# Proposal to Establish the

# Roy J. Carver Center for Educational Transformation at the University of Northern Iowa

### **Problem Statement and Summary:**

In 2012, the Board of Regents, State of Iowa made the decision to close the Malcolm Price Laboratory School located at the University of Northern Iowa (UNI). Research in Iowa and at the national level confirms that the model of a centrally-located laboratory school has become outdated and is no longer the most effective way to shape educational research and development. The State of Iowa, through the Board of Regents maintains that the critical work which took place in the Malcolm Price Laboratory School setting must persist into the future. Furthermore, the State has mandated that UNI must continue to lead these efforts for our state and fill this gap in our PreK-12 educational system. In order to fulfill this mandate, a new transformative research and development model must be created; one which retains the original legislative intent for the state's Research & Development (R&D) school, to:

- Raise and sustain the level of all PreK through 12 students' educational and personal development through innovative and promising practices.
- 2. Enhance the preparation and professional competence of lowa educators through collaborative inquiry in exchange of professional knowledge in teaching and learning.
- Focus on research which transforms practice to meet the changing needs of lowa's educational system.

Compounding this R&D gap in our education system is the persisting problem that education is transforming more quickly than our state is prepared to address. Our children, future workforce and state economy are most at risk if, as a state, we do not act boldly. We must continuously question whether our current systems can meet the future global and economic challenges we face. We must lead transformational change in lowa while also staying attuned to national initiatives.

The University of Northern Iowa has developed a roadmap to both fulfill the state's legislative mandate for educational research and development and provide the transformational leadership necessary for Iowa to regain its place at the forefront of educational attainment. Support from the Roy J. Carver Charitable Trust is imperative to fulfilling this roadmap in a timeframe that ensures we do not lose ground in our fight to rebuild and transform education in Iowa. Therefore, we respectfully propose the

establishment of the Roy J. Carver Center for Educational Transformation at the University of Northern Iowa. The proposed 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, we will leverage UNI's strengths to dramatically impact PreK-12 student learning and teacher effectiveness across the state and to inform the national education landscape. We anticipate an aggressive timeline to launch this new center. Internal preparations have been made in anticipation of an investment from the Carver Trust, positioning the university to move forward very quickly in 2013.

#### A Transformational Imperative:

The current educational context in lowa is in need of a transformation that will enable learners, educators, and the educational system to be bold, nimble, and resolute. The lowan educational context must be bold in its adoption of innovative practices that have proven academic promise; nimble in its ability to adopt and adapt based on contextual needs of the district; and resolute in order to remain steadfast until successes are measured and progress is determined. At the heart of these transformations is the need for a research and development hub that can connect our educators with the practical expertise they need today and world-class innovation to drive their aspirations.

By way of legislative mandate, the State of Iowa, via the Board of Regents, has maintained that UNI is the institution that should lead our state's educational research and development. UNI is uniquely positioned to lead the state into the transformation that is necessary for our educational system. Shaping PreK-12 education in Iowa dates back to UNI's origins as Iowa State Teachers College. As an institution, this rich tradition and focus on improving the educational experience of all Iowa children is one that will remain a focal area of our institution for generations to come.

Beyond this historical context, UNI is the largest, most distributed teacher preparation program in the state of Iowa. This existing infrastructure will enable the Center to conduct research through our ten student teaching centers located across the state of Iowa (Appendix A contains a listing of these centers and their locations), serving our state from River to River. Through these existing centers more than 1,000 UNI preservice educators, students pursuing teaching licensure, per year are placed in these Local Education Agencies (LEAs) to complete field experiences. Our teacher and leader candidates are known for their command of content, authentic pedagogical practices, and their competence and confidence in

working with all learners. The coordinators at each center are responsible for securing placements, maintaining collaborative agreements, supervising candidates, and conducting professional development. These coordinators are well-positioned to become UNI's liaisons for research and development in the LEAs and Area Education Agencies (AEAs). Due to the closing of the Malcolm Price Laboratory School, we also have 25 teachers who transferred to field experience coordinators in area schools. With hands on experience in education R&D, these educators can work as conduits to connectivity at the LEA and AEA levels.

