

**Governing Iowa's public
universities and special schools**

University of Iowa
Iowa State University
University of Northern Iowa
Iowa School for the Deaf
Iowa Braille and Sight Saving School
Lakeside Laboratory Regents Resource Center
Western Iowa Regents Resource Center



Michael J. Richards, MD, President, *West Des Moines*
Patty Cownie, President Pro Tem, *Des Moines*
David R. Barker, PhD, *Iowa City*
Sherry Bates, *Scranton*
Nancy Boettger, *Harlan*
Milt Dakovich, *Waterloo*
Nancy Dunkel, *Dyersville*
Zackery Leist, *Clarion*
Jim Lindenmayer, PhD, *Ottumwa*

Mark J. Braun, Executive Director

October 18, 2019

Mr. Charlie Smithson Secretary of the Senate State Capitol Building Des Moines IA 50319	Ms. Meghan Nelson Chief Clerk of the House State Capitol Building Des Moines IA 50319	Glen Dickinson, Director Legislative Services Agency State Capitol Building Des Moines IA 50319	Ryan Wise, Director Department of Education Grimes State Office Bldg. Des Moines, IA 50319
--	--	--	---

Re: Research and Development Center Annual Report

Dear Members of the Iowa General Assembly, Director Dickinson, and Director Wise:

Pursuant to Iowa Code §256G.4(3)(c)(2), enclosed is Research and Development Center Annual Report for 2019 prepared by the University of Northern Iowa

If you have any questions or need more information, please don't hesitate to contact this office.

Sincerely,

Mark J. Braun

\\Box Sync\Board of Regents Shared\BF\Legislative\2020\Reports\

Attachments

cc: Robin Madison
Legislative Liaisons
Legislative Log



RESEARCH AND DEVELOPMENT CENTER ANNUAL REPORT

October 2019

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:

- To raise and sustain the level of all PK–12 students’ educational attainment and personal development through innovative and promising teaching practice.
- 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.
- 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 mission of the Iowa Research and Development Center for Education Innovation. On October 24, 2013, the Board of Regents, State of Iowa, approved the CET and Phase I commenced. In 2017, 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.

Vision

The originally established vision for the Center 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 and to connect partners with one another. This model enables national research-based educational transformations to be situated in a local context. The transformation is evidenced through the CET’s commitment to learners, educators, and systems.

Mission

The originally established mission for the Center is as follows.

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

EXECUTIVE SUMMARY

Currently, the CET—led by Dr. Lisa Hooper—is in a period of evaluation and transition. Entering its seventh year of operation, the CET is in a strong position to expand the research on which it is focused and to ensure that the research has impact. Specifically, that the research is implicated in the wellbeing of whole students and whole adults and the systems (families, neighborhood, communities, schools, and agencies) in which they are embedded. The CET is charting a course to extend partnerships, improve its capacity and infrastructure, and importantly, build its portfolio. This work is undergirded by strong and genuine relationships with diverse stakeholders, leaders, students, and citizens. These individuals, disciplines, and cross-sector agencies—in conjunction with our council members—will continue to inform the direction and focus of the CET research, which in turn, will inform the translation of the research findings to culturally responsive practices and policies. Ultimately, the intention is that CET-led research can be transported and culturally tailored nationally and globally.

Going forward, the CET will continue to play a leading role in research and development locally and across the state. In addition, the CET director and staff will co-facilitate conversations and engage in collaborations with those interested in the investigation of education, health, and culture separately and jointly. During this past year, stakeholders discussed with the CET leadership and staff members the far-reaching, combined effects of health, culture, and academic outcomes. These discussions underscored the import of the whole individual, the interaction and overlapping nature of systems, and how crossing boundaries and sectors is the most comprehensive, inclusive, and efficient way to solve the complex issues which the state of Iowa and the nation face. Additionally, this systems framework, many contend, is the most effective way to uncover the rich resources that exist in Iowa's students, individuals, families, and communities.

The next section describes the accomplishments and outcomes of the CET in 2018–2019. Also outlined are the accomplishments and strategies used by Dr. Hooper and staff to facilitate the transition to Phase II of the CET. The primary methods employed during the 2018–2019 academic year included the following: (a) listening, observing, and learning tours; (b) assessing the infrastructure, resources, capacity, and partnerships of the CET; (c) leading activities and events; and (d) measuring the impact of the CET based on grantsmanship and other calculable products (e.g., publications and presentations).

REVIEW OF ACTIVITIES

2018–2019

Listening, Observing, and Learning Tours

In 2018–2019, the Center director and staff have invested substantive time and effort in strengthening connections with community members, stakeholders, previous partners, and citizens. During her incoming year, Dr. Hooper conducted a nine-month series of listening, observing, and learning tours. A primary aim of these meetings was to listen to and learn from the perspectives of each individual, parent, student, department, and agency with whom she and other staff met. Some of these individuals were long-time members of the Iowa community, and some were newcomers.

