

***TAP Connect National Pilot***  
National Institute for Excellence in Teaching & Texas Tech University  
SEED Grant Application

**Table of Contents**

|   |    |
|---|----|
| Introduction.....   | 2  |
| A. Significance.....  | 5  |
| 1) National Significance .....  | 6  |
| 2) Contribution to Theory, Knowledge, and Practices .....                     | 7  |
| 3) Magnitude of the Results.....  | 13 |
| B. Quality of the Project Design and Services .....                           | 17 |
| 1) Goals, Objectives, and Outcomes .....                                      | 17 |
| 2) Comprehensive Effort to Improve Teaching and Learning .....                | 22 |
| 3) Professional Development Services sufficient to lead to improvements ..... | 24 |
| C. Quality of the Management Plan and Personnel.....                          | 34 |
| 1) Qualifications of Project Personnel.....                                   | 34 |
| 2) Management Plan Responsibilities, Timelines, and Milestones .....          | 35 |
| 3) Time Commitments.....  | 40 |
| 4) Sufficient and Reasonable Resources. ....                                  | 41 |
| D. Sustainability.....  | 41 |
| 1) Build Capacity and Yield Results .....                                     | 41 |
| 2) Yield Findings and Products for Other Agencies and Organizations. ....     | 42 |
| 3) Disseminate Information about Results and Outcomes .....                   | 43 |
| E. Quality of the Project Evaluation .....                                    | 44 |
| 1) Thorough, Feasible, and Appropriate Goals, Objectives, and Outcomes .....  | 44 |
| 2) Use of Objective Performance Measures Clearly Related to Outcomes.....     | 44 |
| 3) Provide Performance Feedback and Permit Periodic Assessment .....          | 50 |
| 4) Sufficient Resources to Carry Out Project Evaluation.....                  | 51 |

## **Introduction**

For this Supporting Effective Educator Development (SEED) proposal, the *TAP Connect National Pilot* Project is a collaboration between a national non-profit organization and a large, state-funded university. *TAP Connect* will reach nearly 750 teachers and leaders in 18 TAP schools across five high-need Texas school districts (see Table 1 below). It will also prepare at least 90 highly effective new teachers embedded in the partner district TAP schools through Texas Tech University. Use of Teachscape video sharing technology developed through the Gates MET project will enable continuous observation and shaping of performance competencies. Technology-enabled, competency-based shaping will produce highly effective, “TAP-ready” new teachers, in-service TAP teachers with competency-based advanced certification in effective literacy and STEM instruction and TAP school leaders that effectively foster high-fidelity implementation of the TAP System. This technology-enabled, competency-based approach will result in TAP schools that produce significantly higher student achievement than traditional TAP schools and local control schools.

The National Institute for Excellence in Teaching (“NIET”) is a 501(c)(3) non-profit organization, which created the TAP System. Over the last 14 years, NIET has pioneered the use of the TAP System of Teacher and Student Advancement in over 600 schools and in 19 states across America. This system is based on four inter-related components: multiple career paths for teachers; ongoing applied professional development; instructionally focused accountability; and performance-based compensation (see Appendix A). When implemented with fidelity, the TAP System has been shown to allow students to outperform their peers in comparable schools in the same communities. Student achievement increases significantly, as does teaching performance and the retention of effective staff (Daley & Kim 2010; Hudson, 2010; Mann, Leutscher, &

Reardon, 2013; Schacter et al., 2002; Schacter et al., 2004; Solmon et al. 2007) (see Appendix B for list of references).

| <b>Table 1: Partner TAP School Profiles</b> |                               |                      |                      |                            |  |                                       |  |
|---|-------------------------------|----------------------|----------------------|----------------------------|--|---------------------------------------|--|
| <b>District</b>                             | <b>School</b>                 | <b># of students</b> | <b># of teachers</b> | <b># of administrators</b> | <b>% of students qualifying for free and reduced lunch</b> | <b>% of English language learners</b> | <b>% of students below grade level</b> |
| Frenship ISD                                | Willow Bend Elementary        | 615                  | 45                   | 2                          | 76%  | 13%                                   | 3%                                     |
| Frenship ISD                                | Westwind Elementary           | 678                  | 46                   | 2                          | 64%  | 2%                                    | 5%                                     |
| Grand Prairie ISD                           | Danielson Elementary          | 602                  | 35                   | 2                          | 93%  | 32%                                   | 48%                                    |
| Grand Prairie ISD                           | Adams Middle School           | 620                  | 36                   | 2                          | 92%  | 34%                                   | 48%                                    |
| Grand Prairie ISD                           | Grand Prairie High School     | 1,851                | 160                  | 7                          | 78%  | 19%                                   | 48%                                    |
| New Caney ISD                               | Akin Elementary               | 717                  | 43                   | 2                          | 79%  | 50%                                   | 36%                                    |
| New Caney ISD                               | Porter Elementary             | 646                  | 41.5                 | 2                          | 80%  | 25%                                   | 26%                                    |
| New Caney ISD                               | Valley Ranch Elementary       | 602                  | 42                   | 2                          | 64%  | 20%                                   | 31%                                    |
| New Caney ISD                               | Keefer Crossing Middle School | 898                  | 60                   | 3                          | 66%  | 8%                                    | 26%                                    |
| New Caney ISD                               | White Oak Middle School       | 852                  | 61                   | 3                          | 60%  | 9%                                    | 28%                                    |
| New Caney ISD                               | New Caney High School         | 1,392                | 106                  | 6                          | 63%  | 4%                                    | 22%                                    |
| Roosevelt ISD                               | Elementary                    | 523                  | 34                   | 2                          | 73%  | 4%                                    | 16%                                    |
| Roosevelt ISD                               | Junior High                   | 253                  | 22                   | 1                          | 73%  | 4%                                    | 16%                                    |
| Roosevelt ISD                               | High School                   | 281                  | 27                   | 2                          | 73%  | 4%                                    | 21%                                    |
| Slaton ISD                                  | Stephen F Austin              | 193                  | 9                    | 1                          | 81%  | 4%                                    | 9%                                     |
| Slaton ISD                                  | Cathelene Thomas              | 531                  | 35                   | 2                          | 74%  | 4%                                    | 9%                                     |
| Slaton ISD                                  | Junior High                   | 281                  | 31                   | 2                          | 72%  | 4%                                    | 9%                                     |
| Slaton ISD                                  | High School                   | 374                  | 38                   | 2                          | 61%  | 4%                                    | 9%                                     |

To ensure the consistent fidelity of TAP school implementation and to infuse the TAP System principles into initial teacher preparation, NIET is partnering with the College of Education at Texas Tech University (TTU). The dean at TTU, Dr. Scott Ridley, while a faculty member at Arizona State University, began the first competency-based teacher preparation program using the TAP instructional rubric. Now back in his home state of Texas, NIET and TTU will pilot a national non-profit + university partnership model, the *TAP Connect National Pilot*, that promises to become an easily transportable, highly effective prototype for the entire country.

By blending the proven structures of TAP (e.g., the TAP instructional rubric, Cluster Groups, Master Teachers) with the innovative, technology-enabled and competency-based educator training of TTU, this national non-profit + university partnership will:

- 1) Create a pipeline of measurably effective, “TAP-ready” new teachers through a technology-enabled, competency-based, “grow-your-own” teacher preparation model (***Absolute Priority 1, Competitive Priority 2***).
- 2) Provide existing TAP school teachers with advanced certification training in effective Literacy and/or STEM instruction that is technology-enabled with ongoing competency-based feedback and instructional shaping in the classroom (***Absolute Priority 2 & 3, Competitive Priority 2 & 3***).
- 3) Ensure full-fidelity implementation of the TAP Comprehensive School Reform model by providing TAP School Leaders (Master & Mentor Teachers, Principals) with technology-enabled, ongoing competency-based feedback and shaping on TAP school processes (e.g., pre/post conference facilitation, Cluster Group PLC facilitation). Give TAP school

leaders the option of advanced certification along with the development of these advanced skills (*Absolute Priority 3, Competitive Priority 2*).

This NIET + TTU partnership will increase the measurable fidelity of TAP school implementation, the measurable effectiveness of TAP school personnel and student achievement compared to traditional TAP schools. The *TAP Connect National Pilot* will also prove to be a model easily expanded through technology to TAP schools across the nation. For educators who want it, the NIET + TTU model will provide a site-based opportunity for performance competency-based advanced certifications and degrees. In the *TAP Connect National Pilot*, the NIET + TTU partnership will serve 9 TAP schools in the Dallas-Fort Worth and Houston metropolitans, plus will add 9 new TAP schools in panhandle/high plains of West Texas.

#### **A. Significance**

It has been 30 years since the publication of *A Nation at Risk*, yet serious challenges remain to providing every child in this country with an excellent education and the opportunity for a bright future. The globalization of business along with increased global competition for jobs now provides strong motivation for Americans to address these historical inequities.

The *TAP Connect National Pilot* addresses this 21<sup>st</sup> century challenge with an evidence-based, comprehensive model for teacher candidate, teacher, principal and school effectiveness within the context of a school-wide design for competency-based teaching and professional development. Incorporating NIET's TAP school processes, Teachscape's video sharing technology and TTU's competency-based professional credentialing will serve as a model for adoption in schools nationwide.

## 1) National Significance

Most educational reform initiatives today reflect only a piece of the comprehensive and complex whole of American P-12 schooling. For example, alternative teacher preparation programs address an important human capital variable but fail to consider the impact of the school environment in which they work. Such partial reforms slow or prevent long-term and systemic progress. On the other hand, the strength of the TAP System of Teacher and Student Achievement is that it considers the comprehensive and interrelated landscape of P-12 schooling.

TAP is a system of interdependent school leadership processes (multiple career paths; ongoing applied professional development; instructionally focused accountability; performance-based compensation) that, when implemented with fidelity, lead to significant improvements in teaching and student learning results. Over the previous 14 years, the TAP System has expanded its reach to more than 600 schools across 19 states, impacting over 20,000 teachers and 200,000 students. Beyond the TAP System, which includes all four program components, NIET also provides districts and schools access to the individual components of the program through the Best Practices Center, which reaches over 5,000 schools and 2,500,000 students. NIET's TAP System is in place on a national level and has experience working with a wide variety of communities, including rural and urban areas, as well as with different student groups (e.g. economically disadvantaged, racial and ethnic groups, migrant populations, individuals with disabilities, English learners, and individuals of each gender). Furthermore, the TAP System has shown to be effective in these varied communities (Daley & Kim 2010; Hudson, 2010; Mann, Leutscher, & Reardon, 2013; Schacter et al., 2002; Schacter et al., 2004; Solmon et al. 2007).

