Project Narrative: State of Iowa Teacher Quality Partnership Grant

Introduction

The State of Iowa is fully committed to the belief that all students can learn at a high level. Iowa knows and agrees that the single most important element in improving student learning and achievement is to provide high quality teachers for every Iowa student. To realize this belief that all students can excel in learning requires a commitment to support and foster a wide array of partnerships that work together to reform and enhance Iowa's education system. If Iowa is to live by its guiding educational principle that a quality education is essential to a successful democracy, lifelong learning, and a vibrant economy, new methods must be engaged so that Iowa will best prepare teachers and leaders to serve in our schools—especially those schools who are faced with the biggest financial challenges and high teacher turnover.

Strong and Supportive Partnerships

The purpose of the Iowa Teacher Quality Partnership Grant is to forge a partnership among the Iowa Department of Education, the University of Northern Iowa, one of the state's leading teacher preparation institutions, and Dr. Raymond L. Pecheone, a nationally recognized education assessment scholar and Co-Executive Director of the Stanford University School Redesign Network to achieve the goal of significantly increased learning and achievement for Iowa's PK-12 students. The primary areas of focus provided by the plan are 1) to develop more highly effective teachers by defining emerging attributes of effective teaching and integrating those attributes into both pre-service programs and professional development for beginning and practicing teachers and 2) to examine and integrate a diverse set of teacher and student artifacts to document effective teaching featuring teacher work samples supported by an Iowa Integrated Technology Platform.

Support for this project comes from a diverse set of persons and organizations with nationally recognized expertise in this area. Formal supporters and partners include Dr. Linda Darling-Hammond (serving as principal investigator), Stanford University; Dr. Raymond L. Pecheone (serving as project director for TPA component of grant), Stanford University; Margaret Heritage, UCLA Center for Research on Evaluation, Standards, and Student Testing (CRESST); Iowa Association of School Boards; Iowa State Education Association; School Administrators of Iowa; State Board of Education and Iowa Association of Colleges of Teacher Education (IACTE).

In summary, this application meets the criteria for eligibility through a partnership developed among high-need local education agencies (LEAs), Iowa Department of Education, and institution of higher education (IHE) partner the University of Northern Iowa. Further documentation is provided in Appendix A.

A Clear Focus on Specific Grant Priorities and Competitive Preferences

This grant proposal addresses the following *absolute priorities* and *competitive preferences* which will subsequently be explained in more detail in this narrative and in the *Preferences and Invitations* attachment:

- **Absolute Priority 1: Partnership Grants for the Preparation of Teachers.** The eligible partner will carry out a reformed and enhanced effective pre-baccalaureate teacher preparation program. The grant project will be held accountable for the preparation and professional development of new and prospective teachers to understand empirically-based practice and scientifically valid research related to teaching and learning and the applicability of such practice and research including through the effective use of technology, instruction and strategies consistent with the principles of

universal design for learning positive behavioral intervention support strategies to improve student learning.

- **Competitive Preference Priority 1: Student Achievement and Continuous Program Improvement.** The eligible partner will collect and use data on student achievement to assess the effect of teachers prepared through the pre-baccalaureate teacher preparation program. Additionally, demonstrated will be capacity to provide longitudinal data capturing student achievement by teacher from year to year through the grant performance period. Applicant will provide for continuous improvement of participating teachers and of the pre-baccalaureate teacher preparation program based on longitudinal student achievement data. Relevant data would reflect the effectiveness of both teachers in the program and teachers not in the program on student learning and achievement. NOTE: Additional explanation is offered in the "Project Narrative Competitive Preference Priorities Narrative" which is attached as part of the electronic submission.
- **Competitive Preference Priority 4: Partnership with Digital Education Content Developer.** The applicant will partner with Iowa Public Television, an entity which is a partner within the structure of the Iowa Department of Education, to develop digital educational content to improve the quality of teacher preparation programs **and** enhance the equality of pre-service training for prospective teachers. NOTE: Additional explanation is offered in the "Project Narrative Competitive Preference Priorities Narrative", which is attached as part of the electronic submission.

Research Foundation for TQP Project: Developing Highly Effective Teachers and the Role of University of Northern Iowa in Developing Teacher Work Samples

The mission of the Teacher Quality Partnership Grant is to increase the learning and achievement of Iowa PK-12 students by developing more highly effective teachers. The grant will achieve this mission by tapping into the best research to assist in identifying the emerging attributes of effective teaching followed by the integration of a diverse set of teacher and student artifacts to document content knowledge of academic major and effective teaching featuring teacher work samples supported by an integrated technology platform.

The research supporting this approach is substantial. In a to-be-published book, *Improving Teacher Quality: Using the Teacher Work Sample to Make Evidence-Based Decisions* by John E. Henning, Frank W. Kohler, Victoria L. Robinson and Barry Wilson, the authors confirm that teacher work samples TWS consists of a description of a complete unit of instruction during student teaching, including the context of the unit, learning goals, a description of instructional decisions made during the lesson, a plan for assessment, a design for instruction, an analysis of student learning, and the student teacher's reflections on both learning and teaching. It should be noted that the authors were members of the ***Renaissance Group*** and leaders of the implementation effort at one of the ***Renaissance Group*** universities, the University of Northern Iowa, who is a partner in this grant project.

Initially, the TWS was introduced at the University of Northern Iowa (UNI) through a pilot project that began in 2000 and was officially adopted in 2003. The primary purpose for requiring completion of a teacher work sample was to ensure that student teachers had attained a minimal level of competency.

Over time, however, the implementation of the TWS has catalyzed a gradual series of changes. Those changes have had a widespread impact on teacher education programs in areas

that include assessment, teaching, and the revision of the TWS. Each of these changes was undertaken to better align the TWS with our program of instruction.

Emerging Role of Teacher Work Samples

The TWS originated at Western Oregon University in the 1980s under the leadership of Del Schalock. Its emergence was consonant with the shift away from the traditional view of educational assessment as objective testing and toward the increased utilization of performance-based assessments and multiple measures (Hambleton, 1996). The initial and primary purpose of the TWS was to provide authentic evidence of a minimal level of competency before receiving licensure (Schalock & Myton, 1988).

However, Girod (2002), also at Western Oregon, noted that the process of creating a TWS helped student teachers 1) develop a greater awareness of the relationship between student performance and their teaching behaviors and 2) make deeper connections between the processes of planning, teaching, and assessing student learning. The contents of Western Oregon's TWS are organized around the following sections:

Linking context to student learning

In this section of the prompt, student teachers describe the context of learning, including the school and community culture, demographics, school policies (e.g. dress code), their classroom, and their students.

Goals and objectives aligned with school, district and state goals

Goals and objectives for the instructional unit should be specific, thoughtful, and aligned with the rationale for the unit, the state and national standards, assessment strategies and the needs of students in the class.

Rationale for unit

The rationale for the unit should include an explanation of its significance, a justification for teaching it, a graphic organizer illustrating its sequence and conceptual overview and a description of the instructional decisions made when teaching it.

Pre/post assessment

Pre and post assessments should be clearly described, aligned, trustworthy, feasible, varied, and developmentally appropriate.

Lesson plans with adaptations

The lesson plans included in the TWS should be detailed and aligned, include motivational strategies, correspond with the pre and post assessments, use a variety of instructional strategies, and contain adaptations for students with special needs.

Data analysis

An analysis of student achievement data should be performed by groups (e.g., students with special needs), by clusters, by class, and for each student. The data analysis should also include a graphic display of pre/post differences and the learning gains made from pre to post assessment and an interpretive essay of the results.

Reflective essay

The TWS concludes with a reflective essay on classroom management, the evolving philosophy of the student teacher and an explication of the student teacher's personal/professional goals.

How Valid and Reliable is the TWS?

In a study by Denner, Salzman, and Bangert (2001), a group of cooperating teachers and college faculty were surveyed about the content validity of the TWS after serving as a team of expert raters during the scoring process. The expert raters consisted of nine public school

representatives, one principal and eight teachers, three of whom were Nationally Board Certified. The median years of teaching experience for this group was 18, ranging from 11 to 30 years.