Additionally, UNI is considered Iowa's go-to institution for educator continuing education, professional development and resources. Roughly 25% of Iowa's educators and 33% of school administrators come from UNI. More than 12,000 alumni educators live in Iowa and 500 new teachers graduate each year. Annually, around 3,500 in-service educators connect with UNI for professional development and continuing education. Another 400 in-service educators are enrolled in UNI graduate programs via distance education. This existing network and wealth of knowledge will enable the Center to provide transformational leadership for Iowa's learners, educators and systems.

Transforming Learners: Learners are in need of rich personalization so that they can acquire knowledge based on their variability while at the same time being held to high expectations. We must prepare all learners for a shift from a knowledge economy to that of an innovation economy, where they can adopt a needed entrepreneurial mindset—an outlook that demonstrates a willingness to experiment, take risks, learn from failure and solve problems creatively.

Transforming Educators: A transformative educator must see the brilliance in all learners and not teach less, but more. If learners come to school knowing less, and educators put them on track of slower paced, remedial learning, when will they catch up? Transformative educators recognize that a learner who is not capable of critical analysis, problem-solving abilities, and adroit literacy skills becomes the low-level functionary of the dominant society.

Transforming Systems: Iowa has made gradual progress on national indicators over the past 20 years. While once at the top in student performance, the lack of innovation has created complacency and allowed other states to surpass Iowa's position. A transformational systems change would embrace emerging technologies that support student success by engaging students' imagination, accelerating

their work, and assuring that they have access to the most up-to-date information and instructional tools.

#### **Vision, Mission & Goals**

In January 2013, UNI convened a group of 23 stakeholders representing higher education, PreK-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 with not only a solid framework for the Center's strategic plan, but also an engaged group of individuals willing to serve the Center in an advisory capacity. Appendix B contains a full listing of the planning retreat participants. As a result of the retreat activities, a shared vision and mission for the Roy J. Carver Center for Educational Transformation has emerged.

#### Vision

The Roy J. Carver Center for Educational Transformation at the University of Northern Iowa 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:

Transforming Learners - The Center will be data-informed and results-driven. The Center will create an atmosphere of continuous improvement, where positive change for all learners is the highest priority. The Center will utilize the input of actual PreK-12 learners to help inform the research design process. Transforming Educators - The Center will create continuous connectivity between the state's needs and the research and support necessary to meet those needs. The Center will enable PreK-12 practitioners and teacher educators to work alongside nationally-prominent researchers.

Transforming Systems - The Center will challenge traditional assumptions about education including

who conducts world-class research and how research ideas are incubated, implemented and become impactful. The Center will engage government officials as true partners to organically shape policy.

#### 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, dynamic practice, policy advocacy and sustainable innovation.

### **Goals**

The Roy J. Carver Center for Educational Transformation will balance both stability and fluidity; stability as the hub for lowa'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. 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 (See page 9 for detailed descriptions of goals and research scenarios). These goals connect directly with the State of Iowa's legislative intent for educational research and development.

GOAL #1 – Research: To conduct research aimed at transforming our current teaching, learning and educational systems.

GOAL #2 - Practice: To 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.

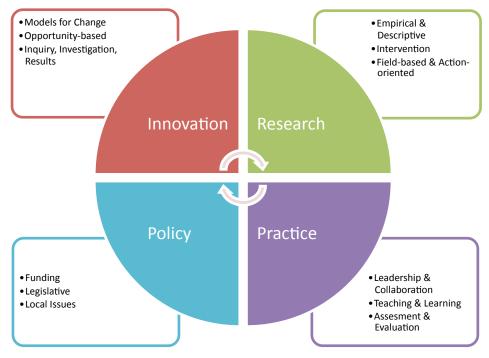


Figure 1: Illustration of the of the proposed Center's goals

#### Structure and Administrative Organization

We envision the creation of this Center to coordinate and solidify statewide efforts in the area of education, providing connectivity to existing centers and reaching out to schools across the state. The Center's Advisory Board will be convened by the Executive Vice President and Provost of the University of Northern Iowa and the Director of the Iowa Department of Education. As a Center housed at one of Iowa's public universities, the Carver Center for Educational Transformation will follow the policies and procedures as outlined by the Board of Regents, State of Iowa.

