education in formal education opportunities in the 21st century and in eradicating racial and socioeconomic inequalities in the United States.

The initially established vision for the CET is as follows:

The CET seeks to redefine the face of educational research in Iowa and beyond. Founded upon the values of partnership and innovation, the CET responds to and is inclusive of all education stakeholders. This intrinsic connectivity allows the CET to become embedded in the Iowa educational landscape so that not only do partners “reach in” to access the CET’s expertise, but
the CET “reaches out” to promote best practices from research results to connect partners with one another. This model enables national research-based educational transformations in a local context. The transformation evidences the CET’s commitment to learners, educators, and systems.

**Research Foci**

Based on a transdisciplinary approach, the CET research focuses on critical and emerging problems of practice in these four central fields: Culture, Diversity, Education, and Health. Across these fields, the CET addresses those social problems and challenges central to the whole wellness and growth of communities and persons. Further, the CET’s research is committed to addressing systemic inequalities in cultural systems, education, and health that harm racial, ethnic, and cultural minority groups. The current focal points in research include the following: (1) education and immigrant populations; (2) education and race/ethnicity; (3) health and immigrant populations; (4) health and race/ethnicity; (5) mental health in schools; (6) trauma-informed care in schools and communities; (7) urban and rural education; (8) urban and rural health; and (9) Science, Technology, Engineering, Arts, and Math (STEAM) education access and equity.

**Research Approach**

The CET employs a community-based participatory approach in all stages of the research process. The decision-making on what to study, methods used, the understanding of problems of practice, data analysis, and how to translate research outcomes into practice occurs together with community members. The community’s contribution and cultural expertise enrich projects with local views and expertise, empower community members, and legitimize subsequent interventions. Thus, community-based participatory research is critical for translating research findings into actionable, sustainable, and ecologically valid change.

The CET relies on qualitative, quantitative, and mixed-method approaches to analyze empirical evidence. Research design involves descriptive and intervention approaches, while methods include empirical experiments, focus groups, interviews, observation, surveys, and case studies. The data collection can be longitudinal or cross-sectional.

**EXECUTIVE SUMMARY**

The CET has been led by Dr. Lisa Hooper since 2018. While in the 2018–2019 period, the CET focused on developing partnerships with diverse stakeholders in the local community of Waterloo, Iowa. During the 2020–2021 period, the CET has consolidated those local partnerships, along with those national partnerships established in prior years, and considerably expanded the collaborative work with institutions and academic experts across the nation. Further, the CET has intensified its work on attracting significant funding from public agencies and nonprofit organizations to support the transition to Phase II, namely, the growth of the
number of CET research projects and the scaling up of the research agenda from the local to the national level.

During the 2020–2021 period, the CET has been notable for its rigorous collaboration with the Waterloo Community School District (WCSD) on producing research evidence for school improvement, particularly in four areas: (1) building a racially diverse educator workforce, (2) reducing racial inequalities in educational outcomes, (3) promoting racial and cultural competence among educators, and (4) enhancing educators’ working conditions and health. Informed by the empirical literature on education, race, and culture, the CET has contributed to guiding systematic conceptual conversations in the district and enhancing school leaders’ theories of action and strategies to advance in those four areas. Further, during 2020–2021, the WCSD and the CET co-led two research projects focused on identifying the current levels of well-being among educators and support staff in the district.

During the 2020–2021 period, the CET has been distinguished for its leading role in mentoring and coaching high school students, graduate fellows, faculty, and the broader academic community. In partnership with the Waterloo Career Center, the CET has launched the high school internship program for students from Waterloo Work-Based Learning in Science, Technology, Engineering, and Mathematics (STEM). Sponsored by this internship program, three students have been mentored in research, virtual reality technologies, web development, and other employment-driven STEM skills. Further, the CET has increased its mentorship and support of graduate fellows and faculty at the University of Northern Iowa and scholars across the nation in advancing their careers. In parallel, the CET launched its international fellowship program. In 2020, the CET hosted one graduate student from the University of Gdańsk to conduct family therapy and social psychology research while contributing to the joint production of scientific knowledge in these areas.