When participants were asked whether the TWS represented the skills necessary for a beginning teacher, 68.8 % (n=11) said "absolutely yes," 18.8 % (n=3) said "yes," and 12.5 % (n=2) were "uncertain." When asked about the importance of these skills, the expert raters responded in the same percentages to "Critical" (68.8%), "Important" (18.8%), and "Somewhat Important" (12.5%). Finally, 68 % of the respondents agreed that practicing teachers used the tasks required by the TWS more than a few times a week.

Work on scoring reliability has been pioneered by Denner et al. (2001, 2003), who demonstrated that an acceptable level of inter-rater agreement can be achieved with as few as two raters. In another study at Western Oregon University, McConney and Ayres (1998) reported 81% to 98 % level of agreement between cooperating teachers and university supervisors when scoring the TWS.

What Makes the TWS Different from Previous Licensure Requirements?

What distinguishes the TWS from previous licensure requirements is its emphasis on improving P-12 student achievement. In contrast to National Board Certification, Interstate New Teacher Assessment and Support Consortium (INTASC), or Praxis III, the TWS provides written evidence of the student teacher's ability to have a positive impact on student learning (Girod, 2002; Schalock, Shalock, & Myton, 1998).

As part of the TWS, student teachers design a plan for collecting pre, post, and formative assessment data, and then use that data to conduct an analysis of student learning that considers the whole class, subgroups of the class, and at least two individual students.

The relationships uncovered during the analysis are included in the TWS in the form of charts, graphs, or other visual representations. Denner et al. (2001) found that if student teachers can do well on the Analysis of Student Learning, they are likely to receive a high overall score on the TWS. While student teachers at the University of Northern Iowa often feel challenged by this component of the TWS, they also express appreciation for the insights it affords. As one graduate commented, "This was a rewarding experience because I was able to prove that my students will leave third grade knowing more because of my teaching. I can make a difference."

How Can the TWS Improve Teacher Education Programs?

The data from the TWS are based directly on student achievement. Thus, they can provide programs and professors with valuable insights into the impact of their student teachers on PK-12 learning. To foster these insights, faculty members at the University of Northern Iowa teacher education are encouraged to serve as TWS scorers. Reading a completed TWS can emphasize to faculty that "coverage" is not equivalent to the deep learning needed for a successful teaching performance. The TWS also tends to reinforce the awareness that the performance of their former students—and less directly their own performance— will increasingly be viewed in light of student achievement at the P-12 level.

The initial informal readings of the TWS have gradually evolved to a system of more systematic and in-depth analysis since the rubric scores have been shared with the 240 members of the University of Northern Iowa teacher education faculty. Teacher educators are given an opportunity to review these data to determine growth areas or continued patterns of concern within their program areas and to determine specific course revisions and realignment of curriculum.

While faculty have always believed they were preparing future teachers with needed skills and knowledge to impact student learning, systematic feedback was not available regarding student strengths and weaknesses in areas such as assessment, lesson design, attention to individual difference, or reflective practice. Now professors of preparation courses have the opportunity to analyze how well the students can actually *apply* the knowledge or skills learned in the class.

The TWS is a potentially rich source of data, not only for assessing the instructional efficacy of the faculty, but also for investigating the thinking practices and professional development of pre-service teachers (McConney & Ayres, 1998). This data collection and recording is a continuous part of the University of Northern Iowa's accountability system.

Exploration within Pre-service Teacher Education

New approaches have been offered by researchers relative to pre-service education such as experiment with new TWS formats. For example, universities and school districts adopting the TWS might experiment with these variations to best meet their needs. In addition, other universities might also examine variations that are more substantial in nature. For example, perhaps the TWS could be modified to make it more relevant for special area educators, such as special education teachers, literacy specialists, or childhood teachers (PK – 2nd grade).

A second suggestion from the research is to develop new methods for preparing pre-service teachers for completing the TWS. As noted above, one of the primary purposes of the TWS is to provide evidence that program graduates are able to meet minimum competencies. Researchers suggest universities provide candidates with frequent and intensive opportunities to learn the TWS processes **before the actual student teaching experience**. A meaningful "future

direction" for teacher preparation programs is to explore additional ways to utilize TWSM during the entire preparation program.

A third suggestion is to integrate or combine the TWS with other evaluation methods. One of the primary purposes or functions of the TWS is to provide evidence that student teachers are able to meet minimum competencies. However, the TWS does not serve as the sole method of evaluation. As teacher educators examine ways to demonstrate accountability and address the standards that they operate under, the task is to find ways to have the TWS complement other measures of candidate performance and knowledge.

Extending the TWS to New Contexts

Currently, much of TWS is limited to pre-service teachers at the time of their enrollment in our teacher education program. The heaviest concentration of TWSM begins during the junior year and ends with student teaching. As teacher educators focus more on the issues of teacher induction, teacher quality, professional development, and school improvement, there may be advantages to expanding the utilization of the TWS to other contexts. The TWS possesses five traits that would make it a useful tool to facilitate reflection for other educators in contexts other than student teaching.

Extending to Graduate Students

The TWS could be implemented in a graduate program to meet a requirement for a masters paper or a culminating project. With the addition of a literature review, the TWS would have many similarities with an action research study. The Analysis of Learning section requires a similar analysis as typically performed in the Results section of a research study. Gains from pre to post assessment can be compared against existing baseline data analyzed to determine the efficacy of instructional strategies (Streifer, 2002). Similarly, the Reflection and Self-Evaluation section perform as a comparable function as the Discussion section in a study. Thus, the structure

of the TWS lends itself to the type of analytical reflection commonly done with action research studies.

Inducting Beginning Teachers

The research notes that TWS could be useful when evaluating beginning teachers by serving as evidence of teacher's ability to manage a sustained teaching performance. It would help beginning teachers focus on student learning, reflection, and improving instruction based on student performance. It would also provide a common professional language between new and mentoring teachers. A rapid acquisition of common terminology could also bring the new teacher into school improvement issues much more quickly. This would provide a smoother transition from inductee to fully functioning and participating member of the staff. It would also facilitate a seamless continuum of professional development from beginning to master teacher.

Finally, it would enable the collection of follow up data from program graduates who completed the TWS during student teaching. Implementing the TWS into the first the first 3-5 years of teaching could provide additional, relevant feedback to teacher education programs. As part of this process, it would be important to determine which measures would provide the most benefit to beginning teachers and teacher education programs.

Extending to Professional Development

Girod (2002) suggests the TWS could be expanded to include veteran teachers, perhaps to include an entire semester. Given the current interest with student achievement and standards, the TWS offers considerable potential as a practical tool for both professional development and licensure renewal among veteran teachers. Teachers could be offered Continuing Education Units (CEUs) for participating in professional development sessions.

A TWS for master teachers might look different from the Renaissance TWS for student teachers. But two essential components of TWSM would need to be preserved. Master teachers should supply evidence of student growth as well as documentation showing the alignment between their instruction and the teaching standards. Maintaining the two elements would ensure that TWSM could be adapted to serve the licensure process for practicing professionals.

The increased focus on student learning often has benefit for practice. As one cooperating teacher stated, "The TWS process helped me focus more on student learning. It was a form of professional development for me!" The authors agree and also would like to suggest it could be used as the focus of study group conversations or as a key source of data to be included in school improvement processes. Teachers could discuss the TWS a section at a time, and later score each other's TWS.

Extending to P-12 Administrators

Adopting the TWS would offer several advantages for principals. First, it would provide a coherent, performance-based assessment tool that addressed essential planning and assessment processes. Second, the seven teaching processes provide a template for principals, so they are less likely to overlook a critical component of teaching such as pre assessment. Thus, the use of the TWS would reinforce the role of the principal as an instructional leader. Iowa principals are required to receive training that could help them evaluate beginning teachers. The TWS could be used as a practice assessment tool when principals receive training to evaluate beginning teachers.

The TWS could also help principals by keeping their teachers focused on student achievement, providing a measure of professional development based on student achievement and fostering a shared language common to pre-service teachers, beginning teachers, and in-

service teachers. Thus, the TWS can enable a more seamless transition across a continuum of professional development experiences and maintain a strong connection between student achievement, professional development, and school improvement.