Dr. Hooper garnered general and culturally specific knowledge about the needs of the community through listening deeply and engaging thoughtfully with UNI leadership, faculty, and staff; the UNI Office of Sponsored Research Program and Foundations Offices; leaders of local school districts; the Iowa Department of Education; the Black Hawk County Health Department; numerous other university administrators, faculty members, and leaders (e.g., from Black Hawk Community College, Iowa State University, and Drake); and local municipal leaders. Also described in these meetings were the many strengths of the community and its members. Following these meetings, the CET director and staff

reflected on the critical and emerging issues that were reported by these different communities and the extent to which the reported issues were consistent or non-overlapping. Taken together, several issues were consistently reported as urgent. Those issues included mental health in schools, diversification of the teacher workforce, and race, ethnicity, and cultural relationships among diverse communities and partners.

In addition to identifying issues consistently reported by stakeholders, these meetings helped identify three areas of importance on which CET might focus its attention: (1) reconnecting with potential partners; (2) reorienting diverse stakeholders about the CET's purpose, vision and mission; and (3) understanding the culture and critical and emerging issues of Iowans and beyond. These useful perspectives afforded the CET director, staff, and student researchers some direction for the year's work. In addition to the above-mentioned three areas, several other important activities and events in which the CET director and staff engaged are described below.

Evaluating Infrastructure, Resources, Capacity, and Partnerships

During the first year under Dr. Hooper's leadership, the CET began evaluating its infrastructure, human resources, and capacity for growth and sustainability. This process was informed by the preliminary assessment from the newly formed National Advisory Council (see Appendix B). One important aspect of the council's recommendations was to refine the vision and mission of the CET so that it more precisely reflects the needs of the community where it operates and the members it aspires to serve. Other recommendations were building capacity through adding staff; building the Center's portfolio, in part by establishing strong partnerships; and updating the CET's website and social media presence. During 2018–2019, these recommendations guided the refinement and the step-wise evaluation process.

Vision and Mission

The CET is in the process of refining its vision and mission. Based on the recommendations put forward by National Advisory Council and the data collected during meetings with community stakeholders and approximately 50% of the UNI departments across all colleges, the CET leadership is seeking to assess the extent to which the long-established vision and mission reflected the goals, objectives, and aspirations of the Center.

During our meetings with stakeholders and UNI faculty, two recurring themes in these conversations emerged. One theme was the association between health and educational outcomes. A second theme was how cultural identities and equity affect health and educational outcomes and systems. These emergent themes underscored the importance of the whole individual, culture, and systems. The CET director and staff are collecting additional information on how to shape the vision and mission to accurately reflect the conversations during our listening, observing, and learning tours and to ensure some level of consensus among on- and off-campus partners and stakeholders.

Center for Educational Transformation Website

The CET website ([Center for Educational Transformation Website](#)) also was revised based on feedback from the CET stakeholders. The website went through a year-long, substantive overhaul. In collaboration with UNI's Office of University Relations, CET graduate research assistant Diego Saavedra Rojas revised each page and created new pages to reflect select information derived from the listening, observing, and learning tours. The goal of the revision was to highlight the transitions evidenced in the Center (from Phase I to Phase II), the new personnel, and the organization of the Center. Additionally, there was a concerted effort to celebrate the history of the Center and the important work of the CET faculty fellows, which continued into 2018–2019. (See grants submitted [**\$11,255,554**] later in this report.) The final aim of the CET website, which is still being revised, is to serve as a resource to UNI and its diverse partners, stakeholders, and broader community.

Center for Educational Transformation Twitter and Social Media

The CET has reestablished its presence in the virtual community by relaunching ($N = 3$) or establishing new ($N = 4$) accounts often used among research and practice communities. More specifically, in 2018–2019, the Center has significantly increased its social media footprint and thus its visibility in the online media space. The CET research assistants and staff established accounts on Bepress, Facebook, LinkedIn, ResearchGate, Twitter, and UNI ScholarWorks (see Table 1). The Center’s virtual presence on the internet, University library portal, and engagement with media have resulted in connections with new partners and community stakeholders and provides an additional platform to disseminate the work of our colleagues and partners. Currently, the CET is collaborating with the GeoTREE Center and Dr. John DeGroot to revise a preexisting map of the state of Iowa and data derived from the 330 school districts. These virtual connections and resources are still being established, and the measurable impact will be reported in 2019–2020.

Table 1

Center for Educational Transformation Social Media Presence and Platforms

Virtual Platform	Status	Link
Bepress	Newly developed	Center for Educational Transformation Bepress
Facebook	Refurbished	Center for Educational Transformation Facebook
LinkedIn	Newly developed	Center for Educational Transformation LinkedIn
ResearchGate	Newly developed	Center for Educational Transformation ResearchGate
Twitter	Refurbished	Center for Educational Transformation Twitter
UNI ScholarWorks	Newly developed	Center for Educational Transformation -- UNI ScholarWorks
CET Website	Overhauled	Center for Educational Transformation Website

Note. UNI = University of Northern Iowa.

