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**REPORT ON IOWA RESEARCH AND DEVELOPMENT CENTER FOR EDUCATION
INNOVATION AT THE UNIVERSITY OF NORTHERN IOWA**

Actions Requested: (1) Consider approval of the report to the Iowa General Assembly regarding the update on the Statewide Research and Development School, now called the Iowa Research and Development Center for Education Innovation at the University of Northern Iowa. (2) Direct the Board Office to submit the report to the General Assembly by January 10, 2013.

Executive Summary: This report provides the background, model, approach, and structure for the Iowa Research and Development Center for Education Innovation 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 initial concept or model for conducting educational research and development in Iowa was at one 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 will be implemented by UNI's proposed Iowa Research and Development Center for Education Innovation. The Center will provide the infrastructure to conduct research throughout Iowa and to disseminate research findings on a statewide and national basis. The need to transition to this more inclusive model was discussed at the March 2012 and April 2012 Board of Regents meetings.

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 research model and proposed Center will use extensive existing research entities in Iowa and leverage state, federal, and private grants and resources to address statewide educational issues.

The proposed Iowa Research and Development Center for Education Innovation will be led by the UNI Teacher Education Executive Council which includes four college deans, the elementary and secondary teacher education coordinators, and three representatives of the teacher education faculty. A statewide advisory council and standing institutional research committee will also be established in 2013; it will include representatives from the public universities, private universities, community colleges, area education agencies, and PK-12 school districts.

Research and Development Background

The University of Northern Iowa is the leader in PK-12 education in Iowa and clearly articulated as one of the six goals in the University's Strategic Plan – Lead the state and nation in PK-12 education. Furthermore, fundraising efforts resulted in the largest give to UNI (\$11 million) to create a Literacy Center in the College of Education.

The legislation that created the concept for a Statewide Research and Development School occurred in Spring 2009 as a part of Senate File 470. The goals outlined in SF 470 will underpin the work of the proposed Iowa Research and Development Center for Education Innovation:

- To raise and sustain the level of all PK through 12th grade students' educational attainment and personal development through innovative and promising teaching practice.
- 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 this state's educational system.

Research and Development Model

The R&D Model will mobilize teaching, research, and outreach resources by having a broader base across the university and beyond. It will include an applied research center involving faculty and staff across campus and the state, as well as visiting research fellows. Critical research questions will be identified and research will be conducted to inform practices and education policy. This group will collaboratively address education needs across the state by offering a menu of services based on the individual needs of specific schools or districts. This expanded model for research and development will engage currently underserved communities across the state in cutting edge research and evaluation. The mission of this effort will be to produce proven, classroom-based research that will lead to effective change in improving the performance of Iowa PK-12 teachers and students. The new model will be both a service to the state and an incubator for original research.

The R&D Model will involve more authentic settings for the research to be conducted and applied and for teaching and learning models to be developed. Initial anticipated focal areas include researching model practices in field experiences for pre-service educators; and addressing student achievement gaps at the 4th and 8th grade levels, with emphasis on STEM disciplines. An additional focus area will be to examine the increasing diversity of PK-12 student demographics, including emergent immigrant and refugee populations.

The proposed Research and Development Center will provide research services to Iowa school districts to assist in proving solutions to persistent PK-12 concerns, such as the achievement gaps, career and college readiness, assessment and evaluation variability, academic persistence and matriculation, and education reform policies and their implementation. The Center will address state and national research initiatives with the capacity to be nimble and to tailor research specifically to Iowa PK-12 school need.

The R&D Model will address student achievement issues with increased flexibility by bringing together statewide expertise and visiting research fellows with national expertise. The Center will coordinate and solidify statewide efforts in the area of education, providing connectivity to existing centers and reaching out to schools across the state. The model will serve as a “proving ground” for state, regional, and national concepts, in concert with Governor Branstad’s STEM Advisory Council and other public and private entities engaged in teaching and learning. This Center will provide a vehicle to research and evaluate these concepts, distilling best practices and forming new important linkages.

Research and Development Approach

The approach to research and development for the Center is design-based implementation research (Pennell, Fishman, Cheng, and Savelli, 2011). The UNI Teacher Education executive Council examined this approach which consists of design research and the development and testing of innovations that will align with, support, and improve teaching and learning.

This design-based implementation research will focus on educational issues from multiple educational stakeholders throughout Iowa. The Center researchers will engage in collaborative design and aim to develop theory related to classroom learning and implementation through a systematic and well-defined inquiry plan. Perhaps most importantly, the researchers will focus on developing capacity for the Center to sustain system changes. Intentional efforts will be in place to develop organizational processes to sustain the research efforts through institutional system changes.

Three critical steps will be completed to develop the design-based implementation research (Pennell et al, 2011).

1. Determine shared norms and practices on theory development. For example, in design-based implementation research, the questions asked are, “What works, when, how, and for whom?” and “How do we improve a strategy to make it more sustainable?”
2. Develop standards about the use of evidence to guide changes in research design. Researchers will determine practices to include multiple points of view on problems and how to interpret conflicting data.
3. Identify resources to support and engage a community of scholars and venues for disseminating findings will be critical to the success of the research Center.