Role of a Digital Platform

Emphasized in this grant proposal is the need to develop an integrated technology platform that will provide a method to store artifacts of effective teaching. In addition, the platform allows for the scaling of artifact attributes. Based the research and development of Dr. Raymond Pecheone from Stanford University, a key partner in this grant project, advantages of such a platform have been explored and applied with success in other states such as California. In such as system, teacher work samples can be recorded for later review by the student, mentors, administrators and other stakeholders. The work plan and subsequent budget narrative explores the requirements to implement this platform. Also, there is an extensive discussion of the platform in the check list narrative section of this document.

Current Iowa Initiatives to Reform and Enhance Teacher Effectiveness

In addition to the national research that contributes to this project, Iowa specific initiatives serve to develop the foundation for this grant proposal. Selections of Iowa-specific research and initiatives have been placed in Appendix D of this application package for review. Initiatives include Adolescence Literacy, Authentic Intellectual Work, Concept-Oriented Reading Instruction, Cognitively Guided Instruction, Enhanced Assessment Grant –Formative Assessment, Every Child Reads, Every Learner Inquires, Every Student Counts, Instructional Decision Making, Iowa Arts Educators Mentor Program-Model of Excellence, Iowa Department of Education EdInsight Data Warehouse Project, Journey to Excellence Model Program, Our Kids, Picture Word Inductive Model, Question Answer Relationships, Second Chance Reading,

Teacher Development Academies, State Wide Reading Team, The Iowa Core Curriculum, and The Strategic Instruction Model.

Integration of Research with State of Iowa TQP Grant Proposal

The grant development team integrated much of this research into the design of the project mission, goals, and objectives. The grant will focus on developing a diverse set of teacher and student artifacts to document content knowledge of academic major and effective teaching featuring teacher work samples supported by an integrated technology platform. The purpose is to enhance and support the professional development of prospective and current teachers in Iowa and to improve decision making of evaluators, teacher and administrators in determining student growth, teacher growth and documentation of teacher effectiveness from the time an individual enters a preparation program to the time of exit of teaching.

Overview of Proposal: A Work Plan Summary

Provided below is a work plan summary which is intended to provide an overview of the mission, goals, objectives, activities, outcomes, and measures. Following the work plan summary will be discussion of the LEA schools identified for attention, details of how the partnership will support the work plan and the role of an integrated technology platform in creating higher quality teachers who will improve the educational performance of the students they teach.

PROJECT MISSION: The mission of the Teacher Quality Partnership Grant is to increase the learning and achievement of Iowa PK-12 students by developing more highly effective teachers. The grant will achieve this mission by 1) defining emerging attributes of effective teaching and integrating those attributes into both pre-service programs and professional development for beginning teachers and 2) examining and integrating a diverse set

of teacher and student artifacts to document content knowledge of academic major and effective teaching featuring teacher work samples supported by an integrated technology platform. The purpose is to enhance and support the professional development of prospective and current teachers in Iowa. Indicators of grant success for partner high-need local education agencies and institutions of higher education will be 1) a higher percentage of teacher education program completers recommended for licensure who demonstrate competence for teaching in high-need districts in multiple ways including improved scores leading to teacher licensure, 2) increased retention of prospective, beginning and experienced teachers, 3) a greater number of prospective, beginning and experienced teachers with electronic portfolios/integrated technology platforms evaluated through a consistent set of matrices and 4) enhanced professional development for pre-service faculty and evaluators and mentors of practicing teachers all with the result of measurably improved student learning and achievement.

GOAL #1—Emerging attributes of effective teaching will be examined, identified and defined in preparation for integration into a partner Institution of Higher Education pre-service program and into partner Local Education Agency professional development.

Objective #1: A review of research will result in a comprehensive study that identifies current and emerging attributes of teacher effectiveness.

Activities	**Benchmarks**	**Timelines**	**Responsible Parties**
Research team selected and recommended by advisory group to facilitate study	Agreement reached with research team	By end of month two	Project Director and IHE partner
Study facilitated and presented to advisory group	Research study accepted	By end of month five	Research team and Project Director

Advisory group accepts and communicates finds to all grant partners	Grant partners receive findings	By end of month six	Project Director
Outcome: All grant partners will have the benefit of study findings to develop pilot program			
Measurement: Grant partners confirm that they have received and considered research			

Objective #2: A collaborative team, which includes the partner institution of higher learning, partner local educational agencies and the Iowa Department of Education, will utilize findings to develop an enhanced and reformed definition of effective teaching.

Activities	**Benchmarks**	**Timelines**	**Responsible Parties**
Collaborative team members identified and meetings scheduled	Team member list and schedule	End of month seven	Project Director
Collaborative team members meet and develop definition of effective teaching	Definition developed	End of month eight	Project Director and Advisory Group
Definition communicated to grant partners	Document received by partners	End of month eight	Project Director
Grant partners received definition and confirm agreement	Grant partners communicate agreement	End of month eight	Project Director and partners
Outcome: Agreed upon definition of effective teaching accepted and agreed upon by grant partners			
Measurement: Grant partners confirm agreement of definition of effective teaching			

Objective #3: Develop scaling of digital artifacts aligned to the Interstate New Teacher Assessment Support Consortium (INTASC) and Iowa Teaching Standards (ITS).

Activities	**Benchmarks**	**Timelines**	**Responsible Parties**
Assessment consultant identified and selected	Consultant agreement secured	End of month two	Project Director, IHE and Advisory Group
An assessment team from grant partners formed	Team members listed and meeting scheduled	End of month two	Project Director, IHE and Advisory Group

A measurement system will be created by assessment team working with consultant and communicated to partners	Report created detailing measurement system presented to grant partners	End of month ten	Assessment Team
Outcome: Measurement system for scaling digital artifacts accepted and agreed upon by grant partners will be created			
Measurement: Grant partners provide documentation that system has been completed			

GOAL #2—Pre-service faculty will integrate the attributes of effective teaching into pre-service program, which will be documented in prospective teacher-created integrated technology platform.

Objective #1: A collaborative team, which includes the partner institution of higher learning, partner local educational agencies and the Iowa Department of Education, will utilize the attributes outlined in the study to develop and pilot a pre-service program.

Activities	**Benchmarks**	**Timelines**	**Responsible Parties**
Pilot team to develop pilot project formed	Team created and first meeting scheduled	By end of month two	IHE and Project Director
Pilot team creates pilot project for review by grant partners	Pilot model presented to grant partners	End of month 12	Pilot Team and Project Director
Pilot project finalized with feedback from all grant partners	Final pilot document shared with grant partners	End of month 14	Pilot Team and Project Director
Pilot project implementation plan developed by pilot team	Plan submitted to Project Director	End of month 15	Project Director and pilot implementing team
Pilot project implemented and assessed	Implementing partners submit results	Fall of 2012 through spring 2013	IHE partner, Project Director and pilot team
Outcome: Results from pilot project provide grant team with assessment of pre-service program enabling adjustments prior to full scale implementation			
Measurement: A summary result will be reviewed by grant partners and assessed regarding validity for full scale implementation			

Objective #2: A collaborative team, which includes the partner institution of higher learning, partner local educational agencies and the Iowa Department of Education, will utilize the results

of the pilot experience to revise and implement a pre-service program to be utilized by the partner institution of higher learning.

Activities	Benchmarks	Timelines	Responsible Parties
IHE will use pilot results to develop reformed and enhanced pre-service program	Creation of program	Summer of 2012	IHE partner institution
IHE will develop a phased implementation schedule for the program	Schedule created and published	Final year of program	IHE partner institution
Outcome: IHE will have developed and implemented a new pre-service program			
Measurement: Implementation to be evaluated			

Objective #3: Prospective teachers enrolled in the partner Institution of Higher Education will implement pedagogy reflecting emerging attributes of effective teaching and document through the creation of artifacts which are placed into integrated technology platforms.

