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January 9, 2015

Mr. Michael E. Marshall
Secretary of the Senate
Second Floor, State Capitol
Des Moines, IA 50319

Ms. Carmine Boal
Chief Clerk of the House
Second Floor, State Capitol
Des Moines, IA 50319

Dear Mr. Marshall and Ms. Boal:

In accordance with SF 470, the annual report for the statewide research and development entity at the University of Northern Iowa is hereby submitted to the General Assembly. As you will note, the report provides the background, model, approach, and structure for the Iowa Research and Development Center for Educational Transformation at the University of Northern Iowa. The University is committed to leading statewide efforts that will optimize resources, capitalize on existing research, leverage research funding, and build capacity for a community of scholars.

The initial concept or model for conducting educational research and development in Iowa relied on a PK-12 site, which was called the Statewide Research and Development School. However, after extensive review and discussion, it became obvious that this model of conducting research and development at one location did not optimize the breadth and complexity of educational resources throughout Iowa. Being constrained to one site would limit UNI's capabilities to embrace and collaborate with educational entities across Iowa and conduct research in those PK-12 schools best suited for the required research.

The new model to conduct research and development throughout PK-12 schools in Iowa has been implemented by UNI's Center for Educational Transformation. The Center provides the infrastructure to conduct research throughout Iowa and to disseminate research findings on a statewide and national basis. This new approach reflects best practices at other teacher training institutions in the country and provides a more distributive research model that is inclusive of all Iowa school districts.

The Center for Educational Transformation is led by the Center's Advisory Council which reports directly to the Executive Vice President and Provost at UNI. The Council includes representatives from the public universities, private universities, area education agencies, and PK-12 school districts.

Please let me know if there are any questions concerning this report.

Sincerely,

Dr. Bob Donley

Enclosure

cc: Legislative Log
Legislative Liaisons
dg/h/aa/R&D/legislog/jan15report.doc

REPORT ON THE IOWA RESEARCH AND DEVELOPMENT CENTER FOR EDUCATIONAL TRANSFORMATION AT THE UNIVERSITY OF NORTHERN IOWA

December 22, 2014

Executive Summary: This report provides the background, model, approach, and structure for the Iowa Research and Development Center for Educational Transformation at the University of Northern Iowa. The university is committed to leading statewide efforts that will optimize resources, capitalize on existing research, leverage research funding, and build capacity for a community of scholars.

Background:

The University of Northern Iowa (UNI) is the leader in PK-12 education in Iowa. This historic priority was established as one of the six goals in the University Strategic Plan (Goal 3: Lead the State and Nation in PK-12 Education). UNI's preeminence in PK-12 education is evidenced by faculty commitment to teaching, research and community engagement. The university's fundraising efforts resulted in two of the largest gifts ever to UNI. Businessman Richard O. Jacobson donated \$11 million to create a literacy center in the College of Education and his most recent gift, the largest gift ever to UNI, \$15 million, will be used for endowed professorships, scholarships, faculty research, and an annual education summit.

The legislation creating the research and development structure at UNI was initiated by Senate File 470 in Spring 2009. The goals outlined in Senate File 470 for the research and development initiative include the following:

- To raise and sustain the level of all Pre-K-12 students' educational attainment and personal development through innovative and promising teaching practices.
- To enhance the preparation and professional competence of educators in this state through collaborative inquiry and exchange of professional knowledge in teaching and learning.
- To focus on research that transforms teaching practice to meet the changing needs of the state's educational system.

In April 2013, UNI received a \$2 million award from the Roy J. Carver Trust to establish the Center for Educational Transformation (CET). On October 24, 2013, the Board of Regents, State of Iowa, approved the Center for Educational Transformation (Agenda Item ESAC 3). The Center fulfills the mission of the previously discussed Iowa Research and Development Center for Education Innovation at the University of Northern Iowa. This report provides an update on activities since the last report was submitted. The university remains committed to leading statewide efforts to optimize resources, capitalize on existing research, leverage research funding, and build capacity for a community of scholars.