# Launching the Center

During the summer of 2013, the Advisory Board will be convened under the leadership of the UNI Executive Vice President and Provost, Dr. Gloria Gibson and the Director Jason Glass of the Iowa Department of Education. Existing partnerships and planning efforts already underway will allow for the immediate launch of the Center during the summer of 2013. Many of the individuals that will help form the framework for the Advisory Board are already engaged with UNI's R&D efforts and/or have participated in the Center's strategic planning efforts. This group is poised to be activated into a formal advisory role. These individuals represent key education stakeholders including representation from the

University of Iowa (UI) and Iowa State University (ISU), state and local government, PreK-12 institutions, academia, private industry and the nonprofit sector. The Advisory Board will provide guidance and leadership to the Center Director and to the Center, as a whole. Advisory board members will meet semi-annually and will serve 3-year terms.

#### Personnel

#### **Center Director**

The Advisory Board will assist with the selection process of a Center Director; this individual will serve as the aspirational and strategic leader of the Roy J. Carver Center for Educational Transformation.

Qualifications for this position include a scholarship record that qualifies the candidate as a full professor and more than 5 years of experience as a research and development scholar. This individual must also possess connectivity to the national education research community. Several individuals who currently lead educational research programs and centers in other parts of the country have been identified and will be approached about applying for this position. A formal position announcement and search process will be undertaken, in accordance with university policies and procedures.

The Center Director will be responsible for developing an operating plan and strategic actions to advance the Center's vision, mission and goals. Research Fellows will report directly to the Center Director. As such, the Director will review and analyze Fellows' research proposals to assess objectives, impact and expenditures. The Director will be the primary liaison to the Center's Advisory Board, the lowa Department of Education, and with other education partners and stakeholders across lowa and the nation. The Director will report to UNI's Executive Vice President and Provost and will work closely with the Dean of UNI's College of Education. This individual will also join the UNI Teacher Education Executive Council as an ex-officio member.

A significant portion of this individual's time will be spent cultivating and maintaining the lasting partnerships that make the work of the proposed center possible. This includes those relationships already in place, due to UNI's position in the state and exploring new opportunities within Iowa and at a national level. The breadth and depth of these partnerships will allow the Director to balance national reform initiatives and educational research within a local context that meets the needs of Iowa students. In addition, the Director will work diligently with UNI leadership and staff to identify and pursue

opportunities for additional financial support for the Center's activities in the form of gifts, grants and contracts.

#### **External Fellows**

Fellows will be at the core of the Center's R&D activities. An investment from the Carver Trust will enable UNI to recruit two nationally-recognized individuals to serve as external Fellows, bringing with them a strong portfolio of applied research experience and connection to national organizations. These initial Fellows will be recruited to strategically address research questions in the four identified theme areas of: 1) Math, Science and Technology Education, 2) Literacy, 3) Learning Environments and 4) Teacher Quality and Effectiveness (a description of these themes begins on page 10). External Fellows will report to the Center Director.

#### **Regents Fellows**

At the same time, two UNI faculty members and one faculty member from UI and ISU will be engaged annually as Regents Fellows. Initial Regents Fellows will be selected to build upon existing work at UNI, UI and ISU in the four identified research theme areas (see page 10). For example, at UNI, the Center for Teaching and Learning Mathematics, the Center for Disability Studies in Literacy, Language and Learning and the Regents Center for Early Childhood Education are all led by faculty that possess the expertise and connectivity to excel as initial Regents Fellows. Regents Fellows will report to the Center Director.

All fellowships will be competitively awarded by the Center Director and the Advisory Board 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 be expected to publish work in peer-reviewed journals or explore other means to promote the work of the Center through presentations.