Activities	Benchmarks	Timelines	Responsible Parties
IHE partner will incorporate attributes and artifact collection system into pre-service programs	IHE curricula document attributes and collection system	Beginning academic year of 2012/2013	IHE faculty
Prospective teachers will implement attributes during field experiences	Prospective teachers document implementation	Beginning academic year of 2012/2013	IHE faculty and prospective teachers
Prospective teachers will identify artifacts and place into integrated technology platform	Prospective teachers document implementation	Beginning academic year of 2012/2013	IHE faculty and prospective teachers
Outcome: All prospective teachers completing field experiences will demonstrate enhanced teacher effectiveness compared with previous pre-service teachers			
Measurement: Evaluation of pre-service teachers who complete field experiences			

Objective #4: Educational administration faculty will incorporate digital artifacts to reform and enhance the PK-12 administrator preparation program to provide support and retain effective beginning and practicing teachers.

Activities	Benchmarks	Timelines	Responsible Parties
IHE partner will incorporate attributes and artifact collection system into administrator preparation program	IHE curricula document attributes and collection system	Beginning academic year of 2012/2013	IHE faculty
Prospective administrators will use scaling of digital artifacts to support beginning and practicing teachers	Prospective administrators document implementation	Beginning academic year of 2012/2013	IHE faculty and prospective administrators
Outcome: Prospective administrators completing internships will demonstrate enhanced effectiveness compared with previous prospective administrators			
Measurement: Evaluation of administrators who complete internships			

GOAL #3—Partner Local Education Agencies will integrate the attributes of effective teaching into professional development, which will be documented in teacher-created integrated technology platforms.

Objective #1: A collaborative team, which includes the partner institution of higher learning, partner local educational agencies and the Iowa Department of Education, will utilize the attributes outlined in the study to pilot reformed and enhanced professional development.

Activities	Benchmarks	Timelines	Responsible Parties
Pilot team to develop pilot project formed	Team created and first meeting scheduled	By end of month two	IHE and Project Director
Pilot team creates pilot project model for review by grant partners	Pilot model presented to grant partners	By end of month 12	Pilot Team, IHE and Project Director

Pilot project finalized with feedback from all grant partners	Final pilot document shared with grant partners	By end of month 14	Pilot Team, IHE and Project Director
Pilot project implementation plan developed by pilot team	Plan submitted to project director	By end of month 15	IHE, Project Director and pilot implementing team
Pilot project implemented and assessed	Implementing partners submit results	Fall of 2011 through spring 2012	IHE, Project Director and pilot team
Outcome: Results from pilot project provide grant team with assessment of professional development enabling adjustments prior to full scale implementation			
Measurement: A summary result will be reviewed by grant partners and assessed regarding validity for full scale implementation			

Objective #2: A collaborative team, which includes the partner institution of higher learning, partner local educational agencies and the Iowa Department of Education, will utilize the results of the pilot experience to reform and improve practices for effective teaching professional development to be utilized by partner local education agencies.

Activities:	**Benchmarks**	**Timelines**	**Responsible Parties**
Pilot team to develop pilot project formed	Team created and first meeting scheduled	By end of month two	IHE and Project Director
Pilot team creates pilot project model for review by grant partners	Pilot model presented to grant partners	By end of month 12	Pilot Team, IHE and Project Director
Pilot project finalized with feedback from all grant partners	Final pilot document shared with grant partners	By end of month 14	Pilot team, IHE and Project Director
Pilot project implementation plan developed by pilot team	Plan submitted to project director	By end of month 15	IHE, Project Director and pilot implementing team
Pilot project implemented and assessed	Implementing partners submit results	Fall of 2011 through spring 2012	IHE, Project Director and pilot team
Outcome: Results from pilot project provide grant team with assessment of professional development enabling adjustments prior to full scale implementation			
Measurement: A summary result will be reviewed by grant partners and assessed regarding validity for full scale implementation			

Objective #3: Practicing teachers in partner Local Education Agencies will implement pedagogy reflecting emerging attributes of effective teaching and document through the creation of artifacts which will be placed into integrated technology platform.

Activities	**Benchmarks**	**Timelines**	**Responsible Parties**
LEA partners will incorporate attributes of effective teaching into pedagogy	LEA teachers document implementation	Beginning school year of 2012/2013	LEA faculty and IHE
LEA teachers will identify and/or create effective teaching artifacts and place into integrated technology platform that includes access through public television partnership	LEA teachers document implementation	Beginning school year of 2012/2013	LEA faculty, Iowa Department of Education, Iowa Public Television and IHE
Outcome: Student achievement will be measurably increased			
Measurement: Evaluation of student achievement including, but not limited to, student work samples and test scores			

Objective #4: Evaluator trainers will incorporate digital artifacts to reform and enhance evaluator training of PK-12 administrators to support and retain beginning and practicing teachers.

Activities	**Benchmarks**	**Timelines**	**Responsible Parties**
Evaluator trainers will incorporate attributes of effective teaching, artifact collection and artifact scaling into evaluator training	Evaluator training materials will indicate new evaluation process	Beginning academic year of 2012/2013	Evaluator trainers
Evaluators will use electronic artifact scaling to support teacher effectiveness	Evaluators report compliance	Beginning academic year of 2012/2013	LEA administrators
Outcome: Evaluators demonstrate effective use of digital artifact scaling in beginning and practicing teacher support			
Measurement: Survey report indicating compliance			

Objective #5: The Department of Education will develop an in-house integrated technology platform and system of storage, maintenance and retrieval to support pre-service and practicing teachers long term.

Activities	**Benchmarks**	**Timelines**	**Responsible Parties**
Team is assembled to investigate, plan, create and implement state platform	Team members meet	Month ten of project	Project Director
Team works with partner's platform, the DOE, and IHE to develop state of Iowa platform	Platform developed	By end of year two	Team, Project Director and IHE
Transition of data to new platform	Platform in use	Beginning of year three	Team, Project Director and IHE
Outcome: Iowa Integrated Technology Platform in use			
Measurement: Evaluation of utilization			

Indentifying Partner LEAs

As noted in the above work plan summary, a partnership with high-need schools will be developed. The criteria for selection follows the directives listed in the grant application under "eligibility." All districts indentified are included on the Small Rural School Achievement Program (SRSA) list. Additionally, the districts identified meet the criteria of teacher turnover rate of 16 percent or higher. Once a district has been identified, the individual schools selected will meet the criteria of residing in the highest quartile for percentage of students eligible for free and reduced lunch within the district. Attached as a separate file in this application package is the documentation relative to how partner LEAs will be identified.

Narrative of Program Requirements: Refer to Optional Checklist, Appendix B

The Iowa Teacher Quality Partnership Grant is designed to meet the goals of ***Absolute Priority 1***, ***Competitive Preference Priority 1*** and ***Competitive Preference Priority 4***. The

following narrative is organized to provide reviewers with more specific information beyond that detailed in the above work plan. The format aligns the information relative to the selected priorities with **Optional Checklist, Appendix B** which is included as part of this application package. Please note that aspects of the checklist that are not applicable to the priority elements selected are marked "NA" in the checklist.

General Application Requirements Checklist Narrative

In the following section of narrative, the grant team provides narrative addressing the General application requirements listed in the Optional Checklist. The application includes a completed optional checklist located in Appendix B. Please note that this section was organized to match the order provided in the optional checklist.