CENTER FOR EDUCATIONAL TRANSFORMATION

The center offers a new, original model in which the state can both address its research and development needs, and engage in projects of national significance. Through field-based and action-oriented research, innovative educational practices and effective policy analysis, UNI leverages its strengths to dramatically impact PK-12 student learning and teacher effectiveness across the state and to inform the national education landscape.

VISION, MISSION AND GOALS

In January 2013, UNI convened a group of 23 stakeholders representing higher education, PK-12 education, government and the private sector to participate in a planning retreat focused on the proposed Center. Building on the internal planning activities already underway, the focus of this retreat was to bring together a variety of educational “voices” from across campus and the state to formalize the vision, mission and goals of the proposed Center. The group also began exploring potential research questions that would be addressed through the Center's activities. The success of this retreat exceeded expectations and provided UNI leadership not only with a solid framework for the Center's strategic plan, but also with an engaged group of individuals willing to serve the Center in an advisory capacity. As a result of the retreat activities, a shared vision and mission for the Center for Educational Transformation emerged.

Vision

The Center for Educational Transformation will redefine the face of educational research in Iowa and beyond. Founded upon the values of partnership and innovation, the Center will respond to and be inclusive of all education stakeholders. This intrinsic connectivity will allow the Center to become embedded in the Iowa educational landscape where partners not only “reach in” to access the Center's expertise, but the Center “reaches out” to promote best practices from research results and to connect partners with one another. This model will enable national research transformations to be situated in a local context. This is a Center that is transformational. The transformation will be evidenced through the Center's commitment to learners, educators, and systems.

Mission

To achieve this vision and fulfill the state mandate for educational research and development, the Center's mission is:

- *To transform education in Iowa and the nation through collaborative research, innovation, practice, and policy advocacy.*

Goals

The Center for Educational Transformation balances both stability and fluidity; stability as the hub for Iowa's educational research and fluidity as research initiatives are tailored to schools' needs. Overarching goals for the Center revolve around four key areas: Research, Practice, Policy, and Innovation. These goals connect directly with the State of Iowa's legislative intent for educational research and development. Research activities will be a blend of both long-term solutions and opportunities to quickly address an issue and disseminate best practices across the state.

GOAL #1 – Research

- Conduct research aimed at transforming our current teaching, learning and educational systems.

GOAL #2 – Practice

- Distill, disseminate and encourage best practices in curriculum, instruction and assessment.

GOAL #3 – Policy

- Leverage partnerships across the state to inform decision-makers and drive policy grounded in research results.

GOAL #4 – Innovation

- Produce innovations to transform our teaching, learning and educational systems.

STAFF

A university search committee initiated a national search for a Center Director during Fall 2013. The Director's role is to provide vision, build collaborations, and implement the strategic activities of the Center. Strong leadership, research, and management skills are needed, as well as a depth of experience and understanding of PreK-12 education policy and practice. The search process was successful in attracting a pool of candidates that were competitive; however, the search did not result in a final appointee. Thus, the position was not filled, and the search committee was charged with reopening the search and initiating advertising for the position again. The committee recently closed submissions for new applicants on October 15, 2014, and is currently on track to conduct interviews for a permanent director in November 2014.

To ensure the Center continues moving forward with strong leadership, an Interim Director was appointed in March 2014, from within the campus community. Dr. Alan Heisterkamp, with experience in center and program management and collaboration with PreK-12 schools, will serve until a permanent director is hired. Dr. Heisterkamp has served administratively in Iowa's secondary schools and most recently at the University of Northern Iowa as co-director of the Center for Violence Prevention. Dr. Heisterkamp has served on several state-wide education and community advisory boards and is well-versed in the areas of research proposals and grant applications.

Dr. Heisterkamp has worked to develop relationships within the university (teacher preparation programs and education-focused centers and programs) and with external stakeholders (e.g., school district personnel, state leaders, and Iowa Department of Education staff) ensuring the Center's mission is carried out. As Interim Director, Dr. Heisterkamp has provided leadership and guidance to research fellows, graduate students, and project faculty. In addition, Director Heisterkamp has:

- Recruited and hired Center staff – specifically, an administrative assistant, a program manager and a data analyst.
- Reviewed and revised the operating plan and logic model that support the Center's priorities and expected outcomes.