We envision the Research Fellows working in pairs and teams to address complex research questions. Fellowships may vary in form, such as virtual fellowships, allowing researchers to remain at home institutions while also serving as fellows. Expectations for time spent on the UNI campus and at partner sites will be outlined and mutually agreed upon by the Fellow and the Center Director. A typical external

fellowship will last 2 years and a typical Regents fellowship will last for 1 year with the opportunity for renewal. With research fellowships designed in this way, the Center will possess the necessary balance of stability and fluidity to further the goals of the Center.

## **Teachers on Special Assignment (TOSAs)**

Additionally, the Center will employ at a minimum, two Teachers on Special Assignment (TOSAs) per academic year. TOSAs are in-service PreK-12 educators that receive administrative approval to leave their current teaching assignment and join the Centers research activities for a temporary period. TOSAs will be selected to provide strategic linkages between the Center's research agenda and real-world classroom experience, further ensuring that the Center is grounded in the practical application of its activities. Candidates for TOSAs will be recruited from among those educators recognized as lowa Teachers of the Year and other similar recognitions. An application and interview process will be conducted from among those individuals interested in serving in this role. With the Center Director, the Advisory Board will be responsible for reviewing and selecting TOSAs that align with current research. TOSAs will work in partnership with the Research Fellows and will report directly to the Center Director. Two individuals already identified as potential TOSAs to help launch this Center would be Tania Johnson, Teacher Quality Liaison for Cedar Rapids Community Schools and Karla Digmann, 8<sup>th</sup> Grade Math Teacher at George Washington Middle School in Dubuque. Ms. Johnson's background and interest would lend itself well to research in teacher quality and effectiveness. Ms. Digmann's background would complement planned research in mathematics.

#### **Graduate and Undergraduate Students**

As the final part of the Center's research team, graduate and undergraduate students will be integral to the Center's activities. The cutting-edge research undertaken by the Center's fellows will enable UNI to attract some of the best graduate students in the country with opportunities to engage in transformational work with these leading researchers. The Center Director will work with the UNI Graduate College to place graduate students in these elite assistantships. UNI takes great pride in providing rich research experiences for undergraduate students, as well. Undergraduate positions will be filled through an application process, targeting specific majors. Graduate and undergraduate students will be assigned to an individual Research Fellow, based on their area of study and the Fellow's identified research needs. Research Fellows will be responsible for providing oversight of graduate and undergraduate student researchers and ensuring a successful experiential learning experience.

#### **Support Personnel**

Two individuals will be hired as support personnel to assist in managing the clerical and operational work of the center. One role would be that of an Administrative Assistant and the other a Project Manager. The Administrative Assistant will manage general clerical tasks, working with UNI Business Operations and other appropriate campus departments. The Project Manager will support the work of the Center Director, including sustaining partnerships and pursuing additional funding support for Center activities. The Project Manager will also serve as the Center's primary liaison to the LEAs, soliciting and organizing research projects based on their articulated needs and opportunities.

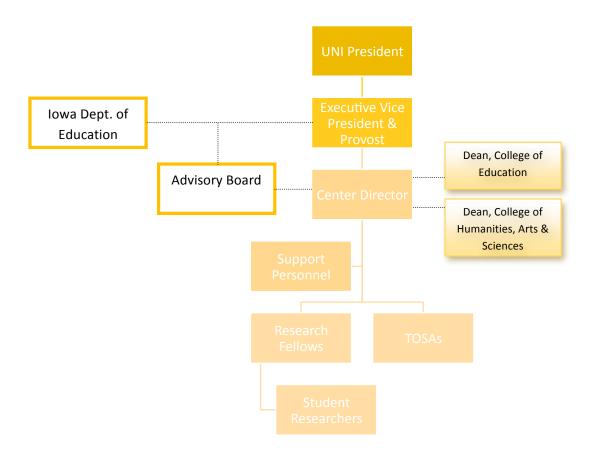


Figure 2: Roy J. Carver Center for Educational Transformation Administrative and Organizational Chart

#### **Physical Location**

The Schindler Education Center is currently scheduled for major renovation during 2015-2017. Once renovations are complete, a permanent location for the Roy J. Carver Center for Educational Transformation will be established in the newly renovated building. Until that time, the Center will be

centrally-located in the Learning Commons space of the Rod Library. This space will maximize connectivity to the broader campus community and create a prominent presence for the Center at UNI.