The NIET + TTU partnership and the *TAP Connect National Pilot* truly offers a 21<sup>st</sup> century technology-enabled, competency-based approach to ensuring TAP school fidelity of

implementation. The partnership also provides initial certification and advanced certification for teachers built on a competency-based model of performance mastery. While the *TAP Connect National Pilot* will occur across the state of Texas, the technology within the model promises easy and affordable scaling across the nation. A further benefit is that the model is suited to implementation in settings across the urban/rural spectrum. Finally, the *TAP Connect National Pilot* can greatly inform teacher preparation programs across the nation and their corresponding institutions of higher education.

## **2) Contribution to Theory, Knowledge, and Practices**

Beyond the expansion of the research-proven effectiveness of the TAP comprehensive school reform model, this *TAP Connect National Pilot* offers two innovative and important new contributions to the development and advancement of teacher and school leadership theory, knowledge and practice: a) articulation of a competency-based and technology-enabled approach to educator preparation that produces not only educator understanding but observable and measurable effectiveness enacting engaging classroom instruction and school leadership skills, and b) and technology-enabled expansion of TAP’s comprehensive and integrated model of human capital development & school effectiveness. The proposed project is a unique partnership between NIET and TTU that facilitates these two important contributions.

### **a. Contribution – Articulation of a Technology-enabled, Competency-based Approach to Educator Preparation**

A crisis of American educator competence has arisen as 19<sup>th</sup> century schooling and teaching practices meet 21<sup>st</sup> century demands. The dominant culture of 19<sup>th</sup> century industrial-era “seat-time education” combined with shallow knowledge-level assessment of learning no longer serves our nation. Industrial-era seat-time education is detached from the realities of today’s American enterprise, which requires generative thinking and effective problem-solving.

Effective entrepreneurs apply academic knowledge and skills in real-time to solve complex, ill-defined problems and opportunities. 19<sup>th</sup> century seat-time education and its “bubble-sheet” assessment of shallow knowledge-level learning does not prepare our citizens for the global challenges ahead.

Additionally, one of the loudest and most longstanding critiques of traditional university teacher education is the programmatic chasm between academic theory and clinical practice (e.g., Beck & Kosnik, 2002; Cobb, 2000; Connor & Killmer, 2001; Latham & Vogt, 2007; Levine, 2006; Mantle-Bromley, Gould, & McWhorter, 2000; Slick, 1998; Zeichner, 1990). The norm in many university teacher education programs is that education professors teach theories, concepts, research methodology, and subject area methods. Usually instruction is at a conceptual (i.e., seat time, shallow assessment) level. Good teaching is only discussed; it is not observed, modeled or facilitated. Many university education professors have little or nothing to do with teacher candidates’ clinical experiences. Instead, teacher candidates are observed by supervisors from a college of education field experience office that are usually unfamiliar with the theories, concepts, and practices taught by education professors. Thus, the “high, lecture-based ideas” of the education faculty may be lost.

There are, however promising exceptions. A small minority of American schools demand deep analysis and original thinking (e.g., Big Picture Learning, New Country Schools, Ed Visions, High Tech High, Rocketship Education). These outcome-based 21<sup>st</sup> century schools are qualitatively different from traditional schools in their focus and operations (Table 2):



| <b>Table 2: Comparison of Traditional vs. 21<sup>st</sup> Century Schools</b> |   |  |
|---|---|--|
| <b>Focus</b>  | <b>Traditional Schools</b>  | <b>21<sup>st</sup> Century Schools</b>   |
| <b>Achievement Index</b>  | Time- and input-based   | Outcome-based  |
| <b>Learning Targets</b>   | Factual knowledge, low-level reasoning (speed and accuracy)   | Higher-level cognition (synthesis, analysis, evaluation), performance skills (e.g., extensive “stand and deliver” communications and presentations, creation of products)  |
| <b>Learning Approach</b>  | Passive, individual, teacher-centered   | Active, group collaborative, student-centered  |
| <b>Basis of Grades</b>  | Attendance, quantity of homework submitted, a predominance of knowledge-level assessments   | In-class, rubric-scored performances (“stand and deliver” presentations), extensive writing at higher cognitive levels, assessments reflecting the expectation of deeper understanding, demonstration of skills, and the creation of products          |
| <b>Model of Schooling</b>   | 19 <sup>th</sup> Century factory production, scientific management of production and cost efficiency, ongoing testing of minimal acceptability standards (“conveyer line product checks for minimum acceptability”) | 21 <sup>st</sup> Century preparation for thinking and problem-solving needed to master globalization and dramatic change including technology. Applied, interdisciplinary academics fostering agility, adaptability, initiative and entrepreneurialism |

While many argue that American students need this type of outcome-based education to be globally competitive in the 21<sup>st</sup> century, there is an underlying problem. *The majority of our teachers are arguably not prepared to lead this type of learning.* Most of today’s teachers were also prepared in a 19<sup>th</sup> century industrial-era seat-time system of pre-service teacher preparation, and then, as classroom teachers, have received professional development with little classroom support.

While nearly every teacher in our country has received professional development on strategies for addressing the learning needs of an increasingly diverse range of students, the training was likely seat-time oriented. This industrial-era approach to educator preparation was based on the assumption that if new or existing teachers *understood* the best-practices being explained in lectures, they would enact them in their classrooms. Unfortunately, this has too

seldom proven to be the case. The result is teachers who *conceptually understand* a range of learner needs and instructional strategies, but who *do not have the skill-based competence* to implement the practices at a level of mastery to actually satisfy student needs.

High-need students suffer most from seat time-prepared teachers and research on teacher distribution suggests that the least-skilled teachers are concentrated in schools serving this student population (e.g., Peske & Haycock, 2006). Some believe that our very future depends on actualizing the potential of America's historically underserved students (e.g., Darling-Hammond, 2010). To regain global leadership in teaching and learning, America must transform its system of educator preparation from an industrial-era seat-time orientation, with its dominant focus on conceptual understanding, to competencies-based preparation. Competency is defined as a combination of skills, abilities and knowledge needed to perform a specific task (U.S. Department of Education, 2001). ***Competency-based preparation is a higher-order type of learning facilitation that prepares educators to enact skillful professional performances built on masterful application of knowledge and reasoning.*** In the competency-based educator preparation model, the merit of targeted competencies is determined by their documented impact on student learning.

Both the TAP System and TTU's educator preparation programs systematically utilize a competency-based approach. Both institutions have developed processes for shaping educators from conceptual understanding to rubric-scored, skill-based proficiency. TTU has developed a technology-enabled system of competency-based shaping that allows continuous (virtual) presence in the classroom via Teachscape video sharing. In light of ever increasing global economic competition, the articulation of the NIET+TTU competency-based approach to

educator preparation will prove revolutionary at a time of badly-needed American educational innovation.

**b. Contribution – Research-based refinement and technology-enabled expansion of TAP’s comprehensive and integrated model of human capital development & school effectiveness to include highly effective initial teacher preparation through our NIET + TTU partnership.**

As previously mentioned, most reform initiatives in America are piecemeal. While piecemeal initiatives may benefit from a concentration of focus, they most times suffer from a lack of consideration of the influence of broader contextual variables. For example, many human capital development initiatives (e.g., initial teacher preparation, inservice teacher professional development) assume school-level support after training. Yet, in spite of years of experience and research telling us that this assumption is commonly erroneous, piecemeal reform initiatives abound.

On the other hand, the TAP system is a comprehensive reform model that addresses human capital development as well as the school environment in which educators work. The TAP system is based on four interrelated elements, designed to enhance teacher performance, teacher job satisfaction, recruitment, and retention, as well as student achievement. The synergy between these four elements drives program success:

- Multiple career paths. In TAP schools, skilled teachers have the opportunity to serve as master and mentor teachers, receiving additional compensation for providing high levels of support to career teachers. Master and mentor teachers form a leadership team, along with the principal, to deliver school-based professional support and conduct evaluations with a high level of expertise.
- Ongoing applied professional growth. TAP teachers participate in weekly cluster group (i.e., professional learning community) meetings, led by master and mentor

teachers, in which they examine student data, engage in collaborative planning and learn instructional strategies that have been field-tested in their schools. Professional development continues into each classroom as master teachers model lessons, observe classroom instruction, and support other teachers to improve their teaching.

- Instructionally focused accountability. TAP teachers are observed in classroom instruction multiple times a year by multiple trained observers, including principals and master and mentor teachers, using rubrics for several dimensions of instructional quality. Evaluators are trained and certified, and leadership teams monitor the reliability and consistency of evaluations in their schools.
- Performance-based compensation. Teachers in TAP schools have the opportunity to earn bonuses each year based on their observed skills, knowledge, and responsibilities; their students' average growth in achievement; and the entire school's average growth in achievement. Master and mentor teachers receive additional compensation based on their added roles and responsibilities.

Using these four components, many TAP schools significantly outperform comparison schools across similar communities, however, our years of experience have also taught that some TAP schools have experienced less success. Research (e.g. Schacter et al., 2002) demonstrates that less successful TAP schools frequently share the traits of lower fidelity implementation (e.g., poorly implemented “Cluster Group” PLC time, inconsistent expectations by the principal, less effective pre- and post-conferences with teachers). Additionally, the TAP System, while showing many years of performance impacts on students and teachers, is at an inquiry-oriented “crossroad” with its public education reform stance around performance-based compensation (see Podgursky & Springer, 2007). While this aspect of the TAP System facilitates the synergy

between each of the other components, a question arises in many potential partner districts and schools regarding the inclusion of this element.

As a direct result of the research findings on low-fidelity implementation of the TAP System as well as the curiosity over resource allocation in schools, the *TAP Connect National Pilot*, a unique NIET + TTU partnership, will further refine the TAP model of comprehensive school reform with research that examines: a) the effects of the presence or absence of technology-enabled, continuous competency-based shaping on the fidelity of TAP implementation and student achievement, teaching, and school effectiveness outcomes, and b) the effects of the presence or absence of performance-based compensation on student achievement, teaching, and school effectiveness outcomes.