1. An application reflecting the eligibility of the partnership is effectively submitted by the result of this application. Also included is documentation detailing the partnership and the eligibility of each member.
    a. A **three part needs assessments** has been provided in **Appendix D** that addresses the requirements with respect to preparation, ongoing training, professional development and retention of general education and special education teachers and principals. Included are a summary of an alumni survey from UNI, the IDE new teacher retention data and the Iowa survey conducted by the New Teacher Center at UCSC survey report on prospective and beginning teachers.
    b. The purpose of the grant is to provide prospective and beginning teachers with pre-service training and professional development based on research supported attributes of effective teaching. Furthermore, evidence of strong teaching skills will be

documented through the collection of artifacts, which is an essential element of the integrated technology platform.

c. The understanding and use of research and data to modify and improve classroom instruction is embedded within teacher work sample, which is already in use by the IHE partner, and within the artifact collection and scaling through the integrated technology platform to be developed through this grant project.

d. (i) The eligible partnership is aware of and committed to the provisions provided under the Elementary and Secondary Education Act, the Individuals with Disabilities Education Act, and the National Science Foundation. (ii) Activities of this partnership will be consistent with state, local and other education reform activities in that this work will connect the IHE partner and pre-service teachers to the work practicing teachers and administrators in the state of Iowa are currently engaged in within the Iowa Core Curriculum.

e. The funding strategy presented in the budget and budget narrative for this project reflects how funds are integrated from other related sources. The strategy includes notation of (i) state match in years three through five, (ii) the intended use of funds such as developing a definition of effective teaching with subsequent pre-service programming and professional development and integration and eventual development of technology platforms to document artifacts of effective teaching and (iii) the commitment of the resources of the partnership to other activities assisted including financial support, faculty participation and time commitments. The continuation plan for this document rests primarily with the transition to an in-house integrated technology platform beginning in year three. Additionally, the IHE partner

will have adopted new and reformed methods of teaching pedagogy for pre-service programs that will offer improved outcomes following the conclusion of the grant period. The IHE will have developed new relationship with LEAs which will be ongoing after the end of the grant period. Administrators and mentors will benefit following the conclusion of the grant in their work with beginning teachers because they will have developed tools that will become a permanent part of their practice. In addition, it is expected that other institutions of higher education will join this effort. Therefore, the positive impact of this grant project will continue for years after the conclusion of year five.

f. (i, ii) In addition to the description of how this grant supports pre-service and beginning teachers, the project's overarching goal is to improve student academic achievement by providing more effective teachers in high-need schools. As described in the project work plan, pre-service and beginning teachers will receive support and professional development aligned to the attributes of effective teaching indentified through research. (iii) It is the intention of this grant that all teachers working with all students will be engaged with appropriate pre-service training and ongoing professional development with the goal of improving student academic achievement. Through ongoing professional development for administrators and mentors, the project will also focus on retention of general education teachers, special education teachers, talented and gifted teachers and English-language learner teachers. (iv) The evaluation plan which supports this section of the grant is included in the Accountability and Evaluation section of this document. (v I) NA, (vII) the University of Northern Iowa's method-based teacher education course require the

embedding of Iowa's academic standards within coursework. This would include the use of these standards as the students develop units and/or lessons that are taught during clinical experiences. Thus, these standards provide the pre-service students' frame work for instructional design and implementation. This issue is also addressed in the state of Iowa's Standards for Practitioner Preparation Programs: Instructional Planning. The candidate plans instruction based upon knowledge of subject matter, students, the community, curriculum goals and state curriculum models. (vi) University of Northern Iowa pre-service teachers will receive intensive instruction in meeting the needs of students with disabilities and serving as a member of the IEP team. A three-pronged approach will be used to address this need: (1) coursework specific to meeting the needs of students with disabilities, taught by faculty from the Department of Special Education, (2) infusion of special education content, including principles of universal design for learning, into education coursework, through collaboration between faculty from Special Education, faculty from the other departments, and teachers in the high-needs schools and (3) clinical experiences in classrooms serving children with disabilities in inclusive settings and, where appropriate, self-contained special education classrooms. (vii) Specific instruction on meeting the needs of English-language learners will be included in coursework. Professional development workshops will be offered for practicing teachers and clinical experiences with English-language learners in high-needs schools will occur. (viii, viii I, viii II) Collaborative teams, or Communities of Practice (CoPs) will work together to strengthen and reform teacher preparation and K-12 rural education, drawing on the expertise of both faculties. Teams will include content area specialists

from UNI's Colleges of Education, Humanities and Fine Arts, Natural Sciences, Social and Behavioral Sciences, as well as specialists in literacy, special education, learning theory, child and adolescent development, curriculum and instruction, and pedagogy from the College of Education and highly qualified practicing teachers (both beginning teachers and more experienced teachers) in the high-need schools.

The work of the CoPs, organized around endorsement areas (for example, Elementary Education, Secondary Mathematics, Secondary Social Studies, etc.) will focus on strengthening the pre-service teacher preparation programs through developing shared operational definitions of what effective teaching looks like in each subject area and/or grade band. Feedback loops will insure that the work of the CoPs will inform K-12 instructional practice and coursework for pre-service teachers at the university, promoting consistency between the content of coursework and clinical experiences in the rural high-needs schools.

Activities of the CoPs will include the following:

1. Participation in shared professional development efforts, building upon the Iowa Department of Education's Teacher Development Academies and other state professional initiatives such as *Adolescent Literacy* (focused on literacy instruction for adolescents), *Authentic Intellectual Work* (focused on cognitive complexity and teaching for understanding), *Concept-Oriented Reading Instruction* (focused on upper elementary and middle school literacy), *Every Child Reads* (focused on the five components of reading, reading strategies, using data to drive instructional decisions, and the use of classroom-based

assessments for frequent, ongoing monitoring of student progress), *Our Kids* (professional development for teachers of English-language learners); *Question Answer Relationships* (focused on middle and high school reading comprehension), *Second Chance Reading* (focused on helping struggling readers at the middle and high school levels), *Every Student Counts* (focused on teaching mathematics for understanding), *Cognitively Guided Instruction* (focused on the use of authentic formative assessment to plan instructional activities), and *Every Learner Inquires* (focused on inquiry-based science education K-12);

2. Summits on topics of need as identified by the CoPs and the PAIT (anticipated topics include meeting the needs of English-language learners, using principles of universal design for learning, differentiating instruction for students with diverse learning needs and using positive behavioral interventions, etc.);
3. Electronic communication using video conferencing, video streaming, blogs and other web-based systems to provide year-long opportunities for enrichment by extending university students' clinical experiences into geographically distant classrooms and
4. Use of the PAIT (described above) to document and assess teacher effectiveness, direct professional development efforts, and support supervision of pre-service teachers and mentoring of beginning teachers.

After the research study identifies the attributes of effective teaching, it will be the responsibility of the Department of Education in partnership with the IHE to align those attributes with the Iowa Core Curriculum and design professional development for teachers, mentors and administrators in elementary and secondary schools to develop attributes of effective teaching, to deepen content knowledge and implement literacy programs that incorporate essential components of reading instruction. (ix) All pre-service teachers at the University of Northern Iowa participate in at least 25 hours of clinical experience in the semester prior to student teaching (the methods semester). Most programs include many more than 25 hours (range 25-100 hours of pre-student teaching field experience). For the purpose of this proposed project, this year-long clinical experience will occur in the high-needs schools and will be augmented with other forms of communication between pre-service teachers, university faculty, and teachers in the high-needs schools. (x) See section viii. (xi) A system that collects this data is already in place. The IDE collects retention data annually. To further draw benefit from the data, the mission of this project provides for outcomes that will be reflected and analyzed using the retention data collected from the partner LEAs to evaluate the effectiveness of the program.

g. (i, ii) The state of Iowa has an induction program in place that includes mentoring by more experienced teachers. UNI will participate in this program through working directly with the beginning teachers and their mentors in the high-needs schools. Central to this work is the use of the integrated technology platform and the Performance Assessment for Iowa Teachers (PAIT) (described in greater detail below). The PAIT will provide a common system for collecting a wide array of

artifacts that demonstrate teacher effectiveness and that will be consistent from teacher preparation programs to the induction process for beginning teachers. Pre-service teachers who use the PAIT in their coursework and clinical experiences will continue to use it in the induction process. The PAIT serves as both a formative and a summative assessment of teacher effectiveness and provides detailed information that can be used to plan and design professional development experiences. UNI faculty will collaborate with the LEAs to provide professional development in areas of need as identified through the use of the PAIT. Components of the PAIT assess content expertise, teaching expertise, differentiation of instruction for diverse learners, ability to implement and appropriately use the results of assessments to adapt teaching, and meeting the needs of English-language learners. Mentor teachers will be adequately compensated through stipends and course credit for working with UNI faculty. (iii) In addition to the state mentoring program, the University of Northern Iowa will build upon its partnership with the National Commission on Teaching and America's Future (NCTAF), a nonpartisan, nonprofit, advocacy group dedicated to improving teacher quality and leading education company Pearson which is based on NCTAF's *Teachers Learning in Networked Communities* (TLINC) project funded in part by the *Fund for Improvement of Postsecondary Education* (FIPSE) . This partnership offers an online learning community designed to support teacher candidates and novice teachers with a broad network of mentors and experienced talent and to connect UNI educator preparation faculty with their K-12 district partners. (iv) UNI faculty will be provided release time to work with beginning and mentor teachers in the high-needs schools. If needed, they will be provided summer stipends to design and implement

professional development. They will also be provided with instructional designers to assist them with designing professional development experiences that integrate technology appropriately and meet the needs of distance learners. Additionally, they will be able to maintain the use of PAIT as a basis for continuing the examination of the new teacher's teaching effectiveness with the mentoring team of appropriate university faculty and district mentors.