#### **Articulated Goals and Research Scenarios**

GOAL #1 – Research: To conduct research aimed at transforming our current teaching, learning, and educational systems.

Addresses the 3<sup>rd</sup> area of legislative intent – "Focus on research which transforms practice to meet the changing needs of Iowa's educational system."

Under the guidance of a Center Director, the Center's research efforts will be driven by a team of Research Fellows. These fellows will be selected from among faculty members at Board of Regents, State of Iowa universities (Regents Fellows) and national experts (external fellows). Fellows will be selected for their expertise in a given research theme area and their potential to help move that area forward. Regents Fellows will fulfill a 1-year appointment (with possibility of renewal) and external fellows will fulfill a 2-year appointment. To further authenticate this research, we envision these activities will employ Teachers on Special Assignment (TOSAs), in-service educators who are given administrative leave to participate in the Center's work. TOSAs will work collaboratively with teams of Research Fellows, infusing the research with practical experience and application. These research teams will conduct the majority of their activities in collaboration with education partners across the state and nation.

While all forms of research will be supported, the Center's emphasis will be on applied research offering the potential to lead real educational transformation. Utilizing UNI's existing distributed student teaching centers (Appendix A) and network of current partners will enable research to commence immediately and impact Iowa from River to River. For example, UNI is currently engaged in a federally-funded Teacher Quality Partnership (TQP) project partnering with 9 high-need rural school districts across the state. These districts, including CAL Community School District in Latimer and Montezuma Community School District in Montezuma, have expressed great interest in continuing to partner with UNI to address future needs. Additionally, UNI's Richard O. Jacobson Center for Comprehensive Literacy has worked extensively with the Marshalltown Community School District and developed a dynamic partnership. Because of this relationship, Marshalltown has expressed a great interest in future

collaboration with UNI researchers. Given the high concentration of English Language Learners (ELL) in Marshalltown, UNI researchers will utilize this partnership to explore research questions that impact education of this demographic group.

### **Research Themes**

The Center's research will focus on 3-5 larger themes, within which specific questions will be addressed by project teams and individual fellows. The Center personnel, advisory board and other education stakeholders, will re-examine and re-prioritize these themes as time goes on, responding to the most salient educational research needs of the state and nation and inspiring innovation around traditional education problems. Some research themes may be on-going as certain education questions persist; others will be shorter-term, allowing the Center's research to be focused on key issues, but also more flexible and responsive. 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.

Initial planning has identified several theme areas in which UNI already possesses great strength and which have the potential to become world-class as a result of this investment (Figure 3). For instance, one initial theme will certainly be math and science education in Iowa. This theme would 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. Another initial 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.

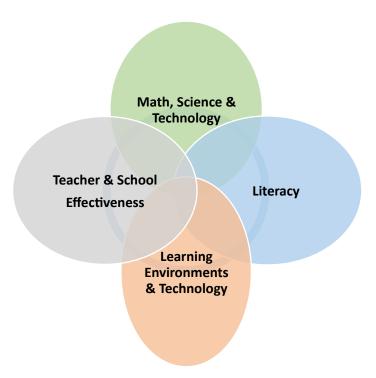


Figure 3: Initial Research Themes. The themes will focus the Center's research into a set of inter-related areas, building upon existing areas of research strength at UNI

Center personnel, advisory board members, and other statewide education professionals will participate in biannual summits, or "innovation sessions." These events will provide Research Fellows with a platform to disseminate the results of their research activities and will also employ national education experts (not currently engaged in Center research) to speak about work in other parts of the country and world, as it relates to current research themes. We envision two of these innovation sessions per year; one that is open to educators across the state, while the other would engage a more targeted group of education visionaries (including the Center's Advisory Board members) to explore new ideas for future research themes and focus areas for the Center. The event open to all educators will be partially supported by a recent gift from Richard O. Jacobson.