Personnel Changes and Directions for the Future

In 2018–2019, the CET experienced several personnel changes. These changes required a concerted effort including several searches to replace long-time program manager Dr. Chris Opsal and administrative assistant Ms. Holly Boehmer. In late 2018–2019, after a comprehensive search, Ms. Michelle Herzberg and Ms. Marina Durinova, joined the CET staff. One position remains unfilled. Additionally, to the extent funding is available, the CET director and program manager will be conducting searches for other positions and research-focused opportunities. These opportunities include postdoctoral fellowships consonant with previous years, year-long faculty research fellowships, research faculty and community partner affiliates, and a summer scholars program for high school students. Some of these personnel efforts will unfold over time as the Center continues to build capacity.

Undergraduate and Graduate Student Scholars

In 2018–2019, the CET director created a new, first-time opportunity for undergraduate and graduate students. Specifically, the CET recruited undergraduate and graduate students to work in the Center, focusing on research and development, and to learn about and participate in the ethical conduct of rigorous human-subjects research. This change was consonant with the vision and mission of the University of Northern Iowa, whereby students have deep and meaningful learning experiences outside of the classroom. Currently, two students are actively engaged in the Center’s research activities. Student scholars are essential to the work of the CET, and going forward, high school students will also have an opportunity to learn about and make a contribution to the research being conducted in their communities, agencies, and schools.

Changes to the Councils

As mentioned previously, the CET relies on the expertise of nationally and internationally recognized researchers, legislative representatives, and educational and health practitioners to guide the future direction of research engagement consonant with current theoretical, research, practice and policy. These individuals, who comprise several councils, facilitate the direction of the Center’s research program and portfolio and the planning and implementation of meaningful research activities. Currently, the CET has three advisory councils: CET Advisory Council, CET Research Council, and CET National Advisory Council. In 2018–2019, there were a few changes to the composition of the CET Councils and the addition of the newly established National Advisory Council. Missing from our advisory councils have been students and individuals who provide an explicit contribution based on their parent role. Thus, a concerted effort will be made to add individuals from these groups. See Appendix B for complete list of councils.

Leading Activities and Events

The CET’s activities have advanced the Center’s purpose of transforming individual lives, families, schools, and the broader community by co-leading events about seminal issues confronting schools and related systems (neighborhoods, communities, healthcare agencies) across our state and nation. As described below, 2018–2019 events ushered in new partnerships and new areas of focus for CET (e.g., equity, education, health, and the relevance of these areas to national and state policies). These key co-initiated and co-organized events include:

- **Inaugural National Advisory Council Meeting, October 18–19, 2018**

The CET held its Inaugural National Advisory Council Meeting to discuss Phase II of the CET. This event comprised presentations on (a) the changing demography of Iowa and UNI students, (b) Phase I of the CET, (c) selected CET-funded research projects, and (d) a review of the CET’s vision and mission and its research and development priorities. Going forward, the CET and the National Advisory Council will work together to identify promising areas of research and development in the education and related disciplines and sectors in the United States.

Partners: UNI Provost Office, UNI College of Education, CET.

- **Recalibrating Federal Roles in Educator Preparation, June 18–20, 2019**

The Center partnered with select institutions and agencies (e.g., American Association of State Colleges and Universities [AASCU]) to establish a national network of education leaders and scholars with the aim of redefining educator preparation in the United States. After participating in the convening, attendees connected with a network of education leaders and scholars engaged in advocacy efforts to recalibrate the federal role in educator preparation.

Partners: AASCU, UNI President Office, CET

- **Systems Mapping Workshop 1, June 26–27, 2019**

Led by Black Hawk County Public Health and the CET, this, the first in a series of system mapping workshops, facilitated an important discussion regarding the forces driving current inequities within the Cedar Valley Community. The *long-term* goal of the series of workshops and thereafter was to facilitate a sustainable, transformative change, undergirded by a systems approach. Initial and introductory conversations among 50 diverse stakeholders and core leaders in the community, allowed for the identification of previously unacknowledged, long-standing issues about race, culture, and equity evidenced in the environments and contexts in which Cedar Valley individuals, students, and families are embedded.

Partners: Black Hawk County Health Department, CET, Engaging Inquiry

- **Redefining Educator Preparation in the United States, July 25, 2019**

AASCU and UNI partnered to establish a national network of education leaders and scholars to redefine educator preparation in the United States. The purposes of this convening, held in Minneapolis, MN, were to engage education leaders and scholars in (a) creating a dialogue on the critical problems confronting PK–12 schools and (b) developing sound, effective proposals to address these problems.

Partners: AASCU, UNI President Office, CET

- **Systems Mapping Workshop 2, July 31, 2019**

Black Hawk County Public Health partnered (once again) with the CET to facilitate a second workshop on a discussion about the forces driving current inequities among community members. The workshop aimed to have open and authentic conversations among 50 diverse stakeholders and core leaders in the community, to gain a better understanding of how they have experienced similarities and differences in their lived experiences in the environments and contexts in which they are embedded.