Accountability and Evaluation

The University of Iowa Center for Evaluation and Assessment (CEA) will support the evaluation of the Iowa DE TQ partnership. Evaluation activities will occur for each of the project goals as well as for the initiative as a whole. Since 1992, the CEA has successfully completed more than 100 evaluations of educational and social programs and curriculum development and technology infusion projects, including projects funded by various private and non-profit foundations and NIH, NSF, FIPSE, HRSA, HHS, the Department of Education and state and local agencies. Completed evaluations include the Consortium for Minorities in Teaching Careers (CMTC) in the mid-1990s (Yarbrough, 1997) and the English-language learner component of the recently completed Teacher Quality Enhancement project awarded to the state of Iowa.

The evaluation will follow current best practice guidelines and conform to the *Program Evaluation Standards, 3rd Edition* (Yarbrough, Shulha, Hopson, & Caruthers, in press; Joint Committee, 1994), the American Evaluation Association Guiding Principles (AEA, 2005). The evaluation will serve multiple purposes, including:

- ***Accountability***, to determine if resources are used as proposed and if the activities and processes take place as proposed.

- ***Formative evaluation***, for project improvement to determine if resources are used as efficiently and effectively as possible, if collaborations among the partners and other activities take place effectively and efficiently, and whether barriers or impediments can be removed or reduced.
- ***Summative evaluation***, for the generation of new general and specific knowledge for dissemination about the recruitment and preparation of highly-qualified teachers and administrators, and the outcomes and impacts of highly-qualified teachers on student achievement.

Accountability and Evaluation

1. (A) The evaluation will investigate ***the achievement for all prospective and beginning teachers***, as measured by the eligible partnership with the University of Northern Iowa (UNI) through multiple, comprehensive activities. First, a *process evaluation* will be implemented to document the changes made to the teacher preparation program as a result of the Teacher Quality Partnership. Included in the process evaluation will be an investigation of how collaboration occurs between partners (Iowa DE, UNI, and LEAs) and within partner institutions. In addition, evaluation staff will work with project leaders and collaborators to evaluate the implementation of electronic portfolios, and the effects on intermediate outcomes such as the ability of participants to find employment.

   Second, an *outcomes evaluation* will be implemented to investigate changes in achievement for new and prospective teachers. During the first year of the project, the evaluation team will identify and select initial evaluation questions and the methods with which to investigate them in collaboration with project staff and representatives

from partner institutions. The evaluation team will work with stakeholders and project leaders to determine the strengths and weaknesses of various types of evidence. Then useful and accurate evidence will be collected based on current best standards of evaluation practice (Donaldson, Christie, & Mark, 2009; Frechtling, 2002; Mark, Henry, & Julnes, 2000; Stevens, Lawrenz, & Sharp, 1993; Worthen, & Sanders, 1997). Key clusters of questions will address the effectiveness of identification strategies, success identifying members of underrepresented groups, and how the identification and implementation processes can be augmented and improved.

During Year 1, evaluation staff will work with project staff and stakeholders to create logic models to address each of the major objectives of the TQP (Wyatt-Knowlton & Phillips, 2008). These models will also be informed by program theories. Program evaluation science (Chen, 2005; Chen & Rossi, 1983, 1990; Donaldson, 2007) has increasingly focused on the role of theory in guiding program implementation and the extent to which proposed and implemented programs are grounded in sound theoretical bases from multiple research paradigms and disciplines. In keeping with these new understandings, the evaluation of the TQP will focus on the explicit and implicit program theories that guides selection, programming and research facilitation, including the theories that help identify the talent to be developed (diagnostic theories), the programming to be developed (intervention theories) and the theories that guide program management and service delivery (process theories).

In addition to output tracking (described in section D), the CEA will identify outcomes for students, teachers, teacher candidates, and administrators. A pre-post survey instrument will be used to measure changes in prospective and beginning teachers' self-efficacy, interest in teaching, attitudes toward teaching, and views on the status of teaching. Results of a factor analysis of the survey instrument, using data from a national teacher recruitment program, led to these four areas (Yarbrough, 1997).

Teacher and student artifacts will be evaluated as instructional or curricular products. This will allow for a more nuanced investigation into the instructional abilities of the teachers, and will allow for some evidence of student processes and learning. The evaluation team will work with project staff, AEAs, and LEAs to finalize evaluation questions and the processes (e.g., rubrics or matrices). The process used to evaluate these artifacts will be reviewed with project staff and stakeholders annually.

(B). ***Teacher retention*** will be evaluated by examining both outputs (changes in retention rates) and outcomes (reasons for any changes in teacher retention rates). The evaluation team will work with project staff, the partner IHE, and identified LEAs to identify current teacher retention rates and processes for establishing a system to evaluate retention rates on an annual basis. Participants will be asked to complete a one-page "Participant Tracking" form to facilitate the evaluation of longer-term outputs, outcomes, and impacts. The tracking form will include information such as current contact phone number(s) and address, alternative (or

permanent) contact information, and the names and contact information for three friends or relatives who would be likely to know how to contact the participant.

At the end of the Teacher Quality Partnership funding, these annual rates will be used to produce summative information on changes in retention rates in the first three years of a teacher's career.

(C). Improvement in the pass rates and scaled scores for initial State certification or licensure of teachers. CEA staff will work with the Educational Placement Office at the UNI to investigate any changes in pass rates on the Praxis I and admissions standards into the teacher education program. In addition, information on teacher licensure rates will be tracked and documented throughout the project, and changes in these rates will be further investigated.

(D). *Methods that address the evaluation requirements of section 204(a) of the HEA*

Multiple methods will be implemented to track the project outputs required by section 204(a) of the HEA, including the participant tracking form. Evaluation staff will also work with staff at the partner institution and at the Area Education Associations to identify additional processes to track project participants, including the use of campus or school groups, or social networking sites.

The tracking form will allow the evaluation team to track the following outputs:

i. the percentage of highly-qualified teachers hired by the high-need local educational agency participating in the eligible partnership

ii. the percentage of highly qualified teachers hired by the high-need local educational agency who are members of underrepresented groups.

iii. The percentage of highly qualified teachers hired by the high-need local educational agency who teach high-need academic subject areas (such as reading, mathematics, science, and foreign language, including less commonly taught languages and critical foreign languages)

iv. The percentage of highly qualified teachers hired by the high-need local educational agency who teach in high-need area (including special education, language instruction educational programs for limited English proficient students, and early childhood education)

v. The percentage of highly qualified teachers hired by the high-need local educational agency who teach in high-need schools, disaggregated by the elementary school and secondary school levels

The evaluation team will collaborate with the AEA, partner IHE, and LEAs to track outputs and document outcomes for the percentage of teachers trained to integrate technology into instruction, including the extent that technology infusion is consistent with universal design for learning. Evaluation instruments will be created to examine the effects of this technology infusion, including barriers to success, teacher attitudes, and effects on students. Participating high quality teachers who use technology to collect, manage, and analyze data will be compared with teachers at similar schools who do not use technology in this manner. Differences in the outcomes for students of project and control teachers may include engagement, attitude, and achievement.

Reporting

Formative evaluation results will be reported in a timely manner to the staff at The University of Iowa, William Penn University, identified LEAs, and other stakeholders. The evaluation team will engage in rapid response reporting of any challenges or key problems for immediate improvement. In addition, annual reports will be constructed for accountability purposes, along with the GPRA reports. These annual reports will also focus on reporting more summative and generalizable information about identification, recruitment, and training of highly-qualified teachers and administrators. Finally, conference presentations and publications grounded in program theories will disseminate results to a wider audience.