- Worked to leverage partnerships across the state by informing Area Education Agency chief officers, district superintendents, and educational stakeholders of the Center's mission and focus pertaining to research capacity and collaboration opportunities.

Director Heisterkamp will continue to work to:

- Supervise Center staff and support staff.
- Recruit and hire one additional external research fellow.
- Oversee all Center research projects and corresponding partners and constituents.
- Identify and secure grants and implement projects related to teacher preparation and PreK-12 education.

RESEARCH

Three distinct categories of research fellows comprise the core research team at the Center for Educational Transformation. We have referred to these as external fellows (to be drawn from national searches), internal fellows (from UNI), and Regents fellows (from University of Iowa and Iowa State University). All fellowships will be competitively awarded by the Center Director and the Advisory Council, based on the applicants' research merits and proposed work. Fellows will be responsible for strengthening and expanding existing research themes, creating original research ideas, and working with partner sites to implement research results. In addition, these individuals will be expected to support the Center Director's efforts for seeking external funding and writing reports. Fellows will also be expected to publish work in peer-reviewed journals or explore other means to promote the work of the Center.

EXTERNAL FELLOW

Dr. Shuaib Meacham, an external fellow appointed in Year 1, has been planning an intensive program with faculty colleagues and the Waterloo Schools to enhance school engagement of middle-school-aged African American boys. In a prior "Hip Hop and Higher Education" program (the "Hip Hop and Literacy Project"), Dr. Meacham was able to increase student engagement in middle and high school as well as interest in and connections to higher educational opportunities. He has brought this partnership model to Iowa and will be implementing his first cohort program this summer, in which youth will write, perform, produce, market, and sell their own music. University students will also be involved in the project as it looks to measure levels of student engagement and the impact on attendance, academic achievement and post-secondary planning. Dr. Meacham has also been involved in teaching at UNI and in collaborative research on racial representations in children's literature.

INTERNAL FELLOWS

Dr. Audrey Rule is a recently promoted Professor of Education at UNI, in the Department of Curriculum and Instruction. She is also coordinator of the gifted education endorsement program, teaching graduate courses in gifted education, creativity, problem-solving, and graduate/undergraduate science education. She has a Ph.D. in Geology and has over 13 years experience teaching elementary school science methods. Dr. Rule has published over 100 refereed journal articles, most presenting research studies validating new curriculum ideas, about 50 in the area of science education; and is the Science Editor for *Early Childhood*

Education Journal, an international peer-reviewed journal published by Springer. Within the CET, Dr. Rule is conducting science curriculum research on the integration of literacy, art, and spatial thinking skills into science lessons that support the Iowa Core Science and Literacy standards. Besides benefiting the students and teacher(s) who are involved with her research projects, study findings will provide rigorous classroom-tested curricula for integrating spatial thinking with science and literacy that will be disseminated to provide examples for other educators.

Currently, Dr. Rule is developing, in collaboration with an incoming doctoral student specializing in gifted education as well as multiple graduate students from her classes and seminar, a new gifted student enrichment program for young, highly advanced students whose needs are not being fully met by the current school curriculum. This after school program provides the opportunity for highly gifted young students to work with intellectual peers close in age on science projects that integrate spatial thinking, arts, and technology.

Dr. Sarah Boesdorfer is an Assistant Professor in the UNI Department of Chemistry and Biochemistry, and a former high school chemistry teacher. Her previous research and publications have been in the areas of effective science teaching and incorporating engineering into the science classroom. Dr. Boesdorfer has four undergraduate students already involved in the research and/or planned for next year. This year, she is conducting a state and national survey of high school chemistry teachers to assess their level of knowledge and use of engineering principles in science teaching, and will be following up with the development, implementation, and testing of engineering lessons in selected schools. Her activities include the revision of an existing research-supported curriculum for high school chemistry in order to align it with the Next Generation Science Standards (NGSS). Dr. Boesdorfer's overall goal is to help chemistry teachers implement the NGSS in ways that result in meaningful learning of college preparatory chemistry content.