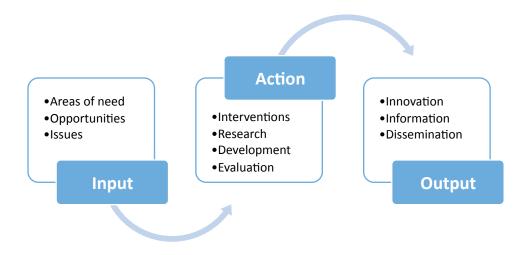


Figure 4: Process by which the proposed Center will conduct its research ideas and activities

#### Research Scenario: How to increase diversity in the teacher workforce?

This project will explore pipeline programs, cluster hiring, salary incentives and pilot other methods to recruit educators from diverse backgrounds. The objective would be to determine the best possible strategies for districts to attract and retain teachers from diverse backgrounds. Both Cedar Falls Community Schools and the Linn-Mar Community School District have expressed interest in participating in research around this issue.

# Research Scenario: Reinventing rigor in mathematics and science at the elementary and middle school levels

Due to time constraints elementary and middle school teachers have a tendency to teach textbook-based science as opposed to inquiry-based science. The Center will investigate models of integrative inquiry-based science and provide action research opportunities for elementary and middle level teachers who will innovate their instructional practices in the sciences in order for the Center to study the effects on student performance. Current work in the Council Bluffs Community School District can be leveraged toward pursuing this research question.

GOAL #2 - Practice: To distill, disseminate and encourage best practices in curriculum, instruction and assessment.

Addresses the 2<sup>nd</sup> area of legislative intent — "Enhance the preparation and professional competence of lowa educators through collaborative inquiry in exchange of professional knowledge in teaching and learning."

To truly serve the state and help inform the national education landscape, the proposed Center has a responsibility to inventory and identify strategies that have significant potential to transform education practice. Through its research and development efforts, the Center will create new transformational strategies and delivery systems which must be measured against existing approaches. With a focus on systems thinking and implementation of innovation, the dissemination of best practices from research results is at the very core of why this Center should exist. The Center's ability to disseminate and encourage implementation of best practices will be the true measurement of its effectiveness and its value to the state and nation. Without dissemination, all other efforts are without merit. Due to the breadth and depth of partnerships this Center will employ, we anticipate dissemination of results will often be organic and almost "viral." Many of these partnerships are already in place as a result of UNI's current infrastructure and distributed model for teacher preparation (including the ten student teaching centers). The Center will work diligently to encourage these partners to implement and incorporate the findings of research activities in ways that will improve student achievement. A key piece of this will be providing ongoing education and resources to ensure that educators and administrators feel supported and empowered in their efforts to implement innovative new practices.

Often times the greatest impediment to innovation can be the risk (real or perceived) that educators face by introducing new strategies. Many fear the repercussions of trying a new strategy that does not achieve the success predicted or does not show immediate positive results. In most cases, the educator is most fearful of how unanticipated outcomes could reflect back on them and their school during the evaluation process. Providing teachers with the necessary empowerment to innovate and employ new strategies without this fear is seen as critical to the proposed Center. A major step towards achieving this will be working with the lowa Department of Education to secure waivers for innovative teaching practices. Securing a waiver for a particular classroom means that the evaluation results for those students will be pulled out of the school's evaluation and will neither improve nor detract from the school's overall results. These waivers will enable educators to work with Center researchers and to employ cutting edge practices without fear of repercussions. Furthermore, the Center will work diligently with both individual teachers and their respective administrators throughout their

participation. It is imperative that all parties are engaged in the process as true partners and are provided with the support and resources they need to feel comfortable in their roles within the project. To measure the Center's effectiveness in achieving this goal, we will utilize established organizational assessments to determine which learning spaces have the "safety" necessary for innovation and how the Center's involvement affects that level of safety.