Partners: Black Hawk County Health Department, CET, Human Impact

- **Systems Mapping Workshop 3, September 11, 2019**

Black Hawk County Public Health partnered with the CET to facilitate a third workshop on discussion about the forces driving current inequities among community members. Different than the previous workshops in this series, this workshop aimed to review the data derived from 50 diverse stakeholders and the resultant systems thinking map produced over the course of the workshops based on narratives about the groups' own experiences about equity.

Partners: Black Hawk County Health Department, CET, Engaging Inquiry

Measuring Impact

The final aspect of this report is the evaluation of the CET impact. As described in previous Annual Reports, the CET funded **18 research projects** over the course of 2014–2018. Taken together, the funded projects were embedded in **58 districts** across Iowa. The projects included **25 investigators** from Drake University, Iowa State University, the University of Iowa, and the University of Northern Iowa, and engendered important findings. Approximately **1500 teachers, 85 students, 38 parents, and 49 administrators** were implicated in the funded projects. Figure 1 provides a visual overview of the school districts originally involved in CET projects from 2014 to 2018. In addition to those shown in Figure 1, faculty fellows reported adding new districts or new states to their original work in this past year (2018–2019).

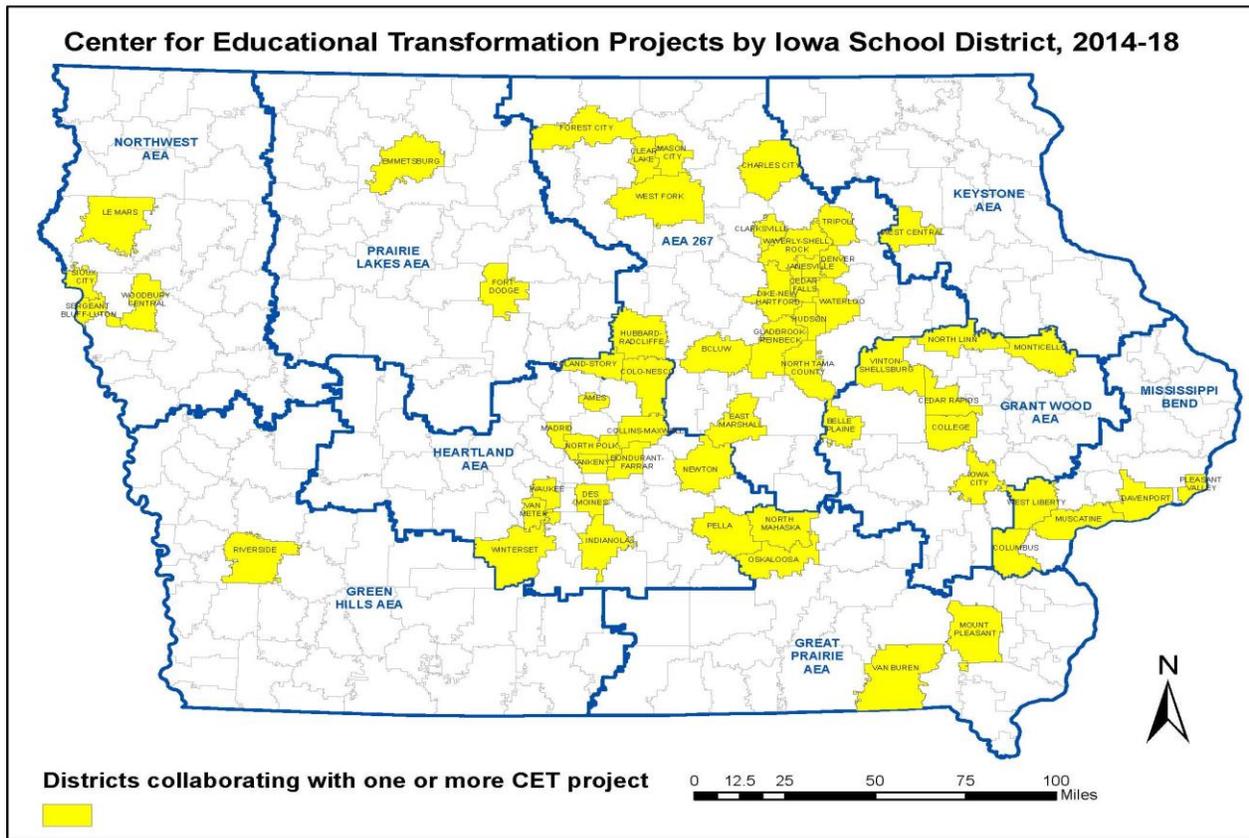


Figure 1. *Center for Educational Transformation (CET) Projects and District Partners.*

Measuring the impact of CET included the long-term outcomes derived from the 18 funded projects and 25 principal investigators. Given the nature of grant funding, publication, and presentation trajectories (i.e., length of time to secure funding or get published), the CET faculty fellows provided information regarding to what extent their pilot project funded by the CET served as foundation for a large externally funded grant, peer-reviewed publications, presentations, or successful partnerships.