Metaevaluation and establishment of a continuous feedback loop

An internal metaevaluation will be conducted. Metaevaluation is a specific type of evaluation, with a focus on accountability and quality assurance of another evaluation. The Program Evaluation Standards (3rd edition, forthcoming) propose that evaluations be held accountable for their utility, propriety, feasibility and accuracy. One aspect of the metaevaluation might examine the utility of evaluation results for various groups of stakeholders, such as project staff, participating teachers and administrators, or IHE partners.

In addition to annual reports, the evaluation team will work with project staff to establish routine meetings to share and discuss formative evaluation results. Processes will be developed to disseminate evaluation results to project stakeholders in a manner that is responsive to their needs. These processes will be reviewed annually for effectiveness and efficiency.

Evaluator Qualifications

The CEA Director, Dr. Yarbrough, has published widely using a variety of mixed methods, including experimental and naturalistic designs as well as quantitative and qualitative information types. He is currently a member and Chair of the Joint Committee on Standards for

Educational Evaluation (JCSEE) and also chairs the task force completing the third edition of the *Program Evaluation Standards* (in press). The CEA Associate Director, Dr. Melissa Chapman, will lead the evaluation of the TQ(3) program with the support of CEA staff. Dr. Chapman provided leadership and evaluation expertise for a state-wide Teacher Quality Enhancement project, and has led a number of other evaluations of projects that involved teacher professional development, English-language learners, analysis of a large statewide dataset, evaluation of program outputs and impacts, and the recruitment and improvement of teachers in STEM areas.

Pre-Baccalaureate Experience: Implementing Reforms within Each Teacher Education Program

(1) Implement Reforms Within each Teacher Preparation Program

1 (A I, II and B i, ii)The proposed project consists of significant reforms to the teacher preparation programs at the University of Northern Iowa (UNI), the largest teacher preparation institution in the state of Iowa. This project will involve university faculty, teacher education students, and beginning and practicing teachers (those who teach multiple subjects, special educators, and teachers of students who are English-language learners) in a seamless program of coursework, clinical experiences, and professional development. (B, ii) The goals of these reform efforts are to improve the selection and preparation of teacher candidates and to increase the effectiveness of beginning and practicing teachers in Iowa, so that all teachers in high-needs LEAs are highly qualified; well-versed in the application of empirically-based practices and scientifically valid research on teaching and learning, principles of universal design for learning, and positive behavioral interventions; and skilled in the effective use of technology to support student learning.

(B ii, II, and IV) Central to the proposed reforms are four components: (1) an integrated technology platform that will support the use of a performance-based system for assessing pre-service teacher quality, (2) intensive collaboration among practicing teachers in high-needs rural LEAs and faculty from across four colleges of Arts and Sciences at the university (Education, Natural Sciences, Social and Behavioral Sciences, and Humanities and Fine Arts) to strengthen content knowledge, pedagogy, student learning methods, and effective teaching strategies for all teachers in rural areas, (3) embedded clinical experiences in high-needs rural schools and (4) use of authentic settings by pre-service teachers for the analysis of student academic achievement data and its impact on improving and differentiating classroom instruction for all students including students with individualized education programs. These are described below. (B IV, bb) and (B IV, aa)

Integrated Technology Platform

(B VI, iii through vi) The use of the integrated technology platform (ITP) to enhance and assess teacher effectiveness is the centerpiece of the proposed project. The project capitalizes on the development and validation of the Performance Assessment for California Teachers (PACT), a performance-based system for assessing pre-service teacher quality designed and piloted by 16 California universities (Pecheone & Chung, 2006). The PACT draws from the INTASC (Interstate New Teacher Assessment and Support Consortium) Standards and the National Board for Professional Teaching Standards, adjusted to take account of teaching issues (such as the teaching of English-language learners) that are important in California. It includes a structured performance assessment and a regimen for scoring that has been honed over several years of research.

The PACT consists of a common assessment, called the Teaching Event (TE), and draws from artifacts created while teaching, accompanied by teacher commentaries that provide context and rationales needed to understand and interpret the artifacts. The PACT uses multiple sources of data (teacher plans, teacher artifacts, student work samples, video clips of teaching, and personal reflections and commentaries) that are organized into four categories of teaching: planning, instruction, assessment, and reflection. The assessment places student learning at the center with special attention to subject-specific pedagogy and the teaching of English-language learners. The PACT thus provides a rich and detailed picture of the teacher's knowledge, skills, and dispositions, and has the potential to inform individual teachers about their performance and drive individual professional development efforts. Specifically, the PACT documents how well the teacher or teacher candidate can:

- plan lessons with consideration for English-language learners and other students with learning challenges,
- teach the lessons to the K-12 students in public school classrooms,
- plan and give student assessments or tests based on the lessons,
- reflect on their own instruction, and
- examine student work and assessment results as evidence of the effectiveness of their instruction.

Reliability and validity of the PACT has been established by Dr. Pecheone and his team at Stanford University over several years of work with 16 teacher preparation programs across California (Pecheone & Chung, 2006). In the proposed project, a partnership with Dr. Pecheone will make it possible for the project team to customize the

PACT to address Iowa teaching standards and state licensure requirements and to establish reliability and validity of the assessment for use with pre-service and beginning teachers. The UNI faculty's considerable contributions to the development and validation of the Teacher Work Sample currently in use in Iowa uniquely qualifies UNI to work with the Stanford team on the customization of the PACT for Iowa.

In their work with teacher preparation programs in California, Dr. Pecheone and his team have found that implementation of the PACT is a powerful tool for identifying strengths and weaknesses of teacher preparation programs and serves as a catalyst for program improvement (Pecheone & Chung, 2006). Results include increased dialogue among program faculty about what constitutes effective teaching; articulation across courses, structures and roles; changes in content of some courses, and structural changes in teacher preparation programs.

The proposed project will build a system for collecting and documenting teacher effectiveness that will be consistent from teacher preparation programs through beginning teacher induction programs. The Iowa version of the PACT, the Performance Assessment of Iowa Teachers (PAIT). Will be used in five ways: (1) in coursework and clinical experiences with pre-service teachers, as a formative assessment, (2) with student teachers, as a summative assessment of their teacher preparation, (3) with beginning teachers in their first two years of teaching in the high-needs schools, as part of the induction and mentoring process, (4) with the teachers in the high-needs schools, as a mechanism for supporting supervision of pre-service teachers, mentoring of beginning teachers, and collaboration and communication between university faculty and teachers in the high-needs schools and (5) by university faculty, as a source of feedback

concerning the effectiveness of specific coursework and entire teacher preparation programs, identifying strengths and weaknesses of programs, and informing reform efforts. Analysis of the results of the PAIT with pre-service teachers will assist university faculty in identifying gaps in the teacher preparation programs.

Collaborations

One of the challenges of rural education is professional isolation. Iowa has over 300 small rural school districts, some that consist of only one school serving as few as 250-300 students. In small rural school districts, individual teachers frequently are the only person in the school with a particular area of expertise, so that they cannot identify colleagues with whom to consult and collaborate. Distance between schools can be a substantial barrier to professional collaborations. To combat this isolation, the proposed project will create a mechanism for using technology to bring together collaborative teams of university faculty and faculty from the high-needs schools participating in the project. These collaborative teams, or Communities of Practice (CoPs) will work together to strengthen and reform teacher preparation and K-12 rural education, drawing on the expertise of both faculties. Teams will include content area specialists from UNI's Colleges of Education, Humanities and Fine Arts, Natural Sciences, Social and Behavioral Sciences, as well as specialists in literacy, special education, learning theory, child and adolescent development, curriculum and instruction, and pedagogy from the College of Education, and beginning and experienced teachers in the high-needs schools.

The work of the CoPs, organized around endorsement areas (for example, Elementary Education, Secondary Mathematics, Secondary Social Studies, etc.) will focus on strengthening the pre-service teacher preparation programs through developing

shared operational definitions of what effective teaching looks like in each subject area and/or grade band. Feedback loops will insure that the work of the CoPs will inform K-12 instructional practice and coursework for pre-service teachers at the university, promoting consistency between the content of coursework and clinical experiences in the rural high-needs schools.