### Research Scenario: How can a district close the achievement gap?

Many Iowa districts struggle with racial achievement gap concerns and several have approached UNI to assist in specific areas, such as literacy. The Center would be able to assist these districts in reviewing their data and practices to identify innovative solutions. Research Fellows would be placed in the school to observe teaching practices, climate and culture dynamics, and leadership techniques. Fellows would then create a set of practices to address the concern. Practices are then implemented with fidelity and outcomes are assessed.

# Research Scenario: Which curriculum design is most conducive to impact career readiness in junior and senior humanities courses?

The humanities curriculum in the high schools is intended to provide learners with broad liberal arts knowledge that are to prepare them to be college, career, and citizenry ready. The Center would investigate current curriculum alignments with the Common Core Standards and determine whether learners can show competence as measured by Smarter Balanced assessments. Smarter Balanced assessments measure student progress toward meeting Common Core Standards at specific tested learning levels throughout the course of an entire school year (Appendix C contains additional information on Smarter Balanced assessments in Iowa).

# GOAL #3 – Policy: Leverage partnerships across the state to inform decision-makers and drive policy grounded in research results.

Addresses the 3<sup>rd</sup> area of legislative intent – "Focus on research which transforms practice to meet the changing needs of lowa's educational system."

To be a truly effective asset for all educators and learning facilitators across the state, the proposed Center will function as both a stand alone resource and a connector. Due to existing partnerships with government, private sector and education at all levels, and UNI's current role as an education resource,

the Center will be able to connect groups from across the state around areas of shared interest. In addition, the Center will function as a conduit to national education experts, offering an even deeper opportunity for Iowa's educators. As a fundamental partner engaged in the activities of this Center, our legislators and government officials will work to create transformation through policy change that reflects the Center's research and development results.

# Research Scenario: How can early interventions offset language acquisition gaps?

The Hart and Risley 1995 study on language acquisition showed that learners arriving in kindergarten at age five have language gaps if they are from welfare or working class homes as opposed to those from professional class homes. This language acquisition gap follows the learners and is the basis for the third grade reading gap. The Center will study current research on language acquisition and vocabulary development in order to provide evidence for policy to support universal preschool programs and early childhood interventions.

# Research Scenario: Can preservice teachers develop linguistic competencies to support the achievement of second language learners?

Research could be conducted on practices that are necessary for preservice teachers to gain linguistic competencies. The ability of the preservice teachers to utilize these competences would be measured via teacher performance assessments. We would anticipate that the second language learners in classes with preservice teachers who possess these assessed competencies outpace second language learners in other classes who do not have preservice teachers with said competencies. Information gathered would be presented to the Board of Educational Examiners requesting a policy change requiring preservice teachers to take courses pertaining to English Language Learners (ELL).

# GOAL #4 – Innovation: Produce innovations to transform our teaching, learning and educational systems.

Addresses the 1<sup>st</sup> area of legislative intent — "Raise and sustain the level of all PreK through 12 students' educational and personal development through innovative and promising practices."

The culmination of the Center's activities will be in the research results that create real change to our educational systems; it is the "gold ring" for which the Center will be constantly reaching. A culmination of the Center's function, these innovations will be grounded in research, tested in practice and

supported by policy. When these forces are able to converge, a truly sustainable innovation is more than just possible, it is inevitable.

A major driver of these innovations will be preparing students that are college, career and citizenry ready. It is widely accepted that in order to ensure the economic vitality of our state, we must focus on preparing the next generation's workforce. This has been evident in our widespread focus on math and science education and how these efforts have been widely embraced by both public and private sectors. Building upon this momentum, the Center will work to examine and evaluate what 21<sup>st</sup> Century skills will be critically important to our state's future workforce and how those skills must be incorporated into our educational systems.

A rapidly changing world requires that our educators and educational systems adapt and change, as well. In Iowa, our rapidly diversifying population has created both a challenge and an opportunity for education professionals. On another level, educators now must often fill roles traditionally held by parents, as they strive to train "good adults" not just "good students." The proposed Center will maintain a forward-focus on diversity, culture and inclusion and the roles these play in education. This will truly be a lens through which the Center will examine issues in our state, as it touches all areas of research and development.