CET Faculty Fellows: Grant Submissions, 2018–2019

Based on the data provided, CET faculty fellows were quite prolific in expanding their work in 2018–2019. Although the CET projects were concluded in 2017–2018, CET faculty fellows continued to have significant impact in the state of Iowa in 2018–2019. Faculty fellows applied for **\$11,255,554** in grant funding, secured **\$6,590,469**, currently have **\$2,671,406** in pending awards, and reported **\$1,993,679** in nonfunded efforts. See Appendix A for a select list of CET faculty fellows; and grant amounts funded, pending, or not funded.

CET Faculty Fellows: Publications and Presentations, 2018–2019

The CET faculty fellows were equally productive as in previous years in the dissemination of their respective study findings. For example, CET faculty fellows prepared, submitted, revised, and published approximately **20 peer-reviewed manuscripts** in top-tier journals and co-led approximately **18 presentations**.

CET Faculty Fellows: Continued Partnerships, 2018–2019

Also noteworthy were the continued and new partnerships that emerged as a result of CET-funded projects. Fellows reported employing a graduate research assistant to support additional data analytic work,

which allowed for additional publications from their projects. Other fellows indicated that they added new national partners based on their original work, a new school district, or took on new roles (e.g., consultant) based on their original CET-funded work.

CET Co-Led Grants, Publications, and Presentations, 2018–2019

The Center successfully partnered on grant submissions with researchers at the University of Iowa, UNI, and Waterloo Community School District. This effort yielded complete or partial submissions (e.g., Letter of Intent) to the Institute of Education Sciences, Robert Wood Johnson Foundation, and Spencer Foundation. The outcomes related to these submissions are pending. The focus of these submissions is consonant with critical and emerging issues described during the listening, observing, and learning tours: trauma-informed care in schools, the intersection of equity and STEM, systems focus on equity in Iowa schools (viz., Waterloo Community School District), and diversification of the teacher workforce. Given the changes in the CET directorship, no Center publications and presentations were submitted or disseminated.

CET Partnerships, 2018–2019

The CET director established several new partnerships and agreements in 2018–2019. Specifically, she agreed to serve as a board member or advisor for the following centers and agencies: Black Hawk County Public Health, Cedar Valley United Way, EMBARC, and the University of Northern Iowa Center for Teaching and Learning Mathematics.

CONCLUSION

As described in this Annual Report, the CET had a productive 2018–2019. Newly hired CET director Dr. Lisa Hooper and staff directed their time to reconnect with potential partners; to reorient diverse stakeholders about the CET's purpose, vision and mission; and to explore the culture and critical and emerging issues in the state of Iowa. Another essential aspect of 2018–2019 was the evaluation of the state and needs of the Center. During this transition year, the newly established National Advisory Council provided insight and guidance during the CET's transition to Phase II.

Going forward, the CET will concentrate on building capacity by co-creating research plans with partners and applying for funding to support research-based initiatives and programs. The CET director and staff will continue to reach across disciplinary, departmental, college, university, PK–12, and agency boundaries to engage with diverse stakeholders. The Center director and staff will also continue to co-create research-related activities, publications, and presentations that will inform the research base, practice, and policy at the state and national levels. Importantly, the CET will incorporate the recommendations of the UNI faculty and staff and other councils and will standardize the meeting schedules of all advisory councils.

FINANCIAL REPORT

UNI provided \$166,604.37 in support for CET staffing, supplies, and services. The remainder of the CET's funding was from other sources.

During the 2018–2019 year, the CET attempted to strengthen its relationships and collaborations with the UNI Office of Research and Sponsored Programs and the UNI Foundation in pursuit of strategic grant opportunities, contracts, and external foundation support to advance its mission.

APPENDIX A

**Center for Educational Transformation
Faculty Fellows
Measuring Impact: Grants, Publications, and Presentations**

Select Listing of Grants Sought to Further Work on CET Research Projects, 2018–2019

Dr. Sarah B. Boesdorfer

Pending:

Boesdorfer, S. B. (2019). *Helping Teachers Engineer Secondary Science for Equity (TESSE)* with A. Antink-Meyer & R. Darner, Institute of Education Sciences, Education Research Grants, **(\$1,290, 226)**.

Dr. Amy Hutchinson

Funded:

Hutchinson, A. Co-PI. (2018). U.S. Department of Education Office of Special Education Programs. WEGO-RIITE: Writing Efficiently with Graphic Organizers - Responsive Instruction while Implementing Technology Effectively, **(\$2,498,627)**.

Hutchinson, A. PI. (2018). National Science Foundation, *Preparing K-5 Teachers to Integrate the Computer Science Standards of Learning in Inclusive Classrooms to Support Students with High Incidence Disabilities*, **(\$999,436)**.