### **3) Magnitude of the Results**

Throughout NIET's tenure in education reform, thousands of teachers have demonstrated changes in practices that have improved the achievement level of millions of students. The NIET TAP System expands the traditional view of providing teachers with professional development, to providing them with ongoing, tailored development. As noted previously, while the TAP System has made dramatic impacts in the K-12 environment, the *TAP Connect National Pilot* provides a unique opportunity to expand the same strategies used in K-12 within the teacher preparation programs of a large-university.

The importance of the projected outcomes of the *TAP Connect National Pilot* is substantial with regard to improvements in teaching and student achievement. The outcomes related to the state of Texas are significant, in that the anticipated improvements in teacher practices and associated improvements in student achievement will help high-need students. Beyond the outcomes of increased percentage of measurably effective new teachers; increased

percentage of measurably effective existing teachers; and increased percentage of measurably effective existing principals. The following research summaries indicate that the rigorous studies examining the impact of the TAP System meet the evidence of effectiveness standards set forth within this application.

- In their 2002 study, Schacter et al., analyzed the growth in achievement of students (n=3,319) whose schools implemented the TAP system compared to the growth of achievement of students (n=7,055) from matched comparison schools. The schools were matched on achievement (percentile rank in Reading, Mathematics, and Language), school size, percent of students eligible for free lunch, school configuration, and location. A statewide cluster analysis was conducted to match the schools. Beyond the matched comparisons, the results in achievement were based on a multi-level value-added model utilizing prior test scores as covariates. Results of the analysis reveal that TAP schools made significantly higher improvements in student achievement gains. Further, this study found that those schools that implemented the TAP system with higher fidelity more significantly outperformed comparison schools.
- In their 2004 follow-up study, Schacter et al. examined the impact of the TAP system across 11 schools. The same cluster level analysis with multi-level multivariate analyses were employed using all available covariates to compare growth between the TAP and control schools. Results from the study indicate that 65% of the TAP schools outperformed their matched controls in reading, language, and mathematics achievement, with the magnitude of change ranging from 6% to 46%. The teacher

satisfaction component of this study indicated strong support for the four core principles of the TAP system.

- In 2007, Solmon et al. analyzed the impacts of the TAP System in terms of value-added gain scores across 650 classrooms in six states. Researchers analyzed the student achievement gains at two levels of comparison—teacher-to-teacher and school-to-school. To evaluate TAP teachers (and similarly in evaluating TAP schools), researchers calculated the effect of each teacher on student progress as assessed by the difference between the actual average scores of the teacher's students and the expected average scores of those students (as derived from previous scores). Through this process, researchers created a statistical control group for the TAP teachers based on performance. Results of the study indicate that in every state more TAP teachers demonstrated statistically significant at or above average amount of student achievement growth than control group teachers. Further, TAP schools outperformed their controls in 57% of the categories in math and in 67% of the categories in reading.
- In 2010, Hudson examined the effect of the TAP System on student achievement across 151 schools in 11 states. Hudson used a statistical control matching method to ensure that the TAP schools and the comparison schools were equivalent prior to the intervention being implemented. Hudson also used a differences-in-differences approach to further account for any differences between the groups and ensures that the evaluation was able to isolate the impact of the program. Results of the study indicate that students in TAP schools outperform students in comparison schools by approximately 0.15 standard deviations in mathematics, and smaller effects but in

favor of the TAP schools in reading. Hudson explains these findings in context to other education interventions by noting that “the estimated effect of TAP on mathematics achievement is more than twice as large [as class size reduction effects]” (p. 28).

- In 2013, Mann, Leutscher, and Reardon examined the impact of the TAP System across fifteen schools in Louisiana. In order to determine impact, a one-to-one nearest-neighbor matching algorithm with replacements was created to find a comparison school for each TAP school. Based on the propensity scores computed using the selection model, the algorithm chooses the non-TAP school with the propensity score closest to the propensity score of the TAP school. There was no significant difference between the TAP schools and their matched comparison schools in the pretreatment year,  $t(26) = 0.080$ ,  $p > 0.05$ . However, results of the study indicate that in the four primary subjects assessed, there was a significant effect in favor of the TAP schools for ELA:  $F(1, 6421) = 6.334$ ,  $p = 0.012$ ; Mathematics:  $F(1, 6421) = 86.386$ ,  $p = 0.000$ ; Science:  $F(1, 7084) = 31.792$ ,  $p = 0.000$ ; and Social Studies:  $F(1, 7085) = 87.411$ ,  $p = 0.000$ ]. Further, the study examined the impact of the TAP system across time to find that the TAP schools significantly outperform comparison schools,  $F(1, 24) = 5.30$ ,  $p = 0.031$ . The study also found that 92% of teachers reported that the TAP System made a positive difference on student achievement in their school and 91% reported that the AYP status was improved as a result of the TAP system.

Without question the continued research into understanding the effectiveness of the TAP System from the *TAP Connect National Pilot* will provide a substantial impact on the local



communities within the state of Texas; to the 19 states and 600 schools using the TAP System; and to the 5,000 schools making use of the Best Practices Center materials. However, the proposed outcomes of the *TAP Connect National Pilot* are likely unique to all SEED applications in that it can fundamentally help address two ongoing research questions related to teacher improvements and student achievement. This project is designed to address to what degree the use of technology-enabled competency-based reforms affect teacher practice and the connection to student achievement. Additionally, this project will provide information on the impact of a nationally known program using performance pay bonuses operating without the bonuses – isolating the impact of the professional development and program. The results attained from this project related to improvements in teaching and student achievement can greatly inform the future direction of district and university partnerships; tailored professional development to teachers and administrators; use of technology for professional development; and use of performance bonuses for teachers.

## **B. Quality of the Project Design and Services**

### **1) Goals, Objectives, and Outcomes**

*TAP Connect* is an enhanced adaptation of the TAP school reform model. It is an evidence-based, comprehensive model supporting teacher candidate, teacher, principal and school effectiveness within the context of a school-wide design for competency-based teaching and professional development. The *TAP Connect National Pilot* is a partnership of NIET and TTU that provides competency-based initial and advanced teacher certification within TAP schools and conducts research to refine, enrich and expand the TAP System nationally. The Goals, Objectives and Measures for the proposed project are represented on Table 3:

**Table 3: GOAL 1 : Create a pipeline of measurably effective, “TAP-ready” new teachers through a technology-enabled, competency-based, “grow-your-own” teacher preparation model (Absolute Priority 1, Competitive Priority 2)**

| Objectives   | Program Evaluation  |               |                             |
|--|---|---------------|-----------------------------|
|  | Measures  | When          | By Whom                     |
| a. TTU works with NIET and TAP school leaders to recruit and enroll high potential teacher candidates into the TAP school-based “grow-your-own” teacher preparation program with the option of either a traditional undergraduate pathway (e.g., community college transfer students) or a post-baccalaureate alternative certification pathway.   | <ul style="list-style-type: none"> <li>• College transcript requirements</li> <li>• Dispositional assessment score TAP School interview score</li> <li>• Content-area pretest score</li> <li>• Interrupted Time Series Comparison to demonstrate increase in incoming candidates</li> </ul>   | Each semester | NIET/TTU TAP School Leaders |
| b. Teacher candidates complete TTU TAP-driven, competency-based teacher education program coursework through live, web-based coursework (from their TAP school site) that includes extensive “Apply & Evaluate” ongoing, formative classroom clinical shaping experiences in each course over each semester.   | <ul style="list-style-type: none"> <li>• “A &amp; E” scores</li> <li>• Course grades</li> <li>• Semester-by-Semester Progress Scores on the TAP rubric and A&amp;Es</li> <li>• State content-area certification exam score</li> <li>• Time Series Analysis to compare to TTU’s previous scores</li> </ul>                                 | Each semester | TTU TAP School Leaders      |
| c. Teacher candidates complete extensive classroom clinical experiences in the TTU TAP-driven, competency-based teacher education program including a year-long, residency-style student teaching experience. Ongoing clinical shaping includes weekly walk-through feedback and at least two TAP performance assessment cycles per semester by a TAP school Master Teacher (i.e., pre-conference, observation, post-conference) | <ul style="list-style-type: none"> <li>• Weekly walk-through scores</li> <li>• Weekly mentor teacher feedback scores</li> <li>• TAP instructional rubric scores</li> <li>• Semester &amp; Student Teaching Progress Scores on the TAP rubric, TRIPOD K-12 student attitudinal measure and student achievement benchmark scores</li> </ul> | Each semester | TTU TAP School Leaders      |
| d. To earn initial certification, teacher candidates meet all course and program requirements, most importantly the demonstration of strong beginning instructional proficiency  | <ul style="list-style-type: none"> <li>• Minimum score of “3” on the TAP instruction rubric</li> <li>• State pedagogical certification exam score</li> <li>• Interrupted Time-Series Comparison of scores.</li> </ul>   | Each semester | TTU TAP School Leaders      |

**Table 3: GOAL 2 : Provide existing TAP school teachers with advanced certification training in effective Literacy and/or STEM instruction and/or Leadership that is technology-enabled with ongoing competency-based feedback & instructional shaping in the classroom (Absolute Priority 2 & 3, Competitive Priority 2 & 3)**

| Objectives   | Program Evaluation  |               |                                |
|--|---|---------------|--------------------------------|
|  | Measures  | When          | By Whom                        |
| a. TTU work with NIET and TAP school leaders to determine the targeted teachers/teacher leaders/grade levels with the greatest need for literacy and/or STEM professional development.   | <ul style="list-style-type: none"> <li>• Student achievement scores (state assessments and district benchmarks)</li> <li>• TAP instructional rubric scores</li> </ul>   | Each semester | NIET/TTU<br>TAP School Leaders |
| b. Targeted in-service teachers at the TAP school receive TTU competency-based Literacy, STEM and/or Leadership advanced certification professional development through live, web-based coursework (from their TAP school site) that includes extensive “Apply & Evaluate” formative classroom clinical shaping experiences in each course over each semester.   | <ul style="list-style-type: none"> <li>• Weekly walk-through scores</li> <li>• TAP instructional rubric</li> <li>• Content-area instructional strategy Apply &amp; Evaluate (A &amp; E)scores</li> <li>• Leadership strategy Apply &amp; Evaluate scores</li> </ul> | Each semester | TTU<br>TAP School Leaders      |
| c. Targeted in-service teachers at the TAP school receiving the TTU competency-based Literacy and/or STEM advanced certification coursework systematically capture & share their ongoing classroom practice via Teachscape video technology. As part of the competency-based program, teachers receive ongoing clinical shaping feedback from TTU content-area faculty (via Teachscape) and from TAP school leadership (face-to-face) to facilitate teachers’ and leaders’ development to rubric-scored performance mastery. NIET, TTU and TAP school leaders collaborate to provide feedback and shape teachers to performance mastery. | <ul style="list-style-type: none"> <li>• TAP instruction rubric and content-area (e.g., writing and STEM instruction) scoring rubrics</li> <li>• Leadership Team Rubric re: individual conferences with teachers and Cluster group sessions</li> </ul>              | Each semester | NIET/TTU<br>TAP School Leaders |
| d. To earn advanced certification, participating teachers and leaders meet all course and program requirements with a dominant emphasis on the demonstration of strong Literacy and/or STEM instructional and/or Leadership proficiency  | <ul style="list-style-type: none"> <li>• Minimum score of “3” on the TAP instruction rubric and Leadership Team rubric as well as on content-area scoring rubrics</li> <li>• Student benchmark scores from participating teachers’ classroom</li> </ul>             | Each semester | TTU<br>TAP School Leaders      |