During the 2020–2021 period, the CET has emphasized the democratization of research evidence and has strategized on circulating high-quality studies and content on pressing issues such as trauma, well-being, and inequalities in health and education, through diverse social media platforms and data visualization approaches.

**REVIEW OF ACTIVITIES AND PROJECTS 2020–2021**

The CET’s work is grounded in research-practice partnerships, with the activities undertaken by the CET anchored in these partnerships. The joint work between the CET and its partners is enacted in three related categories: (1) capacity building, (2) research projects, and (3) relationship building. This last category refers to the long-term process of building agreements to collaborate, establish trustworthiness, build capacity, and develop a joint research agenda between the CET and its different research and practice partners. In prior years, the CET focused on initiating diverse partnerships with local and national practitioners and researchers. As a result of the successful development of these formed partnerships, during the 2020–2021 period, the
CET has substantially increased its collaborative work on capacity building and research projects.

Before describing the CET’s activity in the three mentioned categories within this subsection, it is worth noting how the traditional research and collaborative activities conducted at the CET have experienced important challenges during the 2020–2021 period due to the COVID-19 pandemic. During this time, the CET staff had to transition to work remotely at various times, and many interactions and activities took place through digital means. The CET had to postpone the Annual Education Summit organized to bring together parents, educators, researchers, and diverse community stakeholders to discuss pressing issues in Iowa related to culture, education, and health.

**Capacity Building**

Capacity building refers to the CET’s ability to obtain the financial, technological, and operational resources necessary to fulfill the CET’s mission and conduct research locally, nationally, and globally. During the 2020–2021 period, the CET has built its capacity in three main branches: (1) securing funding, (2) professional development, and (3) dissemination and use of digital platforms. These three branches are detailed in the following subsections.

**Securing Funding to Address Deleterious Inequalities and Increase Equity in Society**

During the 2020–2021 period, the CET has actively sought funding in areas aligned with the CET’s mission to promote practices, policies, and systems reforms that respond to the needs of students, parents, families, and communities in the local context of Iowa and more broadly. The CET’s grant activity has focused on four major areas: (1) education and equity; (2) health, culture, and community engagement; (3) technology use for educational change and equity; and (4) teaching and learning. The CET has collaborated with approximately 20 partners and 10 universities nationwide in grant activities (e.g., George Mason University, Stanford University, University of Iowa, University of North Carolina, University of Virginia, and Yale University).

Overall, the CET has partnered on 15 proposals seeking a total of 14 million, with four proposals funded for $124,000 and six proposals still pending (See Appendix A for a complete list of grants submitted). Two proposals developed in partnership between WCSD and CET and submitted to the William T. Grant Foundation in 2020 and 2021 have been finalists, reflecting the high quality of the proposals co-produced for this competitive grant opportunity. While the proposal submitted in 2020 was finally not funded, the final results for the proposal submitted in 2021 will be known in late 2022.
Professional Development

The CET has actively engaged in identifying and offering the CET’s staff professional learning opportunities aligned with the research activities tackled in the CET. Four of these trainings are detailed below.

The American Educational Research Association (AERA) Annual Meeting. In 2021, this week-long virtual conference theme was “Accepting Education Responsibility.” The CET’s staff and other scholars mentored by the CET explored and reflected on interdisciplinary approaches to culture, education, health, and equity. The conference contributed to increasing the CET staff’s knowledge in the following fields: (1) culturally responsive approaches to mental health; (2) community-based approaches to leadership; (3) systems involved in supporting mental health; (4) creating equitable learning contexts for students from diverse cultural backgrounds; (5) trauma-informed teaching; and (6) addressing culture, race, and bias within schools. Moreover, this conference provided an important vision of the emerging digital forms for disseminating academic work (e.g., interactive paper presentations and virtual exhibits).