Dr. Mason Kuhn

Funded:

Kuhn, M. Co-PI. (2018). Math and Science Partnership Grant (MSP). “Increasing Primary School Teachers’ Understanding of the Iowa Science Standards and Developing K-2 Science Curriculum Using the ASSIST Approach Framework.” **(\$250,000)**.

Dr. Nicole Skaar

Funded:

Skaar, N. (2018-2021). Anonymous Foundation Grant: A Study of the Effectiveness of School based Behavioral Health Multi-tiered System of Support in a Rural School, **(\$166,000)**.

Skaar, N. (2018). Mahaska County Community Foundation Implementation of School-based Mental Health Multi-Tiered System of Support, **(\$5,000)**.

Dr. Armeda Wojciak

Pending:

Wojciak, A. S., Hooper, L., Templin, J., & Mahatma, D. (2019). *We Can! Building Resilience to Improve Student Outcomes through a School-wide Trauma Informed Intervention*. Institute of Educational Sciences, **(\$1,381,180.00)**.

Not funded:

Wojciak, A. S., Magsamen-Conrad, K., & Mahatma, D. (2019). *Improving adoption of evidenced based practices: Teachers as active and informed learners*. James S. McDonnell Foundation, **(\$1,000,000.00)**.

Wojciak, A. S., Mahatma, D., Ali, S., Bruhn, A., Bruch, S., & Peek-Asa, C. (2018) *We Can! Building Resilience to Improve Student Outcomes through a School-wide Trauma Informed Intervention*. Institute of Educational Sciences, **(\$811,863.00)**.

Wojciak, A. S. (2018). *We Can! Building Relationships and Resilience*. Braitmayer Foundation, **(\$35,000)**.

Wojciak, A. S. (2018). *We Can! Building Relationships and Resilience*. Carver Foundation Trust, **(\$146,816)**.

Select Publications on CET Research Projects, 2018–2019

- Bruhn, A. L., & Wills, H.** (2018). The emerging research on and development of technology-based self-monitoring. In T. Landrum, B. Cook, & M. Tankersley (Eds.), *Advances in learning and behavioral disabilities* (Vol.30, pp. 51-68). United Kingdom: Emerald Group.
- Bruhn, A. L.,** McDaniel, S., Rila, A., & Estrapala, S. (2018). A step-by-step guide to tier 2 behavioral progress monitoring. *Beyond Behavior, 27*, 15–27. doi:[10.1177/1074295618756984](https://doi.org/10.1177/1074295618756984)
- Bruhn, A. L.,** Rila, A., Mahatmya, D., Estrapala, S., & Hendrix, N. (2018). Analyzing the effects of data-based, individualized interventions using multilevel modeling and visual analysis. *Journal of Emotional and Behavioral Disorders*. Advance online publication. doi:[10.1177/1063426618806279](https://doi.org/10.1177/1063426618806279)
- Estrapala, S., Rila, A., & **Bruhn, A. L.** (2018). Don't quit cold-turkey: Systematic fading to promote sustained behavioral change. *TEACHING Exceptional Children, 51*, 54–61.
- Bruhn, A. L.,** Estrapala, S., Mahatmya, D., Rila, A., & Vogelgesang, K. (2019). Professional development on data-based individualization: A mixed research study. *Behavioral Disorders*. Advance online publication. doi:[10.1177/0198742919876656](https://doi.org/10.1177/0198742919876656)
- Bruhn, A. L.,** Wehby, J. H., & Hasselbring, T. S. (2019). Data-based decision making for behavior: Setting a research agenda. *Journal of Positive Behavior Interventions*. Advance online publication. doi:[10.1177/1098300719876098](https://doi.org/10.1177/1098300719876098)
- Boesdorfer, S.B.,** Arias, A.M., Mull, B., & Lieberum, K. The availability and quality of existing curriculum materials to support NGSS-aligned engineering instruction in chemistry teaching. *School Science and Mathematics*. Manuscript submitted for publication.
- Cowley, D.,** Garmon, I., Menke, T., Ragen, J., Schinstock, A., **Petersen, A.,** **Gallagher, D.,** & Iqtadar, S. (in preparation). “The trouble with love is”: Educator voices of inclusive change. *International Journal of Whole Schooling*.
- Gallagher, D.,** **Petersen, A.,** **Cowley, D.,** & Iqtadar, S. (2019). A sentimental education: Insights for inclusive reform from a university/school district partnership. In M. J. Schuelka, C. J. Johnstone, G. Thomas, & A. J. Artiles (Eds.), *SAGE handbook of inclusion and diversity in education* (pp. 146–158). Thousand Oaks, CA: Sage.
- Howell, E.,** Perez, S., & Abraham, W. T. (under review). Toward a professional development model for writing as a digital, participatory process. Manuscript submitted for publication.
- Diesburg, S. M.,** **Feldhaus, A. C.,** Oswald, C., Boudreau, C., & Brown, B. (2018). Evaluating elementary student interaction with ubiquitous touch projection technology. *Proceedings of the 17th ACM Conference on Interaction Design and Children* (pp. 357–364). New York, NY: ACM Conference on Interaction Design and Children. doi:[10.1145/3202185.3202757](https://doi.org/10.1145/3202185.3202757)
- Hutchison, A.,** & Woodward, L. (2018). Examining the technology integration planning cycle model of professional development to support teachers’ instructional practices. *Teachers College Record, 120*, 1–44. Retrieved from <https://www.tcrecord.org/library>
- Kuhn, M.** & McGrane, K., (in press). Using the ASSIST approach to enhance students’ conceptual understanding of vocabulary and text. *Science and Children*.
- Meacham, S.,** Lamont, M., & Mennenga, K. (2018). The fifth element? Using the tradition of knowledge and education in Hip Hop to transform classroom outcomes. *Journal of Popular Music Education, 2*, 133–148. doi:[10.1386/jpme.2.1-2.133_1](https://doi.org/10.1386/jpme.2.1-2.133_1)
- Petersen, A.,** **Cowley, D.,** **Gallagher, D.,** & Iqtadar, S. Teaching in the in between: Opportunities for and resistance to inclusive change in boundary work. *International Journal of Inclusive Education*. Manuscript in preparation.
- Rinehart, R., **Kuhn, M.,** & Milford, T. (under review). The relationship of epistemic cognition and dialogic feedback in elementary and middle school science classrooms. *International Journal of Science Education*.