**Table 3: GOAL 3: Ensure full-fidelity implementation of the TAP Comprehensive School Reform model by providing TAP school leaders (Master & Mentor Teachers, Principals) with technology-enabled, ongoing competency-based feedback & shaping on TAP school processes (e.g., pre/post conference facilitation, Cluster Group PLC facilitation). Give TAP school leaders the option of advanced certification along with the development of these advanced skills (Absolute Priority 3, Competitive Priority 2)**

| Objectives   | Program Evaluation  |               |                                |
|--|---|---------------|--------------------------------|
|  | Measures  | When          | By Whom                        |
| <p>a. Conduct research to refine and enrich the TAP System model using a quasi-experimental design. Identify the schools which will manifest the four study conditions and compile results:</p> <ol style="list-style-type: none"> <li>1) TAP school w/ Pay-for-Performance (PfP) and w/ competency-based video</li> <li>2) TAP school w/o PfP and w/ competency-based video</li> <li>3) TAP school w/ PfP and w/o competency-based video</li> <li>4) TAP school w/o PfP and w/o competency-based video</li> </ol> | <ul style="list-style-type: none"> <li>• Student test scores across all conditions</li> <li>• Time series analysis across all competency based conditions</li> </ul>  | Upon award    | NIET/TTU/<br>Partner Districts |
| <p>b. In between monthly site visits by the TAP Regional Master Teacher, each (competency-based condition) TAP school leader receives ongoing technology-enabled, competency-based shaping feedback on key TAP processes (e.g., pre/post conference facilitation, Cluster Group PLC facilitation) from NIET and TTU TAP specialists via Teachscape.</p>  | <ul style="list-style-type: none"> <li>• Consistency/dependability of feedback to TAP school leaders via Teachscape on weekly logs</li> <li>• Rubric scores for pre &amp; conference facilitation</li> <li>• Rubric scores for Cluster Group PLC facilitation</li> <li>• CODE scores ( Improved inter-rater reliability and growth on teachers' TAP instructional rubric scores)</li> <li>• TAP Leadership Team Meeting scores</li> </ul> | Monthly       | NIET/TTU                       |
| <p>c. TAP School Leaders (at competency-based condition schools) score at the exemplary and distinguished levels (i.e., "4"s &amp; "5"s) on facilitation of key TAP school processes</p>   | <ul style="list-style-type: none"> <li>• Rubric scores for pre &amp; conference facilitation</li> <li>• Rubric scores for Cluster Group PLC facilitation</li> <li>• CODE scores (inter-rater reliability and growth on teachers' TAP instructional rubric scores)</li> <li>• TAP Leadership Team Meeting scores</li> </ul>  | Each semester | NIET/TTU                       |

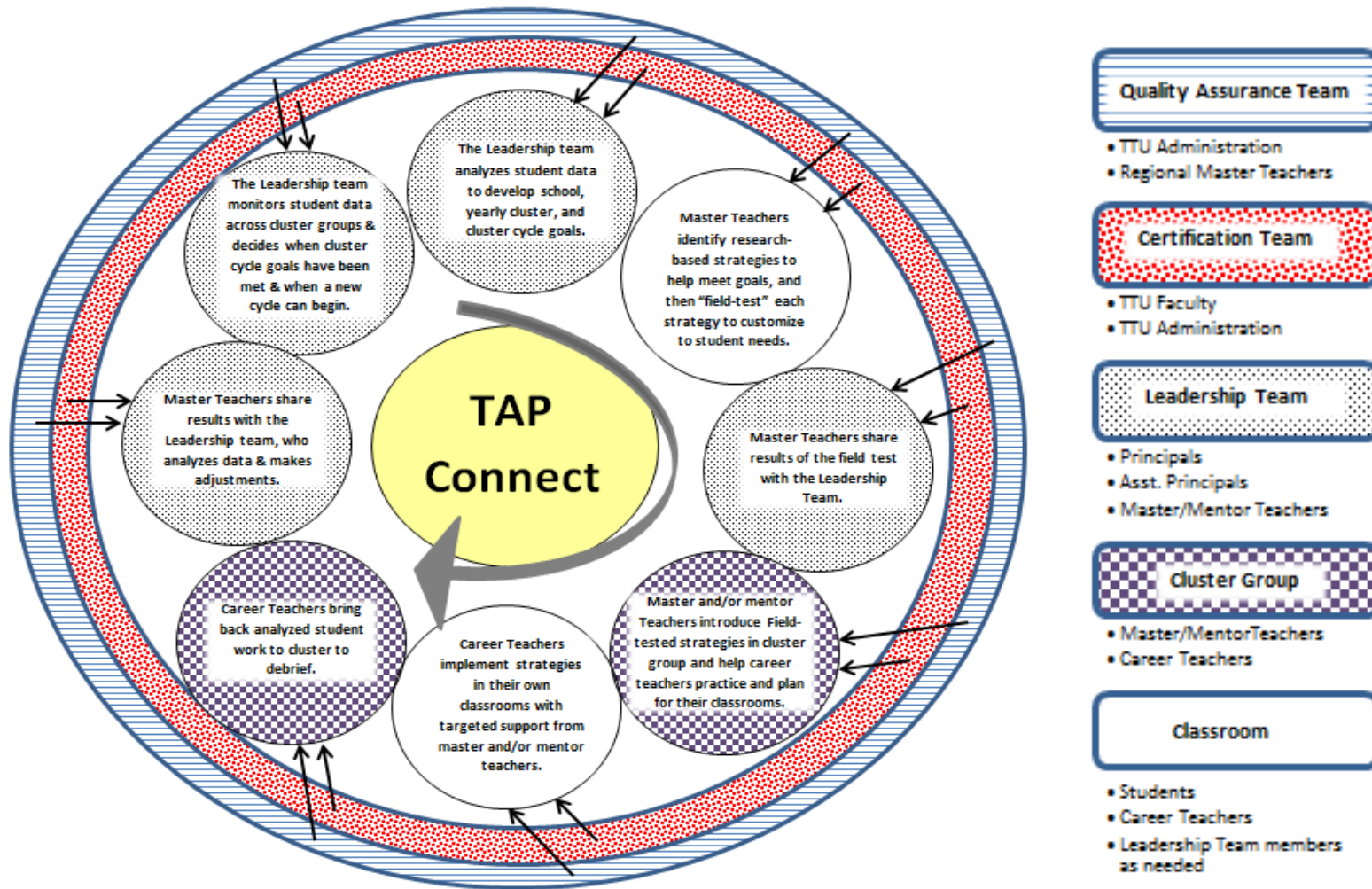
|  |   |                           |                 |
|--|---|---------------------------|-----------------|
| <p>d. TAP instructional rubric scores, student achievement, teacher retention and teacher satisfaction at TAP schools increase in correlation with increased fidelity of TAP System implementation</p> | <ul style="list-style-type: none"> <li>• Rubric scores for pre &amp; conference facilitation</li> <li>• Rubric scores for Cluster Group PLC facilitation</li> <li>• CODE scores (inter-rater reliability and growth on teachers' TAP instructional rubric scores)</li> <li>• TAP Leadership Team Meeting scores</li> <li>• Student achievement growth scores</li> </ul> | <p>End of school year</p> | <p>NIET/TTU</p> |
| <p>e. Exemplary TAP school facilitation video and analysis are posted to the NIET Best Practices Portal to serve as resources for other TAP schools across the NIET network (Texas and nationally)</p> | <ul style="list-style-type: none"> <li>• TAP school leadership resources active on NIET Best Practices Portal by the end of Year Two</li> <li>• TAP school leaders survey</li> </ul>  | <p>Year 2</p>             | <p>NIET/TTU</p> |

## 2) Comprehensive Effort to Improve Teaching and Learning

Over the years, the TAP System has proven to be a comprehensive and effective model for human capital development and schooling. When implemented with fidelity, teacher effectiveness and student achievement grow significantly over time (Daley & Kim 2010; Hudson, 2010; Mann, Leutscher, & Reardon, 2013; Schacter et al., 2002; Schacter et al., 2004; Solmon et al. 2007). However, years of experience and research also indicate that fidelity of TAP School implementation varies. This concern as well as the desire to empirically test the effect of the presence or absence of pay-for-performance compensation on TAP School achievement has birthed the NIET + TTU partnership and the *TAP Connect National Pilot*.

The incorporation of competency-based video sharing technology allows TAP Regional Master Teachers and TTU faculty to continuously observe (via a Teachscape password-protected website) teachers' classroom instruction as well as individual Master Teacher pre- and post-conferences with career teachers and grade-level Cluster Group (PLC) sessions. In this way, Regional Master Teachers, senior TAP school experts who travel to & coach TAP schools across a regional area, are able to provide *ongoing, continuous* feedback to the TAP School Leadership Teams (i.e., Master and Mentor Teachers and Principals) at a distance and in person. Teachscape video technology also makes it possible for TTU faculty teaching the competency-based advanced certificate courses in Literacy/Writing, STEM and Leadership to observe & provide shaping feedback for their teachers, teacher leaders and principals.