The Virtual NNERPP Annual Forums. In 2020 the forum theme was “RPP Effectiveness: Adapting and Advancing Towards a New Normal in an Era of Disruption.” The forum provided conceptual tools and strategies to create and maintain partnerships and navigate the challenges in collaborative work and research related to the pandemic. In 2021 the forum theme was “The New 3Rs: Recover, Reopen, Reinvent/Navigating Partnership Work During This Pivotal Time.” The meeting emphasized innovative designs and strategies to build successful long-term collaborative work between researchers and practitioners. The CET staff had the opportunity to learn the Design-based Implementation Research approach at this event.

The American Sociological Association 116th Annual Meeting. In 2021, the conference theme was “Emancipatory Sociology: Rising to the DuBoisian Challenge.” The CET staff has drawn upon this meeting to enrich the conceptual understanding of status-based inequalities in schools and social psychological mechanisms and frameworks to address racial inequalities in mental health and educational outcomes.

The IOWA Best Summit. In 2021, this summit led by the Iowa Department of Education took place in Des Moines, Iowa, and focused on behavioral, equitable, social-emotional, trauma-informed health in schools. The summit included educators, counselors, school leaders, other practitioners, and researchers to discuss challenges and opportunities to create safe, positive, and predictable learning environments and better support students’ mental health. This event was insightful for discovering student-centered and community-based initiatives on resilience and trauma expanding across the nation. Further, this summit provided the CET staff with an updated perspective on the current problems of practice faced by schools, educators, leaders, and community stakeholders across Iowa, informing the CET’s research agenda at the local and state level.
Dissemination, Use of Technology, & Social Media

The CET continues drawing on the CET’s website, Twitter, ResearchGate, and LinkedIn to maintain visibility in different local and national scenarios and connect with diverse agencies, scholars, and stakeholders across the nation. Among the important changes implemented during the 2020–2021 period, the CET has focused on making research more accessible to all citizens and democratizing science and evidence in the contents disseminated through social media and innovative data visualization strategies. Further, the CET has elevated the centrality of dignity and equity in the language used and content circulated through the CET’s digital platforms. For instance, people from diverse racial/ethnic and cultural backgrounds are included in the visual elements. The content diffused purposefully departs from discrimination, bias, and stigmatization based on race, gender, religion, and other social categories and groups.

The CET’s Twitter account (@IowaCET) disseminates empirically-supported articles and news central to the CET’s research foci and research projects. Academic publications produced or sponsored by the CET are circulated on Twitter. Beginning in 2021, the CET has given more prominence to research articles in the content disseminated and has increased the use of visual elements and user-friendly language to make research accessible to broader audiences. Currently, the CET tweets an average of three times a day and has generated 378 followers. Also, by the end of 2021, the CET has begun to balance the diffusion of traditional research focused on understanding problems with solution-oriented scholar work to improve the use of research on policies, practices, and systems reforms.

Recently, the CET co-developed—with Waterloo community partners—a new website tailored to the Waterloo community. This website will serve as a significant resource by offering the local community information about available resources and research projects co-led by the Waterloo community and the CET (e.g., the Parent PARTNERS Project). This website will link to the CET’s website and the WCSD website. Moreover, the CET has developed interactive material such as videos and infographics to disseminate research projects and knowledge produced in more innovative and effective ways to make research relevant for diverse academic and non-academic audiences, including educators, students, parents, and community leaders. Finally, the CET will open a YouTube channel to disseminate various ongoing projects in the coming months.

Research Projects

The research conducted by the CET is grounded in a transdisciplinary approach to respond to the complex challenges addressed in culture, education, and health. Transdisciplinary research is research conducted by academic and non-academic citizens from diverse disciplinary backgrounds and life experiences who collaborate to create new conceptual, theoretical, methodological, and translational innovations which expand beyond discipline-specific research approaches (Stokols, 2006).
During the 2020–2021 period, the CET staff, in collaboration with diverse partners, has produced 20 peer-reviewed articles and participated in multiple academic events, including conferences and webinars. Further, the CET has co-led nine research projects presented below.

**Projects Co-led with the Waterloo Career Center (WCC)**

The WCC and the CET co-lead two projects to enhance students’ schooling experiences and support youth career exploration. These two projects are described below.