Design-based implementation research addresses teaching and learning practices and policy issues. The collaborative design focuses on addressing education challenges and provides districts the assistance they need to improve instruction. Furthermore, this research will assist in identifying new and innovative teaching practices and student achievement parameters, and in providing data for informed decision-making about changes needed in educational policies.

Research and Development Structure

The Center Director (a tenured faculty position) will report directly to the Provost, and will join the UNI Teacher Education Executive Council as an ex-officio member. The Iowa Department of Education will serve as an external advisor, providing statewide connectivity for dissemination and demonstration. Given the specific research questions pursued, local education agencies (LEAs) will be engaged on an individual basis, in partnership with their respective area education agency (AEA), providing regional connectivity when appropriate.

The University of Northern Iowa has committed an initial annual allocation of \$300,000 for this project, effective FY 2013. Institutional funds will be used to provide staffing as well as graduate assistantships, undergraduate research awards, and additional faculty fellowship support.

The Center will recruit and engage a group of UNI faculty and other nationally-recognized external educators to serve as research fellows. The number of fellowships created and the specifics of those fellowships will vary within the available funding. The external fellows will ensure that the Center's efforts are infused with the expertise necessary to launch a high-profile, high-performing educational research center.

External fellows will be recruited to strategically address research issues that have been identified as most significant for Iowa schools and which will likely have national implications. UNI faculty also be engaged as internal research fellows. This approach will create a Center that possesses the necessary balance of stability and fluidity to meet Iowa's educational needs while addressing the requirements specified in SF 470.

Research and Development Center

The new model will capitalize on the breadth of university disciplinary expertise throughout UNI to serve the state of Iowa. Research will be conducted to address theoretical, empirical, and applied research questions. Funding arrangement will be established to allow and encourage visiting scholars, practitioners, Iowa Department of Education staff, and others to be engaged, depending on the project.

Partner districts will collaborate on research initiatives that enhance students' academic achievement. Research initiatives might be based on the needs of a particular Iowa school or on a statewide educational need. For example, the Center might focus on a state need to generate, pilot, and research the effectiveness of project-based education in a competency-based teaching and learning environment. Another example might be a focus on educational policy in which areas of parental engagement, human capital, staffing models, administrative practices, and finance models are addressed.

The Center will also act as a clearinghouse for innovative pedagogical techniques and curriculum design and development. The Center will create a repository of innovative research and teaching practices that PK-12 teachers throughout the state can access. These innovations will be captured through video vignettes (modeled lessons) as well as lesson plans, unit plans, research papers, and descriptive articles on the scholarship of teaching and learning. Technology will be used to disseminate research findings and engage practitioners.

The objective of the Center is to be the site in which Iowa's schools seek support for professional development, design of assessment systems, modeling of best practices, and showcasing transformative research. The Center will also coordinate the distribution of services of other UNI centers and programs that have a PK-12 dissemination focus. Examples include the Regents Center for Early Developmental Education; Center for Disability Studies in Literacy, Language, and Learning; Freeburg Early Childhood Program; Richard O. Jacobson Center for Comprehensive Literacy; and Center for Teaching and Learning Mathematics. Center faculty who are distributed across the state will serve as placement coordinators for pre-service teachers giving them a broader field of practice in which to complete their clinical requirements.

Summary

The following are brief highlights of the Iowa Research and Development Center for Education Innovation at UNI:

- ☑ A much wider variety of research questions can be addressed and hypotheses tested by having a broader set of disciplines, educators, and PK-12 school testing sites involved.
- ☑ UNI will be enhanced as a national education leader by establishing a process to have nationally prominent education scholars and thinkers connected to the Center on specific research projects. Furthermore, the State of Iowa will benefit by having world class educators involved through the Center.
- ☑ The Center will be led by UNI under the governance of the Board of Regents; it will operate in partnership with other Iowa higher education institutions and the Iowa Department of Education. An advisory board of education stakeholders will be established; it will include representatives from the University of Iowa and Iowa State University. The Center will work in cooperation with existing UNI Centers, as well as the Governor's STEM Advisory Council to leverage expertise. An organizational chart is available in Attachment A for illustrative purposes.
- ☑ The Iowa Research and Development Center for Education Innovation will:
 - ⇒ Be the clearinghouse for education innovation.
 - ⇒ Conduct transformative design-based implementation research.
 - ⇒ Provide professional development for practicing teachers.
 - ⇒ Broaden the arena of practice for pre-service teachers.
 - ⇒ Synergize existing services of other active PK-12 centers across the university.
 - ⇒ Benefit rural Iowa districts by conducting research on distance learning and teacher retention in rural areas.

Iowa's Research & Development Center for Education Innovation Organizational Chart



□ Iowa's Research & Development Center Director serves as an ex-officio member of the Council.
 ◇ Serves as affiliates of Iowa's Research & Development Center for Education Innovation.
 * Serves an advisory role.

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