Figure 1: TAP Connect Diagram



The enhanced *TAP Connect* model supplements the original TAP school model with two additional levels of technology-enabled review: Advanced Certification Team review and Quality Assurance Team review. While some TAP School Leaders are expected to take advantage of the advanced certificate opportunity, not all will choose to do so. However, all TAP School Leaders (in competency-based condition TAP Schools) will be involved in the Quality Assurance processes whereby Regional Master Teachers across Texas will continuously view, at a distance, classroom, individual conference, and Cluster group meetings and provide ongoing competency-shaping feedback in order to ensure high-fidelity implementation of the TAP model.

Teachscape, our video sharing technology partner (see Appendix C) is also the technology partner of the Gates Measures of Effective Teaching (MET) Project (Gates, 2010). Teachscape video capture equipment and web-based interface provide the foundational technology solution for **ongoing** capture, analysis, and sharing of classroom teaching, professional learning community events (i.e., Cluster groups), pre- and post-instruction conferences, and school leadership meetings.

### **3) Professional Development Services sufficient to lead to improvements**

**Goal 1: Create a pipeline of measurably effective, “TAP-ready” new teachers through a technology-enabled, competency-based, “grow-your-own” teacher preparation model (Absolute Priority 1, Competitive Priority 1, Priority 2).**

The TTU College of Education will collaborate with the 18 partner TAP school to recruit and prepare at least 90 high-potential teacher candidates from traditional and non-traditional pathways. Traditional undergraduates will come from local community colleges, Hispanic-



serving institutions and Historically Black institutions geographically close to the partner TAP school. Post-bachelorette teacher candidates will be recent graduates and/or career-changers. In all cases, teacher candidates will be earning or will have earned degrees from other colleges such as Arts & Sciences; in Texas there are no undergraduate degrees in education.

All TTU applicants must pass content-area exams, pass screening on the Haberman dispositional assessment and interviews by TAP school teachers and leaders. Each TTU teacher candidate is issued a Teachscape video capture rigs at the beginning of their program. Clinical placements occur entirely in the partner TAP schools, begin the first semester and culminate in a year-long, residency-style student teaching experience.

The TAP instructional rubric for effective teaching is the framework that drives the entire TTU teacher education program. Each course is delivered live via interactive web interface to teacher candidates embedded in the partner TAP schools (in combination with an array of performance-based enrichment modules). Courses prepare teacher candidates to understand best-practices and to *implement* targeted indicators from the TAP rubric. The notion of “Apply & Evaluate” from the TAP Cluster Group process has been adopted in all TTU teacher education courses. This means that every course requires teacher candidates to try out and video capture attempts to implement “best practices” strategies in their TAP school classroom placements. These video captures are brought back to the teacher education class, shared virtually with and scored by peers on the TAP rubric.

All teacher candidates experience clinical feedback from weekly walk-throughs and two TAP performance-assessment cycles (pre-conference, observation, post-conference) or more per semester administered by the TAP school Master Teachers. Student teaching will occur in the

partner TAP schools with a year-long, residency-style experience with a highly-rated TAP career teacher. Leading education researchers insist that cooperating teachers must be seen as a partner in preparing teachers and argue that there is a cyclical problem of professional teachers who had inadequate student teaching experiences when they were in college, who are considered inadequate cooperating teachers to the next generation of teachers. The *TAP Connect* project addresses this problem in the current preparation of teachers by allowing Teachscape video capture to enable ongoing clinical observation and shaping feedback by TTU faculty during student teaching to compliment feedback from the TAP School Master Teacher. To graduate with an institutional recommendation for teacher certification from TTU, student teachers must earn a “3” on the TAP rubric.

The NIET+TTU partnership will provide scholarship incentives to recruit and prepare the strongest traditional and post-bac teacher candidates into the *TAP Connect* National Pilot Teacher Education Program. TTU currently has year-long student teaching scholarships provided by several foundations in the state of Texas.

**Goal 2: Provide existing TAP school teachers with advanced certification training in effective Literacy, STEM and/or Leadership instruction that is technology-enabled with ongoing competency-based feedback and instructional shaping in the classroom (Absolute Priority 2 & 3, Competitive Preference Priority 2 & 3).**

Four advanced certificates will be offered through TTU in the *TAP Connect National Pilot*: a) Language/Literacy Certificate; b) STEM Certificate; c) Teacher Leadership Certificate; d) Principal Leadership Certificate. Each advanced certificate program will consist of five competency-based courses. It is assumed that 300 teachers in the partner TAP schools will

choose to earn advanced certification. With a five-course sequence in each advanced certification program and with a performance competency-based orientation requiring school children and school function, courses will only occur during the school year. Given this, it will take the majority of this three-year grant for participants to complete the advanced certification (i.e., one course per long semester, two courses per K-12 school year).

NIET, TTU and TAP school leadership will collaborate to target the advanced certificate programs to the TAP teachers most in need of professional development (i.e., use TAP school student achievement data and TAP instructional rubric scores to determine priorities). Like the courses for initial teacher preparation explained earlier, the five advanced certification courses in each program will be delivered live via interactive web interface (e.g., Lync, Second Life) and include an extensive array of performance-based modules. Teachscape video sharing will be the central component of the advanced certification courses allowing ongoing TTU faculty member observation and shaping for TAP school participating teachers, teacher leaders and principals as they strive to master best practice implementation in the classroom & school.

TTU faculty and TAP school leadership will confer to set targets for performance mastery for career teachers on TAP instructional and other observational performance rubrics, then feedback from both TTU and the TAP school Master Teachers and principals will be aligned.

The STEM Advanced Certificate Program focuses on inquiry-based learning, specific innovative approaches to maximizing student growth, and multiple dimensions of assessment. Candidates will be required to complete five courses designed to develop their demonstrated and rubric-scored pedagogical content knowledge & skills in science and mathematics. These

research-based courses to develop STEM literacy will serve as the basis for obtaining a Science and Mathematics graduate certificate and could count towards a Master's degree.

The Literacy/Writing Certificate addresses applications of research and theory to practice, with an emphasis on implementing effective literacy instruction strategies in TAP school classrooms and the use of formal and informal assessment techniques. TAP's professional learning groups (i.e., Clusters) are an excellent venue for teachers to share student writing samples within the context of TTU competency-based shaping to promote better writing and methods for formative assessment of student writing.

A distinction has been made between a Leadership Certificate for Teachers and a Leadership Certificate for Principals. The Teacher Leadership program consists of five Masters-level courses and focuses on (1) TAP-driven mentoring skills for developing and nurturing teachers' skillful and reflective thinking; (2) data-driven decision-making using the CODE system within the TAP System (see Appendix D) , and (3) effective Cluster Group PLC facilitation.

The Principal Leadership Certificate consists of five doctoral level courses for principals engaged in school improvement with a focus on (1) implementation of TAP school instructional leadership; (2) data-driven decision-making using the CODE system within the TAP System; (3) ethics & responsibilities for creating a school culture of high performance.

The College of Education at Texas Tech University has a robust graduate education program, with 1,066 students who take face-to-face, hybrid, and online courses. The quality of courses offered through *TAP Connect* will equal that offered in our current programs and venues (i.e., face-to-face, online, hybrid). In all cases, to earn advanced certification at TTU,

participating TAP school teachers, teacher leaders and principals must demonstrate observation-based, rubric-scored proficiency and student impact in the certification discipline (i.e., effective literacy instruction, effective STEM instruction, effective TAP System facilitation) via Teachscape and school outcome data. See Appendix E for an example of the TTU certification program curricula for STEM.

**Goal 3: Ensure full-fidelity implementation of the TAP Comprehensive School Reform model by providing TAP school leaders (Master & Mentor Teachers, Principals) with technology-enabled, ongoing competency-based feedback and shaping on TAP school processes (e.g., pre/post conference facilitation, Cluster Group PLC facilitation). Give TAP school leaders the option of advanced certification along with the development of these advanced skills (Absolute Priority 1, 3, Competitive Preference Priority 1, 2).**

NIET and TTU will conduct research on elements of the TAP System as well as TTU's technology-enabled, competency-based approach to educator development to refine, enrich and expand *TAP Connect* into an effective and nationally transportable model of educational reform. One factor that may contribute to the TAP System's viability for school districts nationwide is the evolution of the Pay-for-Performance (PfP) component. Research in recent years (e.g., Springer, Ballou & Peng, 2008; Texas Education Agency, 2009; Springer et al, 2010) has suggested a mixed record of impact for performance-based compensation. Given this, a central research question is whether the other components of the TAP model are sufficient to create increased teaching effectiveness and student achievement without the performance-pay element.

To refine elements of the TAP model and demonstrate the potential effectiveness of TTU's competency-based approach in fostering full-fidelity TAP implementation, the NIET + TTU partnership will use quasi-experimental research to test four implementation conditions:

- 1) TAP school implementation with Pay-for-Performance (PfP) and with technology-enabled, competency-based shaping
- 2) TAP school implementation without PfP and with technology-enabled, competency-based shaping
- 3) TAP school implementation with PfP and without technology-enabled, competency-based shaping
- 4) TAP school implementation without PfP and without technology-enabled, competency-based shaping

It is hypothesized that TAP schools with technology-enabled, competency-based shaping will produce the most significant growth in teaching effectiveness and student achievement and that absolute levels of performance will not statistically differ between TAP schools with and without pay-for-performance teacher compensation. The rationale for the PfP component of our hypothesis is driven by TAP school teacher attitudinal research (e.g., Schiff, 2002) and years of TAP school experience. In short, we have witnessed the strength of well-implemented TAP processes (e.g., multiple pre-conferences, observations and post-conferences between teacher leaders and career teachers) on teachers' motivation and performance. While performance compensation may be the early motivator for many TAP school teachers, highly effective TAP professional development and leadership processes soon take over as the basis for TAP school teacher satisfaction.

The rationale for the hypothesized effectiveness of technology-enabled, competency-based shaping is also experience-based. TAP schools exist in urban and rural communities across the nation. There is variation across these schools in the strength of TAP school personnel, particularly in some rural and extreme poverty urban TAP schools. This variation calls for

different and/or more professional development support from TAP specialists external to the school. Such experts, Regional Master Teachers, are assigned to a number of TAP schools, usually 10-12, across a geographical area and physically travel to these schools on a rotation basis.