1. **The Virtual Reality Pilot Study.** The racial and cultural mismatch between educators and students is one factor that contributes to inequalities in educational outcomes. For instance, many White American educators hold racial biases, which are harmful to racially and linguistically diverse students and their learning opportunities in school. On the other hand, documented evidence shows that teaching practices based on culturally responsive pedagogy benefit educational experiences and outcomes for all students, particularly those from diverse backgrounds.

The Virtual Reality Pilot Project is designed to create, refine and evaluate a transformative learning method based on Immersive Virtual Reality Technology (IVRT) for enhancing racial and cultural competence, cultural humility, and empathy in pre-service and in-service educators. To date, the partnership has developed a prototype based on the First-person Point of View design: the immersive experience lasts 4 minutes and resembles a class in Mathematics through the lenses of specific characters (e.g., the interaction between a White American teacher and a Black female student in an elementary classroom). The partnership is seeking funding from the National Science Foundation (NSF) to escalate the built prototype and implement its use in professional development programs for pre-service and in-service educators.

2. **The Waterloo Career Center Internship Project.** The long-standing lack of opportunities for gender, racially, and linguistically diverse individuals in the Science, Technology, Engineering, and Mathematics (STEM) workforce remains detrimental to the U.S. ideals of equity and diversity. Further, there is a gap between the skills demanded by the industry in STEM areas and the proportion of qualified workers in these areas.

The WCC and the CET have formed a partnership to provide Work-Based Learning opportunities in STEM for youth from Waterloo, Iowa, particularly for racial minority youth. Thus, the partnership sponsors high school students interested in STEM areas for hands-on intensive supervised experience at the CET to cultivate their knowledge and skills in research activities, virtual reality technologies, and web development. During the 2021–2022 academic year, two high school fellows are being mentored and coached at the CET’s site. Further, a former Work-Based Learning fellow has been recognized as an emerging scholar and appointed as a staff member at the CET.
Projects Co-led with the Waterloo Community

The CET is co-leading four initiatives with stakeholders from the Waterloo community. These four projects are oriented to support families from Waterloo in education, mental health, and well-being and reduce structural, institutional, and cultural barriers that sustain racial inequalities in those mentioned outcomes. The progress of these four projects is described next.

3. Black Hawk County Health Department. From 2018 to date, the CET and the Black Hawk County Health Department have collaborated to dismantle racial/ethnic inequalities in health care in the local community. This partnership is engaged in periodic conversations informed by research evidence at the national and local levels to understand how racial/ethnic inequalities in health care are produced and are connected to structural, environmental, historical, and societal policies. These conversations allow county leaders to reframe their conceptions of racial/ethnic inequalities in health care and identify novel practices and solutions. Moreover, the CET serves on several committees in public health in the county and assists the Black Hawk County Health Department based on the standards on public health practices established by the Public Health Accreditation Board.

4. Family Well-Being Study. During a changing economic structure and lasting systemic racism, communities and families struggle to sustain adequate levels of well-being and meet fundamental needs in health, learning, and social inclusion.

The Family Well-Being Project is a survey-based study that examines the overall well-being of families from Waterloo, which is crucial for designing effective policies and practices to support the wellness and living standards in the community. In addition, this study seeks to capture the repercussions of the COVID-19 pandemic on families’ well-being (e.g., mental health, physical health, etc.) and provide evidence-based guidelines and interventions to better support families in Waterloo in this unprecedented time.

5. Parent PARTNER (Prevent ACEs, Reduce Trauma, Nurture Relationships, and Enhance Resilience) Project. Exposure to traumatic events is a critical risk for racial/ethnic minorities that erodes their wellness, mental health, and socioeconomic progress and sustains racial inequalities in the United States. Many families from Waterloo, a highly diverse community, are disproportionately affected by violence, trauma, and other mental health issues. This project builds a program to provide trauma-informed services tailored to the specific needs of the Waterloo community.