REGENTS FELLOWS

Dr. Amy Hutchison is an Assistant Professor of Literacy, Co-Director of the Duffelmeyer Reading Clinic, and Director of the Literacy Coaching Certificate program at Iowa State University. Dr. Hutchison's research interests include the study of the new skills, strategies and dispositions required to read, write, and communicate with digital technology and how to best prepare teachers for the integration of literacy and technology. Based on her work with classroom teachers, Dr. Hutchison and her colleague developed the Technology Integration Planning Cycle for Literacy and Language Arts (Hutchison & Woodward, 2014). The cycle identifies seven critical elements that influence literacy teachers' instructional planning involving digital technology and the success or failure of the resulting classroom instruction. Her research is focused on examining literacy teachers' abilities to implement the planning cycle to provide effective learning experiences for students that integrate digital technology. Dr. Hutchison's research has recently been published in outlets such as *Reading Research Quarterly*, *Reading Teacher*, and *Technology, Pedagogy & Education*. She teaches courses on new media literacies, adolescent literature, literacy teaching methods, and literacy coaching.

Dr. Carolyn Colvin, from the University of Iowa, is conducting research that blends the study of language, literacy and culture in rural school districts in Iowa. Rural schools have been transformed by the arrival of immigrant families. Both school faculty/administrators and immigrant parents are challenged in the way they must learn to effectively communicate across differences in language and culture. Parent-teacher communication most often takes place around the institutionalized activities of parent-teacher conferences as it is these points of contact that provide opportunities to share and discuss information concerning academic progress for the children of immigrant parents. Extensive research exists that documents mainstream parents' involvement in schools (for example, see Epstein, 1986; Epstein & Dauber, 1991). More recently, researchers have begun to examine parent involvement for immigrant parents, specifically Latino parents (Valdez, 1997). However, parent involvement models tend to reflect dominant mainstream practices for how parents can serve as advocates for their children. Notably, in much of the existing research, parent voices and perspectives are absent. In Dr. Colvin's study, four elementary teachers, four Spanish-speaking parents, and four parents from Laos were recruited to explore through interviews how each participant understood the purposes of and prepared for parent teacher conferences. Questions guiding this research included the perceived purposes of parent-teacher conferences, conference preparation, and participants' perceptions of conferences as sites for effective communication. Analysis will occur using grounded theory (Corbin & Strauss, 1998). The outcome of data analysis will inform a model for bicultural parent engagement for possible implementation at the local school site involved. A parent engagement model might be applicable for other school sites where large numbers of immigrant/recently-arrived families reside.

CENTER AFFILIATE

Brian Townsend serves as a research affiliate with the Center and represents research interests currently underway within the Center for Teaching and Learning Mathematics (CTLM). For the past five years, the CTLM has provided professional development to teachers in the state of Iowa through various competitive grants and contracts. Data collected on this professional development for project evaluation is a rich source for further research into teachers' change in practice, increase in their content knowledge for teaching, and the impact on student achievement. Through the support provided by the Center, Townsend is examining data on the work of improving professional development in an effort to improve mathematics instruction.

BUDGET

UNI provides \$300,000 per year; these funds were reallocated following the Price Lab School staff restructuring. As stated earlier, a grant from the Roy J. Carver Trust was obtained to launch the Center. It provides \$2 million in research funding and support over a 2-3 year period. The Center currently works in collaboration with the Office of Research and Sponsored Programs and the UNI Foundation to pursue strategic grant opportunities, contracts, and external foundation support to advance the mission of the Center.