The dictates of time and economics may limit the effectiveness of the current face-to-face site visit only approach of TAP Regional Master Teachers, especially with high-need TAP school staff. The NIET+TTU partnership hypothesizes that the addition of ongoing, technology-enabled, competency-based shaping between monthly site visits will significantly improve the effectiveness of TAP school leaders and the overall fidelity of TAP school implementation. We recognize technology cannot supplant the human element, but could supplement it in strategic ways.

Further potential advantages of Teachscape video sharing is to allow observation and feedback to TAP personnel by a number of other external experts beyond the Regional Master Teacher including NIET personnel in multiple states, discipline-area faculty members at Texas Tech University or peer teachers and school leaders at TAP schools across the nation. Literally, Teachscape video sharing permits observation and shaping feedback from anyone, anywhere.

Possibly the most beneficial aspects of video capture is self-reflection on practice. Ongoing use of Teachscape video capture will enable teacher candidates, teachers, teacher leaders and principals at TAP schools to carefully review their own performance. Research has shown that teacher reflection is an important component of professional development (Feeney, 2007).

**What will TAP Schools with PFP receive in the *TAP Connect National Pilot*?**

Existing TAP schools in Texas will be used to implement the teacher pay-for-performance variable. Funding for teacher pay-for-performance at these schools will come from non-SEED grant sources. Based on student growth scores, TAP instructional rubric scores and peer evaluations, teachers receive a calculated performance bonus at the end of the school year. Teacher leaders and principals also receive a performance bonus based on school-level student achievement and survey assessment of TAP implementation.

New TAP schools in the *TAP Connect* National Pilot will not implement pay-for-performance. The only augmentation of salary in these TAP schools will be an annual extra-duty-extra-pay stipend to Master and Mentor Teachers for the TAP leadership roles that they play.

### **How will Technology-enabled, Competency-based shaping in TAP Schools look?**

*Equipment:* Teacher candidates, teachers in advanced certification programs, teacher leaders and principals in TAP school will receive a Teachscape “Mini-Rig”. This is an Ipad Touch with a tripod and a high sensitivity microphone. The ipod has a video-recording function and a Teachscape “App” to unload extended video segments (up to 90 minutes) to Teachscape’s password-protected website. Each teacher candidate, teacher, teacher leader and principal will also receive annual license access to Teachscape’s website which includes expansive video storage and cataloging with the capacity for tagging, annotating, segmenting and sharing video with designees of their choice world-wide.

*Who is involved:* Teacher candidates, teachers in advanced certification programs, teacher leaders and principals in TAP schools. Regional Master Teachers, TTU Faculty teaching



in the TAP school-based teacher education program, TTU Faculty teaching in the advanced certification programs, state and national NIET personnel.

*Procedures:* Teacher candidates, teachers in advanced certification programs, teacher leaders and principals in TAP schools use the Teachscape mini rigs (almost daily) to both informally and, at other times, very intentionally capture, upload and share their practice with Regional Master Teachers and TTU faculty. Video capture is a normative expectation of daily practice and coursework. Teacher candidates, teachers in advanced certification programs, teacher leaders and principals in TAP schools are expected to observe, evaluate and comment on their practice. These annotated video segments are observed, and evaluated by Regional Master Teachers and TTU faculty with the goal of targeted improvement through feedback.

*Frequency:* This varies depends on the nature and level of professional development (e.g., initial teacher preparation, principal). It is safe to assume weekly video sharing. Key capture events for teacher candidates and teachers include targeted classroom instruction. Key capture events for teacher leaders include pre- and post-conference and Cluster Group PLC facilitation. Key capture events for principals include teacher conferences and TAP school leadership team meetings.

**NOTE:** Whether school leaders participate in advanced certification programming with TTU or not, TAP school leaders will participate in Teachscape video sharing with their Regional Master Teachers and other NIET personnel.

**C. Quality of the Management Plan and Personnel**

**1) Qualifications of Project Personnel**

The *TAP Connect National Pilot* includes two experienced Project Directors and key personnel in order to carry out the management and evaluation plans (see complete project personnel professional vitas and resumes in Appendix F).

| <b>Table 4: Personnel and Qualifications</b>   |   |
|--|---|
| <b>Key Personnel</b>   | <b>Qualifications, Duties</b>   |
| <b>National Institute for Excellence in Teaching (NIET)</b>  |   |
| <i>Jason Culbertson, will serve as the NIET Principal Investigator for the TAP Connect National Pilot (1 days per week).</i>   | Jason is the Chief Learning Officer and Executive Vice President of NIET. He was previously the Director for South Carolina TAP and has extensive experience managing federal grants.   |
| <i>Anissa Rodriguez, Ph.D., will serve as the NIET Project Manager for the TAP Connect National Pilot (2.5 days per week).</i> | Anissa is Director of Learning Technology with NIET. In this role, Dr. Rodriguez supports all aspects of NIET’s web-based applications and technology support for TAP and the Best Practices Center including the TAP System Training Portal, the NIET Best Practices Center Portals, CODE and the TAP Observer, MyEvaluator, and OTES Observer iPad applications. Anissa also supports the implementation and management of the TAP System, including TAP trainings, partnership support, evaluation and other projects. |
| <i>Joshua Barnett, Ph.D., will serve as the Project Evaluator (.5 days per week).</i>  | Joshua is the Director of Research and Evaluation for the National Institute for Excellence in Teaching (NIET). Over the previous decade, Joshua’s primary research interest has focused on improving teacher quality in all schools for all students by addressing two related issues: examining how teachers and principals are evaluated and how resources are distributed to and used within schools.   |
| <i>Allison Ellison will serve as the Business Manager for NIET on the Project (2.5 days per week)</i>                          | Allison is the Director of Support Services for NIET. Allison has extensive experience managing budgets, tracking invoices, and with various accounting systems for NIET.   |
| <b>Texas Tech University (TTU)</b>   |   |
| <i>Scott Ridley, Ph.D., will serve as the TTU Principal Investigator for the TAP Connect National Pilot (1 day per week).</i>  | Scott is the Dean of the College of Education at Texas Tech University. He has served as the Principal Investigator and Project Director of nearly \$150 million in grant funding during his career and is exceptionally well qualified to lead a   |

|  |  |
|--|--|
|  | team to accomplish the tasks set forth in this project.  |
| <i>Stephanie Mosqueda, M. Ed., will serve as the Executive Project Director for TAP School Partnerships in the TAP Connect National Pilot and Supervisor for the Texas Regional Master Teachers (5 days per week).</i> | Stephanie is the Director of the Texas TAP System. She has extensive experience as a teacher, administrator and with the TAP System. She has previously served as a Master Teacher and Regional Master Teacher.  |
| <i>Peggy Johnson, Ph.D. will serve as the Director of the Literacy/Writing Certificate program (1 day per week).</i>   | Peggy is the Vice Dean in the College of Education at Texas Tech University. She has been in the College for 20 years and has taught and led projects aimed at language and literacy throughout her career. Peggy has been recognized as an international expert in this area, serving in seven countries.     |
| <i>JoAnn Klinker, Ph.D., will serve as the Director of the Leadership Certificate program (1 day per week).</i>  | JoAnn is the Program Coordinator for Education Leadership at the College of Education. She served as a teacher and principal for 18 years and is well qualified to lead this effort.   |
| <i>Zenaida Aguirre Munoz, Ph.D. will serve as the Director of the STEM Certificate (1 day per week).</i>   | Zenaida is the Associate Director of the TTU STEM Core Center, a cross-college STEM collaborative. She has managed multimillion dollar projects in Texas and around the Los Angeles area. She has extensive expertise in the STEM disciplines as well as development of English-as-a-Second language teachers. |
| <i>Doug Hamman, Ph.D. will serve as Director of Teacher Education Programs in the TAP Connect National Pilot (1 day per week).</i>   | Doug is the Director of Teacher Education Programs in the College of Education at Texas Tech University. He has extensive expertise with competency-based programming using TAP, TRIPOD and partner district benchmark assessments as outcome targets.   |
| <i>Susan Malone Back, Ph.D., MBA, will serve as co-evaluator on this project (.5 day per week).</i>  | Susan is an Associate Professor and Director of the Office of Program Evaluation and Research Support in the College of Education at Texas Tech University   |

## 2) Management Plan Responsibilities, Timelines, and Milestones

The Management Plan has been developed alongside Table 3 (previously discussed) to ensure that all *TAP Connect National Pilot* objectives are met on time and within budget. The Management plan outlines the objectives, the person(s) responsible, the timeline, and specific milestones for accomplishing each task,

Co-PIs Culbertson (NIET) and Ridley (TTU) will use Microsoft Project as the project management platform and will communicate weekly to ensure effective and proactive management of the *TAP Connect National Pilot* across their respective institutions. Co-PI Ridley will have supervisory oversight of Stephanie Mosqueda who will be responsible for partnership relations with TAP schools in the *TAP Connect National Pilot*. The districts have all agreed to participate and support the program (Appendix G; Appendix H). TTU faculty leading the initial and advanced certification programs for TAP school personnel will communicate weekly with Stephanie Mosqueda and the Regional Master Teachers that she supervises.

The entire NIET + TTU teams will meet quarterly to evaluate formative data and monitor and adjust project management plans. All participants and implementers will be invited to attend an annual event held at places across Texas in the late summer.