This project is funded by Cedar Valley United Way and co-led by the University of Minnesota, the CET, and parents from Waterloo with the ultimate intention of construing a trauma-informed program. During the 2020–2021 period, the project completed two phases and has collaborated with 22 Waterloo parent leaders, who have come together for 15 meetings to discuss the realities and pressing issues in mental health and civil harmony across the Waterloo community.
6. UNI Fit Families Project. Parents’ knowledge of stimulating motor skills in children with autism spectrum disorder (ASD) is crucial for these children’s lifelong development. The lack of availability of this specific knowledge contributes to delays in the physical growth of children with ASD. This project provides a twelve-week virtual course to teach parents of children aged 4–12 in the Waterloo and Cedar Rapids Community School Districts how to stimulate 13 key fundamental motor skills (FMS) in their kids.

Projects Co-led with the Waterloo Community School District (WCSD)

The Waterloo community faces complex challenges in reaching equity and fostering opportunities for racially, ethnically, and culturally diverse populations to ameliorate educational and health disparities and whole person, community, and organizational well-being. These challenges are rooted in the legacy of anti-Black racism in the United States, the changing economic structure, and increasing job insecurity. Waterloo neighborhoods and schools remain largely segregated across racial and socioeconomic lines, and the city is currently identified as one of the most racially divided towns in the United States.

The CET has a strong commitment to supporting the Waterloo community in overcoming these persistent challenges and inequalities. This commitment to the local community is at the core of the CET’s mission to produce empirical evidence relevant to promoting positive social change and more equitable opportunities for all citizens, especially those historically marginalized. The spatial proximity between Waterloo and the CET also facilitates this collaborative work, established in 2018. Further, the CET seeks to enrich the local discussion on equity by drawing upon national trends and promising solutions emerging in other local communities.

During the 2020–2021 period, the collaborative work between the WCSD and the CET has focused on conducting high-quality research to inform school policies and practices in three different projects detailed below.

7. The Teacher and Staff Well-Being Studies. Many K–12 educators experience job-related stress and symptoms of depression, deleterious conditions for wellness and job satisfaction, and barriers impacting teaching quality, teacher retention, school climate, and students’ educational outcomes.

The Whole Teacher and Staff Well-Being Projects seek to identify the levels of whole well-being in WCSD K-12 educators and support staff across five dimensions: (1) cultural well-being, (2) emotional well-being, (3) physical well-being, (4) professional well-being, and (5) psychological well-being.

This longitudinal study aims to understand how serving in the role of educator and support staff may shape employees’ life across different areas of well-being. The first survey for educators was administrated during the 2020–2021 academic year, and results were disseminated in the district in Fall 2021. Importantly, the CET launched innovative strategies to disseminate the final
report of this study, including data visualization, infographics, and videos—methods that will be further developed for future projects. The district has decided to continue the systematic measurement of whole teacher well-being, and the third survey will be administered between December 2021 and January 2022. The first survey for support staff was administered during the 2020–2021 academic year, and the data collected is in the analysis stage.

8. Building Racially and Culturally Competent Teacher Workforce through Teacher-Led Professional Development. This project seeks to co-develop a teacher-led professional development program to increase racial and cultural competence among in-service teachers, reduce racial inequalities in whole-student outcomes, and enhance the whole school well-being in the WCSD.

At this point, the project research design has been co-created, and the WCSD-CET is seeking funding from the William T. Grant Foundation to sponsor the co-production and evaluation of the specific modules to be implemented in the professional development program.

9. Diversifying the Teacher Workforce.

This project is focused on increasing the representation of minority teachers in the district. Though the racial and linguistic diversity of the student population continues to rise in the WCSD, most teachers are White American and female. The racial and cultural mismatch between teachers and students contributes to educational inequalities. The goal is to uncover those factors underlying the underrepresentation of minority teachers in the district and transform the current hiring practices to increase the proportion of minority teachers.

Currently, the WCSD-CET partnership continues working in a committee dedicated to revising teacher hiring practices in the district and redesigning hiring protocols to enhance the racial diversity of the teacher workforce. Moreover, the partnership is also seeking funding to sponsor innovative hiring practices and monetary incentives to overcome structural barriers such as the less competitive salaries offered in the district that deter racially diverse teachers from seeking a teaching position in that location.