- Tharp, B., **Kuhn, M.**, Milford, T., & McGrane, K. (under review). Creating an epistemic climate for evidence-based argumentation in elementary classrooms with the growth mindset. *Journal of Science Teacher Education*.
- Wojciak, A. S.**, Powers, J., & Medberry, L. (under review). Schoolwide trauma informed professional development: We can! Building relationships and resilience. In M. Reardon & J. Leonard (Eds.), *Alleviating the educational impact of adverse childhood experiences: School-university-community collaboration: Current Perspectives on School/University/Community Research* (Vol. 5). Charlotte, NC: Information Age Publishing.
- Woodward, L. & Thoma, J.** (revise & resubmit). Perceptions of literacy coaching: A survey study of a Midwestern state. *Teacher Development*.
- Woodward, L. & Thoma, J.** (in preparation). The impact of role confusion on instructional coaching. *Journal of Literacy Research*.

Select Presentations on CET Research Projects, 2018–2019

- Appelgate, M.** (2019, April). *Using text messages to connect linguistically diverse families with their child's mathematics classroom learning*. Paper presented at State of Iowa Mathematics Leadership Team, Huxley, Iowa.
- Atwood-Blaine, D., & **Kuhn, M.** (2019, January). *Home-grown primary science: Developing district-wide K-2 science teachers and curriculum aligned to NGSS using the ASSIST approach*. Paper presented at Association for Science Teacher Education Conference (ASTE), Savannah, GA.
- Bruhn, A. L.,** & Scott, T. S. (2018, October). *Using technology to enhance data-based decision making and classroom practices*. Paper presented at National PBIS Leadership Forum, Chicago, IL.
- Boesdorfer, S.B.** (2019, July). *Integrating engineering activities, ideas, and tips*. Workshop presented at ChemEd 2019, Naperville, IL.
- Boesdorfer, S. B.,** Arias A.M., Mull, B., & Lieberum, K. (2019, January). *The availability and quality of existing curriculum materials to support chemistry teaching to facilitate NGSS-aligned engineering instruction*. Paper presented at ASTE International Conference 2019, Savannah, GA.
- Howell, E.** (2018, December). *Assessing digital literacies to amplify student voice*. Panel presentation given at National Council of Teachers of English (NCTE) Conference, Houston, TX.
- Howell, E.,** & Perez, S. (2018, December). *Modifications needed: Making writing a digital, participatory process*. Paper presented at Literacy Research Association (LRA) Conference, Indian Wells, CA.
- Hutchison, A.,** & Colwell, J. (2019, October). *What are preadolescent readers doing online? An examination of upper elementary students' reading, writing, and communication in digital spaces*. Poster presented in Meet the Research session at the conference of the International Literacy Association, New Orleans, LA.
- Hutchison, A.** (2019, May). *Using virtual reality for multimodal science and literacy learning*. Paper presented at the Clarke County Innovation Conference, VA.
- Hutchison, A.** (2019, April). *Results on a study using virtual reality for multimodal science learning*. Paper presented at the annual conference of the American Educational Research Association, Toronto, Canada.
- Kuhn, M.,** Rinehart, R., & Milford, T. (2019, April). *The role of dialogic feedback and epistemic cognition in promoting evidence-based argumentation in science*. Paper presented at American Educational Research Association (AERA), Toronto, Canada.
- Kuhn, M.,** & Atwood-Blaine, D. (2019, October). *The ASSIST approach: Using inquiry as a learning tool and outcome*. Paper presented at Science Teaching Section/ Iowa Council of Teachers of Mathematics (ISTS-ICTM) Fall Conference, West Des Moines, Iowa.
- McDermott, M., Bedward, J., Weiss, K., Quarderer, N., & **Kuhn, M.** (2019, January). *Comparing engagement with the ASSIST approach in pre-service and in-service teacher programs*. Paper presented at the Association for Science Teacher Education Conference (ASTE), Savannah, GA.
- Majeika, C., Sterrett, B., **Bruhn, A. L.,** & McDaniel, S. C. (2018, October). *Beyond the critical features: Adapting tier 2 interventions to increase student success*. Paper presented at Teacher Educators for Children with Behavior Disorders Conference, Tempe, AZ.
- Skaar, N.** (2019, April). *Considerations of universal mental health screening: A rural school illustration*. Paper presented at Southeastern School Behavioral Health Conference, Myrtle Beach, SC.
- Skaar, N.,** Frynaardt, A., & Livezy, A. (2019, February). *Effectiveness of a school mental health program in rural schools*. Paper presented at NASP Convention, Atlanta, GA.
- Wojciak, A. S.,** & Range, B. (2018, November). *Trauma informed care: The importance of resilience in schools*. Research discussion presented at the American Association for Marriage and Family Therapy, Louisville, KY.