**Table 5: GOAL 1 Work Plan: Create a pipeline of measurably effective, “TAP-ready” new teachers through a technology-enabled, competency-based, “grow-your-own” teacher preparation model (Absolute Priority 1, Competitive Priority 2)**

| Activities   | Milestones  | Timeline                  | Responsible            |
|--|---|---------------------------|------------------------|
| <ul style="list-style-type: none"> <li>Meet with personnel in existing TAP Schools about the specific details of the initial certification program delivered to teacher candidates.</li> </ul> | <ul style="list-style-type: none"> <li>Teachers, teacher leaders and principals at TAP School understand and support the TAP-driven teacher education program</li> </ul>  | Within the First semester | Hamman                 |
| <ul style="list-style-type: none"> <li>Target marketing materials to the partner district, higher-education institutions and news outlets close to the partner district</li> </ul>             | <ul style="list-style-type: none"> <li>Create a high quality pool of teacher candidates from traditional and post-bachelorette pathways</li> </ul>                        | Within the First semester | TTU & NIET<br>Brownell |
| <ul style="list-style-type: none"> <li>Administer the Haberman Screener and prepare TAP School teachers and teacher leaders to interview local applicants</li> </ul>                           | <ul style="list-style-type: none"> <li>Select high-potential teacher candidates for the TAP School-based teacher education program</li> </ul>                             | Within the first Year     | Hamma;<br>Mosqueda     |
| <ul style="list-style-type: none"> <li>Conduct monthly technology-enabled conferences with TTU teacher education program faculty and Master Teachers at TAP Schools</li> </ul>                 | <ul style="list-style-type: none"> <li>TTU faculty and Master Teacher at TAP Schools have the same expectations for teacher candidate progress</li> </ul>                 | Monthly                   | Hamman;<br>Mosqueda    |
| <ul style="list-style-type: none"> <li>Wait until Year Two to begin the TAP School-based teacher education programs in new TAP Schools</li> </ul>  | <ul style="list-style-type: none"> <li>TAP School teachers, teacher leaders and principals are ready to guide preservice teacher development in the TAP School</li> </ul> | The beginning of Year Two | Hamman                 |

**Table 5: GOAL 2 Work Plan: Provide existing TAP school teachers with advanced certification training in effective Literacy and/or STEM instruction and/or Leadership that is technology-enabled with ongoing competency-based feedback & instructional shaping in the classroom (Absolute Priority 2 & 3, Competitive Priority 2 & 3)**

| Activities  | Milestones  | Timeline                  | Responsible                                       |
|---|---|---------------------------|---|
| <ul style="list-style-type: none"> <li>Meet with TAP School Leaders to collaboratively determine the outcome goals for the advanced certification programs</li> </ul>   | <ul style="list-style-type: none"> <li>NIET, TTU and TAP School Leaders are on the same page with expectations for the advanced certification programs</li> </ul>             | Within the First Semester | Johnson; Aguirre-Munoz; Klinker; Mosqueda         |
| <ul style="list-style-type: none"> <li>Look at TAP School achievement and teacher performance data with TTU and TAP School Leaders</li> </ul>   | <ul style="list-style-type: none"> <li>Determine together the advanced certification program priority participants</li> </ul>   | Within the First Semester | NIET, TTU, TAP Principals                         |
| <ul style="list-style-type: none"> <li>TTU faculty in the Literacy and School Leadership disciplines develop competency-based programming structure parallel to that developed by STEM faculty AND with the ongoing input of NIET and TAP School Leaders</li> </ul> | <ul style="list-style-type: none"> <li>All TTU advanced certification courses are competency-based with explicit performance-based criteria for course mastery</li> </ul>     | By the end of Year One    | TTU Co-PI Ridley                                  |
| <ul style="list-style-type: none"> <li>Conduct monthly technology-enabled conferences with TTU advanced certification program faculty and Master Teachers at TAP Schools</li> </ul>   | <ul style="list-style-type: none"> <li>TTU faculty and Master Teacher at TAP Schools have the same expectations for career teacher progress</li> </ul>                        | Monthly                   | Johnson; Aguirre-Munoz; Klinker; Mosqueda         |
| <ul style="list-style-type: none"> <li>Conduct monthly technology-enabled conferences with TTU advanced certification program faculty and Regional Master Teachers</li> </ul>   | <ul style="list-style-type: none"> <li>TTU faculty and Regional Master Teachers have the same expectations for Master &amp; Mentor Teachers and principal progress</li> </ul> | Monthly                   | Ridley; Mosqueda; Johnson; Aguirre-Munoz; Klinker |

**Table 5: GOAL 3 Work Plan: Ensure full-fidelity implementation of the TAP Comprehensive School Reform model by providing TAP school leaders (Master & Mentor Teachers, Principals) with technology-enabled, ongoing competency-based feedback & shaping on TAP school processes (e.g., pre/post conference facilitation, Cluster Group PLC facilitation). Give TAP school leaders the option of advanced certification along with the development of these advanced skills (Absolute Priority 3, Competitive Priority 2)**

| Activities   | Milestones  | Timeline                         | Responsible                          |
|--|---|----------------------------------|--------------------------------------|
| <ul style="list-style-type: none"> <li>Establish the four implementation conditions for TAP Schools in the <i>TAP Connect</i> National Pilot (i.e., PFP &amp; Technology-enabled, Competency-based Shaping)</li> </ul> | <ul style="list-style-type: none"> <li>The four implementation condition TAP Schools are comparable in terms of size and demographics</li> </ul>  | First Semester                   | Ridley; Mosqueda; Rodriguez; Barnett |
| <ul style="list-style-type: none"> <li>Teachscape equipment and licenses purchased, distributed to TAP school participants and training provided</li> </ul>  | <ul style="list-style-type: none"> <li>TAP school teacher candidates, teachers, teacher leaders, principals and Regional Master Teachers are proficient with technology, unloading and use of the web-based services</li> </ul> | By the end of the First Semester | Ridley; Mosqueda                     |
| <ul style="list-style-type: none"> <li>Provide advanced training on the Teachscape System for the Regional Master Teachers and Director Mosqueda</li> </ul>  | <ul style="list-style-type: none"> <li>Ensure that the state TAP leaders are also leaders on the use of Teachscape</li> </ul>   | By the end of the First Semester | Teachscape                           |
| <ul style="list-style-type: none"> <li>Provide advanced training on the Teachscape System for the TAP School Master Teachers</li> </ul>  | <ul style="list-style-type: none"> <li>Ensure that TAP School leaders are also leaders on the use of Teachscape</li> </ul>  | By the end of the First Semester | Teachscape                           |
| <ul style="list-style-type: none"> <li>Create a TAP School Leadership Resource Library (video and materials) of highly effective TAP School facilitation posted on the TAP Portal website</li> </ul>                   | <ul style="list-style-type: none"> <li>Spread the best of what is working in the <i>TAP Connect</i> National Pilot to other TAP Schools across the nation</li> </ul>  | By the beginning of Year Three   | NIET, TTU, Teachscape                |

### 3) Time Commitments

Because the *TAP Connect National Pilot* is built on the infrastructures of the TAP System and the competency-based, TAP-driven programs at Texas Tech University, many of the costs for administration, program design, program implementation, and data services are already current functions within these organizations. This allows the *TAP Connect National Pilot* to quickly allocate maximum support to TAP School participants vs. start-up

| <b>Table 6: Personnel Commitments</b>              |  |
|--|--|
| Commitments of Project Directors and Key Personnel |  |
| Goal 1   | The TTU Director of Teacher Education Programs (Dr. Doug Hamman) will oversee the recruitment and selection process and will be supported by existing full-time TTU recruiters. Recruiters will actively recruit prospective students along with TAP School Leaders using a detailed TTU recruitment plan. Additionally, the TTU Co-PI (Dr. Scott Ridley) in his role as Dean of the College will also oversee the effectiveness of the competency-based coursework and clinical experiences delivered to the partner TAP Schools. NIET and TTU Project Evaluators will monitor formative indicators and report to Co-PIs Ridley and Culbertson. |
| Goal 2   | The TTU faculty members and Directors of the Writing, Leadership, and STEM advanced certification programs will oversee implementation and impact data on the competency-based programs. Additionally, the TTU Co-PI (Dr. Scott Ridley) in his role as Dean of the College will also oversee the effectiveness of the competency-based coursework and clinical experiences delivered to the partner TAP Schools along with State TAP Director Stephanie Mosqueda. NIET and TTU Project Evaluators will monitor formative indicators and report to Co-PIs Ridley and Culbertson.  |
| Goal 3   | The TTU and NIET Co-PIs will oversee the Project Evaluator in regard to implementing the quasi-experimental research design. The Co-PIs will also request quarterly progress monitoring reports on the fidelity of implementation across TAP School in the <i>TAP Connect National Pilot</i> .   |
| Evaluation   | NIET and TTU Project Evaluators will execute the evaluation of this project. The Co-PI will require quarterly formative data reports (fidelity of implementation) as well as annual summative reports on teaching effectiveness and student achievement.   |



#### **4) Sufficient and Reasonable Resources.**

The Co-PIs have years of extensive and successful experience leading large funded projects. Like many other projects, personnel costs in the *TAP Connect National Pilot* reflect the majority of costs. The provision of teacher pay-for-performance costs in PFP TAP Schools is covered by non-SEED funds for the term of this project saving very significant costs in the *TAP Connect National Pilot*.

SEED funds are sufficient to cover required personnel and materials including a portion of Master Teacher salaries at TAP Schools, salary augmentation for Master & Mentor Teachers in TAP Schools, funding for advanced certification courses, funding for Teachscape rigs and licenses, funding for the Executive Project Director (Stephanie Mosqueda) and two Regional Master Teacher Leaders. Sufficient funds from the SEED budget are allocated to program evaluation research which will allow a rigorous and objective test of our research questions regarding the effects of teacher pay-for-performance and the impact of technology-enabled, competency-based shaping on the fidelity of TAP School implementation.

#### **D. Sustainability**

##### **1) Build Capacity and Yield Results**

*TAP Connect* builds capacity in a number of ways. ***Capacity building at the participating school level:*** Most schools that implement the TAP System continue to use TAP processes even if they do not continue with teacher pay-for-performance. The New Caney and Grand Prairie School Districts are currently employing the core TAP components and communicate the intention to continue doing so. The new TAP Schools in Roosevelt, Slaton and

Friendship School Districts will implement TAP without pay-for-performance increasing the probability of full-fidelity implementation over the long-term.

Trained Master and Mentor teachers will be continue to be seen by their colleagues as valuable resources for coaching and professional development. Teachers and principals trained by the project will continue to implement best practices resulting from the intervention, due to positive results obtained and a shift in the school culture.

***Capacity building at the NIET + TTU educational reform level:*** The technology provided by the *TAP Connect* National Pilot will remain in the schools and TTU will continue to provide pre-service teacher candidates with video “rigs” as they do for all TTU teachers candidates. Successful technology-enabled, competency-based initial teacher preparation, subject-area professional development and TAP school leadership training will become a fee-for-service model after pilot validation. NIET and TTU will create a business model for the shared services. With strong teaching effectiveness and student achievement results, school districts will redirect Title II funds to comprehensive school efforts such as *TAP Connect*.

## **2) Yield Findings and Products for Other Agencies and Organizations.**

In addition to the detailed data and analyses resulting from the project evaluation, the study of the different manifestations of TAP will indicate whether use of technology-enabled, competency-based shaping or Pay-for-Performance provide significant improvements to the TAP model. Should the result indicate that Pay-for-Performance is not necessary for the model to yield results, the accessibility of the TAP model will be greatly enhanced. Districts that would not favor Pay-for-Performance would then consider TAP as a viable tool. Demonstration of the effectiveness of Regional Master Teacher site visits in combination with ongoing technology-

enabled, competency-based shaping at a distance will benefit all districts (especially rural) who would likely find internet conferencing a cost-effective method for implementing the enhanced *TAP Connect* model.