**Relationship Building**

The CET’s work is nested into Research-Practice Partnerships (RPPs) co-led with diverse stakeholders. A Research-Practice Partnership (RPP) is “a long-term collaboration aimed at educational improvement or equitable transformation through engagement with research. These partnerships are intentionally organized to connect diverse forms of expertise and shift power relations in the research endeavor to ensure that all partners have a say in the joint work” (Farrell et al., 2021, p. 05). Building and maintaining trusting relationships that result in long-term mutual commitment and collaboration is vital in developing successful RPPs. Figure 1 displays the link between the two levels of collaborative work: building the long-term partnership and co-leading specific research studies.
The intended outcomes in an RPP encompass short- and long-term advancement and innovation of systems and organizations (e.g., school districts, communities, health systems). While the short-term pursued changes can address micro-level existing challenges and specific problems, long-term pursued changes target deep-rooted organizational change that involves mid- and macro-levels in the organizational ecosystem. Accordingly, the CET has defined intended outcomes from the collaborative work co-led with partners: improvement, transformation, diversity, and equity.

Based on the literature, the CET has defined improvement as the continuous and iterative cycles of inquiry and change that identify what is working in systems and organizations’ practices and policies and what needs improvement (Banks, 2012; Farrell et al., 2021). Usually, improvement plans focus on specific practices and outcomes (e.g., curriculum development, clinical supervision). Further, transformation refers to those more durable and broader organizational changes (Farrell et al., 2021). Finally, the CET engages in collaborative work to promote diversity and equity, two values that require structural change in society and institutions. Diversity and equity refer to the systems’ ability to provide non-discriminatory, safe, and inclusive environments for all citizens, especially those from diverse cultural, linguistic, racial/ethnic, religious, and socioeconomic backgrounds that have been traditionally marginalized.

The CET’s Work in Relationship Building During the 2020–2021 Period

During the 2020–2021 period, the CET has continued working on connecting, strengthening, and expanding the partnership with diverse local and national allies that seek the improvement of educational and health outcomes for people from diverse racial/ethnic, linguistic, religious, and socioeconomic backgrounds. During the 2020–2021 period, the CET particularly has progressed
in connecting with national networks of scholars and universities in three main domains: (1) well-being, trauma, and community-based programs on mental health; (2) interventions based on immersive virtual reality to enhance educators’ cultural competence; and (3) education and equity. Ultimately, the central goal of the CET of decreasing cultural, linguistic, socioeconomic, and racial inequalities underlies the collaborative work on the three mentioned domains.

At the national level, the CET has collaborated with approximately 50 partners, ten national universities, and one international university in mentoring, research, and grant activities. Those educational institutions include Baylor University, George Mason University, University of Iowa, University of Minnesota, University of Northern Iowa, University of North Carolina, Stanford, and the University of Gdańsk. Moreover, the sustained progress in the collaborative work across the nation is evidenced in the extensive grant activity co-led with national partners during the 2020–2021 period.

During the 2020–2021 period, the CET has consolidated the partnership with the WCSD at the local level. This partnership, initiated in 2018, is aimed to enhance students’ educational experiences and outcomes in the district. The district and CET have progressively collaborated in four central areas: (1) building a racially diverse teacher workforce, (2) reducing racial inequalities in educational outcomes, (3) promoting racial and cultural competence among educators, and (4) enhancing educators’ working conditions and health. In 2021, the partnership made significant progress in implementing procedures and routines to advance the co-established goals. Further, the partnership has involved one teacher in the co-design and co-lead of research projects to expand the research team’s expertise and better align the research projects with the problems of practice taking place in the district.

MEASURING IMPACT

In summary, the CET’s work during the 2020–2021 period has had major positive effects on practice and policies across three areas: (1) mentorship, supervision, and coaching of human capital; (2) research-based solutions and democratization of research evidence; and (3) partnership building. The positive impact on these three areas is detailed below.