EDUCATION SUMMIT 2015

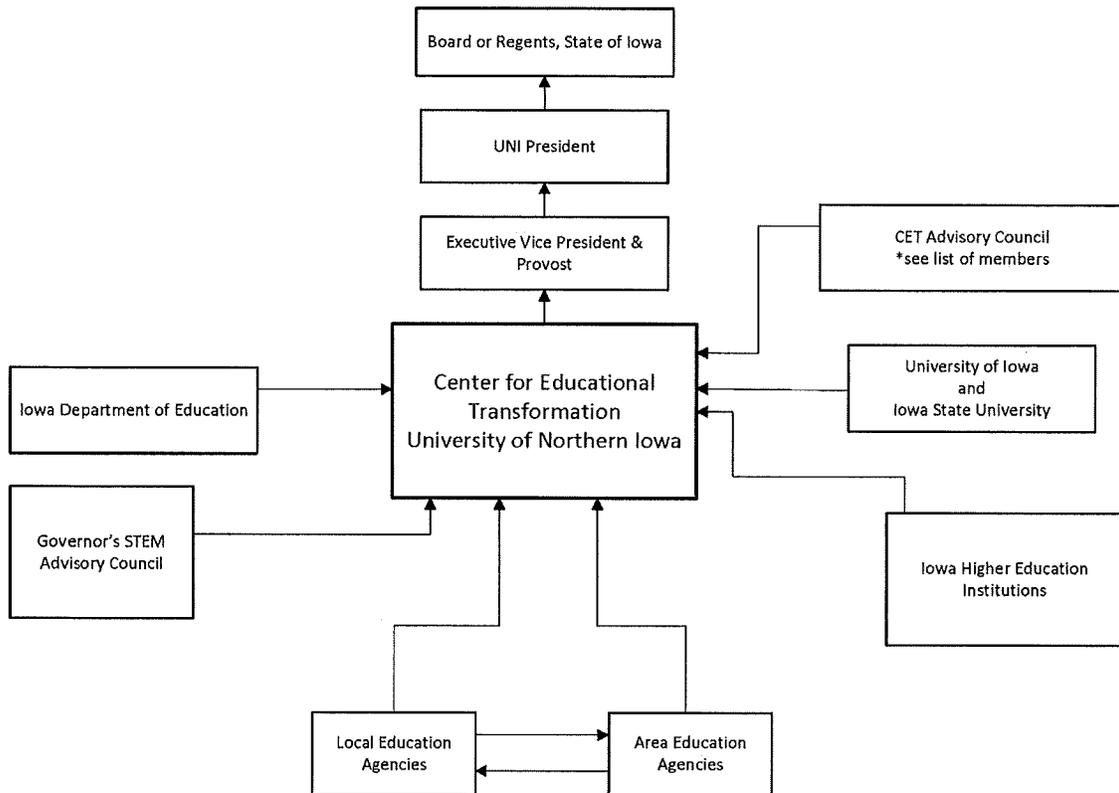
An Education Summit at the University of Northern Iowa is scheduled for Spring 2015; it will attract educational, legislative, and community leaders from around the state. Initial planning has identified three main theme areas in which UNI already possesses extensive strengths. One initial theme will be math and science education, or STEM, in Iowa. This theme will build on UNI's current work in math and science education, a strong state-level emphasis on STEM education and future workforce needs (through the Iowa Governor's STEM Advisory Council), and the prevalence of this issue in national research. A second theme will be Literacy. This theme area connects with the work of several existing Centers at UNI, including the Richard O. Jacobson Center for Comprehensive Literacy which works closely with Iowa schools to improve literacy for all Iowa students. The third theme will focus on the needs and changes of rural school districts in Iowa and will be supported by the work of a focus group of nine (9) rural school superintendents who are currently studying and analyzing the changing dynamics and culture of rural school districts and their respective communities. The Center for Educational Transformation will serve as co-host and sponsor of this event.

SUMMARY

In conclusion, the Center for Educational Transformation will:

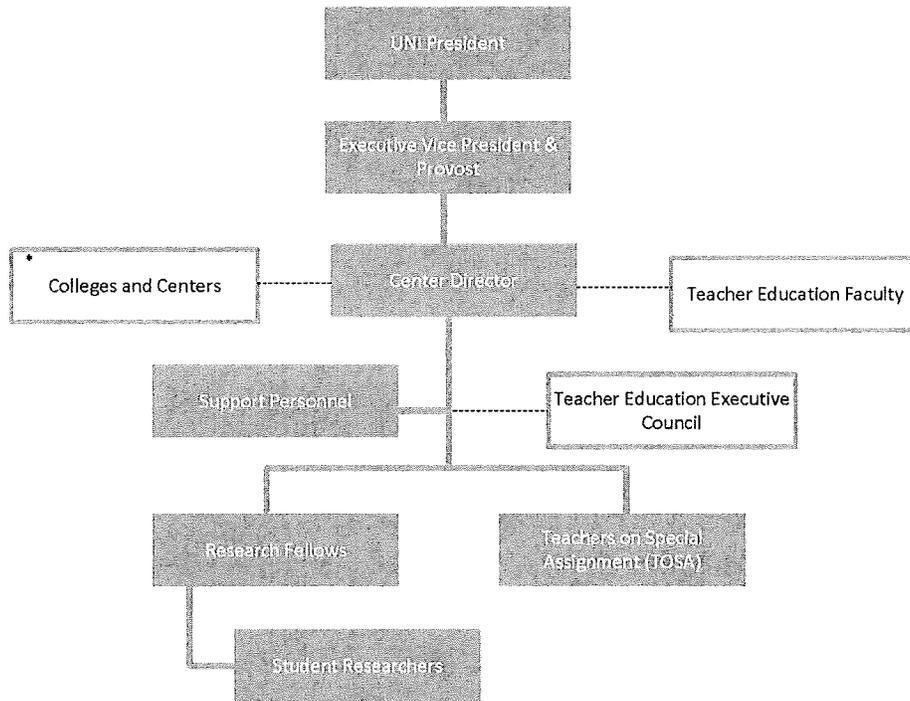
- Be the clearing house for educational innovation;
- Conduct transformative design-based implementation research;
- Implement a national search for an additional external research fellow in 2015-2016;
- Provide professional development for practicing teachers;
- Broaden the arena of practice for pre-service teachers; and
- Synergize existing services of other active PK-12 centers across the university.

Center for Educational Transformation (CET) Organizational Chart (External)



November 1, 2013

Center for Educational Transformation Organizational Chart (Internal)



*** Teacher preparation involves departments in all four colleges:** College of Education, College of Business Administration, College of Humanities, Arts & Sciences, and College of Social & Behavioral Sciences

Teacher preparation may include the following centers: Richard O. Jacobson Center for Comprehensive Literacy, Center for Disability Studies in Literacy, Language and Learning, Center for Teaching & Learning Mathematics, and Regents Center for Early Developmental Education

November 1, 2013

CENTER FOR EDUCATIONAL TRANSFORMATION ADVISORY COUNCIL

Name	Title	Department/Institution
Michael Licari	Interim Provost & Executive Vice Pres. for Academic Affairs	University of Northern Iowa
Randy Pilkington	Executive Director – Business and Community Services	University of Northern Iowa
Hillery Oberle	Director, Corporate & Foundation Relations	University of Northern Iowa
Tim Gilson	Assistant Professor – Educational Leadership & Postsecondary Education	University of Northern Iowa
Chad Heinzl	Associate Professor – Earth Sciences	University of Northern Iowa
Joel Haack	Dean – College of Humanities, Arts, & Sciences	University of Northern Iowa
Dwight Watson	Dean – College of Education	University of Northern Iowa
Kathryn East	Associate Professor – Education Psychology & Foundations	University of Northern Iowa
Larry Escalada	Professor – Physics	University of Northern Iowa
Anita Gordon	Director of Research Services – Sponsored Programs	University of Northern Iowa
Catherine Miller	Associate Professor – Mathematics	University of Northern Iowa
Katie Mulholland	Superintendent	Linn-Mar School District
Jon McKenzie	Director of Assessment & Compr Improvement	Cedar Falls School District
Tom Penaluna	President & CEO	CBE Companies, Inc
Jay Pennington	Bureau Chief	Iowa Department of Education
Susan Lagos-Lavenz	Associate Dean – College of Education	University of Iowa
John Schuh	Director, School of Education & Program Director, Emerging Leaders Academy	Iowa State University
Jane Lindamen	Superintendent	Waterloo School District
Roark Horn	AEA 267 Chief Administrator	AEA 267, Waterloo
Slade Hovick	Math Teacher	West Liberty High School
David Zumbach	State Senator	Iowa General Assembly
Brian Schoenjahn	State Senator	Iowa General Assembly
Bob Kressig	State Representative	Iowa General Assembly
Chris Hagenow	State Representative	Iowa General Assembly

Logic Model for UNI Center for Educational Transformation (CET)