### Research Scenario: How can research be best disseminated throughout Iowa?

Each research project requires specific consideration for the best possible methods of disseminating its results. Bi-annual summits known as "innovation sessions" will convene statewide partners, providing a means by which the Center's research activities can be synthesized and critical innovations shared. At these sessions, the best course of action for further disseminating the results of a particular research project will be charted, and then facilitated by Center staff following the session.

#### Research Scenario: Technological, Pedagogical and Content Knowledge (TPACK)

The infiltration of technology into society has yet to meaningfully infiltrate education. A teacher who is TPACK- literate is one who is confident in all of these areas and can employ these skills to provide an effective learning experience for students. This particular research question would explore TPACK in the context of rural versus urban and suburban schools. In addition, the socioeconomic impacts of 1:1 technology would be explored.

#### Sustainability & Evaluation

The proposed Center will seek to sustain its efforts by leveraging significant external investment in the form of competitive grants, contracts and gifts. The Center has been carefully designed so that it is well-positioned to pursue funding for specific research projects from the U.S. Institute of Education Sciences, U.S. Department of Education, the National Science Foundation and other prominent federal agencies. The Center's close partnership with the state will likely result in opportunities to function as an operations arm for statewide education initiatives. In addition, we anticipate significant private interest in this Center from individuals, corporations and private foundations and funding partnerships will be actively pursued with these constituents. The growth of this Center will be among UNI's top fundraising priorities and we are widely committed to its future success.

One recent example of private support that will enhance the work of the Roy J. Carver Center for Educational Transformation is the \$15 million gift received from Richard O. Jacobson in support of teacher education at UNI. Without duplicating the activities outlined for the proposed Center, Mr. Jacobson's endowed gift is structured to complement its efforts through faculty positions in literacy and science, visiting faculty, support for student-faculty research and scholarships.

For each research project, a common evaluation matrix will be used (Appendix D) to assess the project's ability to impact positive change. Each research project will be expected to have an outcome for learners, educators and systems. In addition, each project will be measured on its ability to further one or more of the Center's goals in research, practice, policy and innovation and how the project has helped to further the state's legislative intent for research and development. These evaluations will take into account that in order to be effective at a system level, 90% of teachers must be implementing the innovation at a high level. Research Fellows will be expected to complete a self-reported project evaluation which will be coupled with an third-party evaluation by the Center Director and Advisory Board members. AEA and LEA partners engaged in the project will also be asked to complete an evaluation about the Fellow's work and their experience.

The Center will engage the expertise of its Advisory Board to form an evaluation task team, assessing the effectiveness of the Center's overall activities, including the leadership provided by the Center Director. Special attention will be paid to the Center's ability to meet the state's specific legislative intent for

research and development (as outlined on page 1). Though separate from the mission and direct activities of the proposed Center, we anticipate these efforts will enrich teacher preparation and field experience activities at UNI through the engagement of our faculty members and the benefit of external experts brought to campus under the auspices of the Center's activities. This team will examine qualitative and quantitative measures, including:

- Impact on PreK-12 education (short-term and long-term)
- Project completion
- Number of Local Education Agencies (LEAs) engaged
- Number of schools and educators engaged in research
- Number of schools and educators engaged in innovation sessions and other events
- Project impact on individual schools/LEAs
- Policy influences
- Dollars generated by competitive grants and contracts
- Presence at national events, including presentations (Director and Fellows)
- Relationships cultivated across lowa and beyond
- Ability to attract and recruit high-caliber Fellows (Director)

The evaluation team will take into account the performance of the Center and Center Director in each of these, and other areas. Specific attention will be paid to the Center's ability to leverage the investment of the Carver Trust to bring in additional funding and to cultivate strategic, lasting partnerships. The Center will publish an annual report which will be distributed to key stakeholders across lowa and to national partners.