1. Mentorship, Supervision, and Coaching of Human Capital. The CET has actively supported and mentored fellows from different educational levels. As a result, the high school students mentored, who belong to the local community of Waterloo, Iowa, have developed their critical, analytical, and research skills and access to high-competitive national colleges. Further, undergraduate and graduate students have refined their skills to transform research projects into publishable high-quality content, build their writing and analytical skills, escalate their professional development, and access competitive positions in academia. In addition, the CET has assisted emerging scholars and faculty at the University of Northern Iowa and nationwide in designing and carrying out research projects aimed at solving complex problems in culture, education, health, and equity, existing in contemporary society. Consequently, those mentored emerging scholars and faculty members have been able to solidify their academic careers.
Moreover, the CET hosted the first award-winning international scholar for six months in 2020. As a result, the CET and the international scholar have published three peer-reviewed articles jointly. Notably, the CET has systematically mentored cultural brokers, community leaders, and parents from Waterloo and developed awareness of trauma, well-being, and the role of structural factors sustaining racism and socioeconomic inequalities in the community. This community-based work has empowered citizens to understand the roots of the pressing issues that impact their community and families (e.g., violence; insecurity; drug trafficking; consumption; spatial, racial, and socioeconomic segregation). Further, mentored citizens have begun identifying how to use research to address pressing issues in their community.

2. Research-Based Solutions and Democratization of Research Evidence. The CET has co-led nine research projects that are consonant with the CET research foci and include the following: diversifying the teacher workforce, cultural-linguistic competence among educators, trauma-informed care, immersive virtual reality, and whole-teacher well-being, to name a few. The research-based solutions are illustrated in the academic production. For instance, the CET has produced two reports and approximately 20 peer-reviewed papers (See Appendix A). The positive benefits of the CET’s research projects can be seen in the awareness developed by the district leaders from WCSD about the structural roots of educational inequalities. The district leaders have gradually centered equity in educational experiences and outcomes as a central goal. They have identified the importance of conducting and using research to create effective policies and practices to reach equity in the district. On the other hand, the CET’s work on disseminating high-quality research and knowledge promising to inform and empower local leaders and communities on pressing issues (e.g., trauma, well-being, racism) has enhanced the collaboration between local communities and the research community. For instance, by using diverse social media platforms and framing disseminated contents into a culturally responsive language meaningful for and respectful of diverse communities, the CET has encouraged conversations and awareness on trauma and research-based programs to address trauma in the local community of Waterloo.

3. Partnership Building. The CET’s proactive involvement in multiple networks identifies common purposes and builds research capacity to address pressing social issues. By doing so, the CET has been reached by numerous networks, higher education institutions, and agencies to develop collaborative initiatives and research projects, particularly in two main axes: trauma and virtual reality-based interventions to promote cultural skills in K–12 educators. Broadly, the CET has participated in many campus events and has engaged in collaborative work with around 50 scholars and ten universities nationwide, positioning the CET at the UNI as a leading institution in culturally responsive and community-based research across diverse national research networks.
CET STAFF

Director of the Center for Educational Transformation
Dr. Lisa Hooper Richard O. Jacobson Endowed Chair for Research

Research and Evaluation Team
Diana Marcela Galvez-Bohorquez, Researcher and Data Analyst
Allison Pleggenkuhle, Graduate Research Assistant
Umar Chohan, Graduate Research Assistant

Research & Development Emerging Scholars
Alex Joens, Research & Development Emerging Researcher
Beau Smith, Research & Development Intern
Chloe O’Brien, Research & Development Intern

Research Partners & Affiliates
Jamie DeCoster, Senior Scientist Affiliate
Sara Tomek, Senior Scientist Affiliate
Armeda Wojciak, Senior Scientist Affiliate

Practice Partners
Gina Weekley, Cultural Broker, and Practice Partner Affiliate
Kingsley Botchway, Waterloo Community School District, Chief Officer of Human Resources & Equity
Evan Gratteau-Zinnel, Waterloo Community School District, Equity & Inclusion Data Analyst
Brandy Welch, Waterloo Community School District, Lead Teacher
Ricco Jones, Practice Partner Affiliate