Activities of the CoPs will include the following:

- Participation in shared professional development efforts, building upon the Iowa Department of Education's Teacher Development Academies and other state professional initiatives such as *Adolescent Literacy* (focused on literacy instruction for adolescents), *Authentic Intellectual Work* (focused on cognitive complexity and teaching for understanding), *Concept-Oriented Reading Instruction* (focused on upper elementary and middle school literacy), *Every Child Reads* (focused on the five components of reading, reading strategies, using data to drive instructional decisions, and the use of classroom-based assessments for frequent, ongoing monitoring of student progress), *Our Kids* (professional development for teachers of English-language learners), *Question Answer Relationships* (focused on middle and high school reading comprehension), *Second Chance Reading* (focused on helping struggling readers at the middle and high school levels), *Every Student Counts* (focused on teaching mathematics for understanding), *Cognitively Guided Instruction* (focused on the use of authentic formative assessment to plan instructional activities), and *Every Learner Inquires* (focused on inquiry-based science education K-12),

- Summits on topics of need as identified by the CoPs and the PAIT (anticipated topics include meeting the needs of English-language learners, using principles of universal design for learning, differentiating instruction for students with diverse learning needs, using positive behavioral interventions, etc.),
- Electronic communication using video conferencing, video streaming, blogs and other web-based systems to provide year-long opportunities for enrichment by extending university students' clinical experiences into geographically distant classrooms and
- Use of the PAIT (described above) to document and assess teacher effectiveness, direct professional development efforts, and support supervision of pre-service teachers and mentoring of beginning teachers.

(2) Embedded Clinical Experiences

2 (A-H) Pre-service students will participate in clinical experiences in the high-needs schools during their final year in the teacher preparation programs. There are four required clinical experiences at the University of Northern Iowa. The first one is embedded in multiple schools. The second one takes place in Iowa's Research and Development School, UNI's Price Laboratory School. The final two semesters of the university's teacher preparation programs consist of methods classes (Level 3) and student teaching (Level 4), in that order. The methods semester includes a minimum of 25 hours of clinical field experiences (range 25-100 hours clinical experience pre-student teaching), depending on the program.

Field experiences for UNI students have been difficult to embed regularly in small rural schools, due primarily to geographic barriers. For this project, technology will be used to link the teachers in the high-needs schools with students at the university. Poly-coms and video streaming will make it possible for students in university coursework to observe in classrooms, get to know their supervising teachers, and become familiar with their teaching in addition to their face-to-face clinical experiences in the teachers' classrooms, thus providing the pre-service students with a clinical based experience throughout the course of their programs. Instructional designers will assist university faculty in designing coursework that can be completed on-line, increasing the amount of student time available for clinical experiences at Level 3.

The close collaboration between university faculty and teachers in the high-needs schools, fostered by the CoPs and the teachers' experiences using the PAIT in their own classrooms will make it possible for UNI faculty and classroom teachers to work together to integrate pedagogy and classroom practice. That is, students will experience continuity between what they learn about research-based practices and what they observe, implement, and reflect on in real classrooms, using the PAIT as a formative assessment. The use of the PAIT will support pre-service teachers in learning how to choose, implement, and analyze student assessment data and use the results to improve classroom instruction.

The use of the PAIT in the pre-student teaching clinical experiences will make it possible for students to receive specific feedback on their teaching from

UNI faculty and supervising teachers in the high-needs schools. Clinical experiences will focus on learning how to meet the specific learning needs of a diverse range of students including students with disabilities, English-language learners, students who are gifted and talented and students with low literacy levels. Clinical experiences will also provide students with opportunities to learn how to participate effectively as a member of an IEP team and collaborate with other specialists to identify strategies for meeting the needs of students with disabilities. Finally, practicing teachers in the high-needs schools will work with university faculty to insure that all pre-service teachers in the project receive instruction in how to use effective strategies for reading instruction, use appropriate screening tools and assessments to diagnose reading difficulties, individualize literacy instruction for students with deficiencies in literacy skills and integrate literacy skills across subject areas.

Students who participate in the project will complete their Level 4 student teaching in these small rural schools. The PAIT will serve as a summative assessment of pre-service teachers' knowledge, skills, and dispositions during the student teacher experience, insuring that graduates are qualified and ready to enter the field as highly effective teachers. Although the project cannot compel high-needs LEAs to hire these graduates, it is logical to assume that the knowledge and skill demonstrated by these graduates will make them highly sought-after by the rural schools in which they conduct their student teaching.

In addition to being used at the level of the individual teacher, data from the PAITs conducted by student teachers in the high-needs schools will be fed back to the programs in a feedback loop that will drive program reform.

Academic Achievement Data

The formal pre-baccalaureate classroom and clinical setting will provide pre-service teachers opportunities to analyze student academic achievement data and other measures of student learning to improve classroom instruction. The proficient use of well designed assessment tools supports learner-centered teaching as required in the new Iowa Core Curriculum.

UNI and LEA faculty will incorporate sound assessment technologies and strategies that provide continuous feedback on what is being learned, enabling teams of teachers to make necessary revisions that personalize learning resources and activities to individual needs. The use of the PAIT process will serve to immerse pre-service students and faculty participants in an example of comprehensive assessment model. This can assist in understanding the use of data from other scientifically valid and research based assessment tools. Regular discussions within the CoPs groups will establish a learning culture that will link the full learning cycle to ongoing student and program enhancement. These collaborative efforts will support learning and program improvement at both the local and university levels. The process of collaboration between faculty and pre-service student supports and encourages continuous learning, sustained teamwork, and agility in an ever-changing environment.

(3) Induction Program for Beginning Teachers

The project will make it possible for university faculty to participate actively in the induction program for beginning teachers in the high-needs schools. Specific activities in the induction program include the following:

- Mentors will receive professional development on how to use the PAIT as a tool in mentoring beginning teachers.
- Beginning teachers will complete the PAIT three times each year of the induction program.
- Mentors and university faculty will use the results of the PAIT to identify strengths and weaknesses and plan professional development experiences specifically targeted at areas of need.
- Beginning teachers will participate in Communities of Practice (CoPs) (see previous language in narrative) alongside university faculty and mentors.
- Integrate Teacher Work Samples process for measuring professional growth in "Journey to Excellence", an Iowa model for mentoring and induction for beginning teachers

(5) (a.b.c) **Teacher Recruitment**

The grant partnership will develop and implement strategies to recruit and retain highly qualified teachers from wider representative populations, including minorities, those will disabilities and teachers for whom their first language is not English. The IHE partner will implement an alternative licensure program in order to attract professionals from other fields to meet the needs of high-need, rural schools and shortages in specific content areas such as math, science, special education, and instruction for English-language learners.

The Iowa Mentoring and Induction Program and the Journey to Excellence Model Program support the recruitment and retention of beginning teachers by providing funding, public policy and training for PK-12 schools. Beginning teachers in high-need partner schools will be able to teach in an environment that provides guidance from a trained mentor and a supportive organizational structure at building and district levels.

A loan forgiveness program offer by the state of Iowa offers loan cancellation benefits to teachers who teach in shortage areas. The maximum annual award is 20 percent of the teacher's total federal Stafford loan balance, including principal and interest, not to exceed the average resident tuition rate established for students attending universities governed by the Iowa Board of Regents for the first year following the recipient's graduation. For 2008 graduates, the maximum award is $6,420.

(6) Literacy Training

The literacy component of the proposal will be based on research-based professional development models and programs, which the Department of Education and Area Education Agencies provide and continue to enhance for practicing teachers and administrators in Iowa. As listed previously and as described in Appendix D, faculty will be invited to participate in train-the-trainer professional development activities with the intention of integrating these literacy models and programs into the preparation program to strengthen literacy teaching skills of prospective and beginning teachers.

Iowa literacy models and programs incorporate the essential components of reading and writing across subject areas, including the use of screening, diagnostic, formative and summative assessments to improve classroom instruction for all students and provide individualized, intensive, targeted literacy instruction for students with deficiencies in literacy skills.

In Summary

The narrative provided details the background, research and project plan that will enable the Iowa Teacher Quality Partnership Grant to successfully meet the challenge of significantly improving the learning of Iowa's PK-12 students.