Partnerships (Established and Continued), 2018–2019**Student Partnerships****Dr. Lindsay Woodward and Dr. Jen Thoma**

- Fall, 2009. Employed a Graduate Research Assistant as a statistician to support additional analyses efforts to continue to publication.

Community School District Partnerships**Dr. Mason Kuhn**

- Next Generation Science Standards (NGSS) Consultant - Waterloo Community School District (All 11 Elementary Campuses)
- Next Generation Science Standards (NGSS) Consultant / Science Curriculum Developer - King Chavez Preparatory Academy, San Diego, California.

Dr. Alison Bruhn

- Community Consulting: Iowa City Community School District, Iowa City, IA.
- District, Iowa City, IA.

APPENDIX B

**Center for Educational Transformation
Councils**

Table 2

National Advisory Council

Name	Title	Organization or Institution
Dr. Terry Ackerman	Lindquist Chair	University of Iowa
Dr. Kenneth Coll	Dean, College of Education	University of Nevada, Reno
Dr. Sarah Diem	Associate Professor, Educational Leadership and Policy Analysis	University of Missouri
Dr. André Green	Associate Dean, College of Education and Professional Studies	University of South Alabama
Dr. Diane Horm	George Kaiser Family Foundation Endowed Chair of Early Childhood Education; Founding Director, Early Childhood Education Institute	University of Oklahoma
Dr. Sonya Horsford	Associate Professor, Education Leadership; Research Associate, Institute for Urban and Minority Education	Teachers College, Columbia University
Dr. Amy Hutchison	Associate Professor, Literacy and Reading	George Mason University
Dr. Ann O'Connell	Director, Research Methodology Center; Professor, Educational Studies	Ohio State University
Benjamin Riley, JD	Founder and Executive Director	Deans for Impact
Dr. Natalie Tran	Chair, Department of Secondary Education; Professor, Educational Leadership	California State University-Fullerton

Table 3

CET Advisory Council

Name	Title	Organization or Institution
Dr. Lisa Hooper	Director	Center for Educational Transformation
Dr. Ryan Wise	Director	Iowa Department of Education
Dr. Willie Barney	Superintendent	Meskwaki Settlement School
Thomas Gerhold	Iowa House of Representatives	State of Iowa
Dr. Eric Giddens	Iowa Senate	State of Iowa
Cassandra Hart	Assistant Principal	Hoover Middle School and First lady of Waterloo
Dr. Slade Hovick	Professor	Williamsburg Junior/Senior High School
Monica Kurth	Representative	Iowa House of Representatives
Dr. Nancy Langguth	Associate Dean for Teacher Education and Student Services	University of Iowa
Dr. Jon McKenzie	Director of Assessment and Comprehensive Improvement	Central Rivers Area Education Agency
Dr. Mark Nook	President	University of Northern Iowa
Dr. Vicki Oleson	Assistant Professor of Mathematics Education	University of Northern Iowa
Dr. Marlene Strathe	Director of the School of Education	Iowa State University
Dr. Lindsay Woodward	Assistant Professor, Literacy Education	Drake University
Dr. Dan Zambach	Senator	Iowa Senate

Table 4

CET Research Council

Name	Title	Organization or Institution
Dr. Amy Jurrens	Instructor, Communications	Northwest Iowa Community College
Dr. Brenda Lohman	Department chair in human development and family science	University of Missouri
Chloe O'Brien	Student	Waterloo East High School
Dr. Jay Pennington	Chief, Bureau of Information and Analysis Services	Iowa Department of Education
Dr. Saba Rasheed Ali	Professor, College of Education	University of Iowa
Dr. Lindsay Woodward	Assistant Professor, School of Education	Drake University