### **3) Disseminate Information about Results and Outcomes**

Other universities across the nation will be drawn to this school-level, multiple-level professional development model which makes assessment of impact easy to measure. TAP schools and school districts across the nation will be drawn to a model that develops teachers from entry to retirement. The *TAP Connect National Pilot* will disseminate information about results and outcomes through the following:

- **National Conferences:** The outcomes of the Project will be presented at the National TAP Conference and 2 other professional research conferences. Key project personnel will participate in the TAP Conference and professional research national conferences that will bring together organizations from across the nation to showcase the project, and offer a venue for sharing results, information, and ideas (e.g. AERA; AACTE). Finally, key project personnel will present key outcomes at the American Association of Colleges of Education Day on the Hill in Washington, DC.
- **Texas Tech University Presentations.** The Information about the grant's implementation and data – as appropriate – will be shared with the public by presentations at TTU for the partnering districts and other interested agencies.
- **Print and Online:** Findings will also be disseminated via NIET and TTU College of Education web-sites, plus publication in professional journals and presentations at

conferences and workshops. As previously mentioned, a TAP School Leadership Resource Library will provide best practice video and materials to TAP Schools all over the nation.

## **E. Quality of the Project Evaluation**

### **1) Thorough, Feasible, and Appropriate Goals, Objectives, and Outcomes**

The NIET Research and Evaluation team and Texas Tech University's Office of Program Evaluation and Research Support will oversee the project evaluation under the direction of Dr. Joshua Barnett and Dr. Susan Back. The *TAP Connect National Pilot* consist of thorough, feasible, and appropriate goals, which are further articulated by measurable objectives and outcomes. All program evaluation elements are feasible and appropriate within the structure of the *TAP Connect* model. The model is built on the idea that data is used to make programmatic decisions, improve services, and to evaluate program effectiveness.

### **2) Use of Objective Performance Measures Clearly Related to Outcomes**

This program evaluation research will be conducted by NIET and TTU. To determine the impact, we will conduct within and between comparisons. The within comparison will consist of tracking the variables of interest (e.g. student achievement, teacher/principal effectiveness and retention, school climate) longitudinally across the life of the grant. We will work the partnering schools to collect baseline data for 2012-2014 to have two years of trajectory data prior to the implementation of the *TAP Connect* program. This baseline collection will allow us to examine directly the impact of the program and SEED resources in the schools electing to

participate and compare those changes to schools without those resources (i.e. control groups).

The control schools will be selected based on their comparable school-level demographics and performance scores. Table 7 below reflects the information previously discussed on Table 3 with regard to goals, objectives, and measures within the design description; however, the information below is focused on only the evaluation components, which consists of both process and outcome questions. Beyond the questions for each of the three goals and corresponding objectives, the evaluation contains three overall research questions examining the impact of the project on student achievement, educator satisfaction, and educator retention in partnering schools.

**Table 7: Evaluation**

Goal 1 - Research Question 1: What is the impact of the TTU “grow-your-own” teacher preparation model on creating a pipeline of TAP-ready teachers?

- a. How have joint TTU and TAP School recruitment and enrollment practices impacted the quality and number of incoming teacher candidates?
- b. How has the TTU program impacted the performance of teacher candidates during their coursework?
- c. How have the TTU clinical experiences in TAP Schools impacted teacher candidates?
- d. What is the impact of the TTU program on teacher candidates’ beginning instructional proficiency?

Goal 2 - Research Question 2: What is the impact of the TTU program component of providing advanced certification in effective Literacy and/or STEM instruction to existing TAP school teachers?

- a. To what degree have TAP school leaders identified teachers/leaders/grade levels with the highest need for professional development?
- b. How have the targeted services provided to teachers deepened their content knowledge as measured by content-area assessments?
- c. How have the targeted services provided to teachers improved their pedagogical skills as measured by the TAP instructional rubric?
- d. How many educators have earned advanced certification demonstrating a strong emphasis in Literacy and/or STEM instruction for teachers or Leadership proficiency for leaders?

Goal 3 - Research Question 3: To what extent has each participating school fully implemented

the TAP Comprehensive School Reform model?

- a. Have all participating schools been allocated to one of the four conditions?
- b. How has the TAP school established the leadership and infrastructure necessary to ensure support and accountability?
- c. To what extent are TAP school leaders facilitating the TAP school processes?
- d. What is the correlation between fidelity of implementation and school outcomes (e.g. rubric scores, achievement, retention, satisfaction)?
- e. How many exemplary TAP video and analyses been posted to the NIET Best Practices Portal?

Overall - Research Question 4: How have TTU-partnering TAP schools affected the academic performance of students?

- a. How do students of teachers trained in the “grow-your-own” program compare to students of teachers in other programs?
- b. How do students of teachers receiving advanced certification compare to teachers who did not?
- c. How do students in schools with principals receiving advanced certification compare to students in schools where principals have not earned this credential?

Overall - Research Question 5: How have TTU-partnering TAP schools affected the behaviors and attitudes of teachers and principals?

- a. How has TAP school participation affected the reported behaviors and attitudes of the participating teachers as measured by the TAP Teacher Attitudinal Survey?
- b. How has TAP school participation affected the reported behaviors and attitudes of the participating principals as measured by the TAP Principal Attitudinal Survey?
- c. How do the reported behaviors and attitudes of the participating teachers compare to those in the comparison schools?
- d. How do the reported behaviors and attitudes of the participating principals compare to those in the comparison schools?

Overall - Research Question 6: How have TTU-partnering TAP schools affected the teacher retention rates?

- a. How has TTU-TAP school participation affected teacher retention rates over time?
- b. How has TTU-TAP school participation affected principal retention rates over time?
- c. How do teacher retention rates in the participating schools compare to those in the comparison schools over time?
- d. How do principal retention rates in the participating schools compare to those in the comparison schools over time?

### ***Study Design***

Data for this study will be collected from Texas Tech University, Texas Education Agency, partner district schools, and NIET. All performance data (RQ4) and retention data

(RQ6) will be collected from the Texas Education Agency. Data related to fidelity of implementation (RQ3) and teacher/principal attitudes and behaviors (RQ5) will be collected through surveys, interviews, and observations conducted by NIET staff.

### ***Data Measures***

To respond to RQ1, Texas Tech University will collect performance data on applicants, including transcripts, dispositional assessment scores, and content-area pretest scores. This information will be collected for all applicants whether they elect to participate in the traditional undergraduate program or the post-baccalaureate alternative certification pathway. Additionally, TTU will collect course grades, semester-by-semester progress reports, TAP rubric scores, TRIPOD K-12 scores, benchmark scores, and state certification exam scores for all pre-service teachers. Additionally, 30 students will be randomly selected to participate in focus groups regarding their perceptions of how the TAP-driven program is shaping their clinical experiences.

To respond to RQ2, TAP instructional rubric scores and student achievement scores on state and district benchmark exams will be collected. Additionally, Master Teacher walk-through scores will be collected. These data will be summarized and examined to identify where targeted professional development is most needed.

To respond to RQ3, Regional Master Teachers will submit a monthly observational checklist reflecting the sub-themes on each of their TAP schools. Added to these data will be observational reviews by the State TAP Director, visiting Regional Executive Master Teacher Leaders (multiple visits per year), and a formal annual school review by NIET. All cluster group, leadership scores, and teachers scores are housed within the CODE system, which TAP uses across all states and TAP sites.

To respond to RQ4, data will be collected from the Texas Academic Excellence Indicator System (AEIS). This system provides performance indicators for:

- Results of the Texas Assessment of Knowledge and Skills (TAKS),
- Exit-level TAKS Cumulative Passing Rates;
- Progress of Prior Year TAKS Failers;
- Attendance Rates;
- Annual Dropout Rates (grades 7-8 and grades 9-12);
- Completion Rates (4-year and 5-year longitudinal);
- College Readiness Indicators;
  - Completion of Advanced/Dual Enrollment Courses;
  - Completion of the Recommended High School Program or Distinguished Achievement Program;
  - Participation and Performance on Advanced Placement (AP) and International Baccalaureate (IB) Examinations;
  - Texas Success Initiative (TSI) – Higher Education Readiness Component;
  - Participation and Performance on the College Admissions Tests (SAT and ACT), and
  - College-Ready Graduates;
- Performance on each of these indicators is shown disaggregated by ethnicity, special education, low income status, limited English proficient status (since 2002-03), at-risk status (since 2003-04, district, region, and state), and, beginning in 2008-09, by bilingual/ESL (district, region, and state, in section three of reports). The reports also provide extensive information on school and district staff, finances, programs and student demographics.

To address RQ5, NIET's TAP Teacher and Principal Attitudinal Survey will be used.

This survey is administered annually to all TAP scores across the nation, which will allow scores for the TTU-partnering TAP schools to be compared to other TAP schools. Additionally, observational data will be collected from site visits from the State TAP Director and Regional Master Teachers.

To address RQ6, researchers will collect school level data from AEIS and from each of the participating schools with regard to teacher and principal characteristics – highly qualified



status, out of field teaching status, emergency certification status, honors (National Board Certification), and turnover rates.

### *Analytic Strategy*

Student applicant data will be compared to previous application (RQ1) information collected by TTU through a interrupted time-series comparison. Reviewing these data on a semester basis will allow for comparisons between incoming students' performance at each phase of preparation. ANOVAs will be used to determine if the differences between the groups are significant, as will effect sizes to determine practical significance.

The observation, focus groups, and interviews collected (RQ1, 2, 3) will be organized and discussed with TTU and NIET leadership to determine the level of successful implementation of the TAP processes. Further, these data will be compared to the formal evaluations of other TAP schools across the country. The framework to analyze the impact on student achievement (RQ4) will be a matched comparison group. The AEIS system will allow for schools to be matched on prior year test scores and observable demographic variables. Because students are compared to themselves across time, as well as to the students scoring at the same performance level through the value-added measures, the belief that unobserved variables are accounting for potential findings is minimized (Angrist & Krueger, 1999). ANOVAs will be used to determine if the differences between the groups are significant, as will effect sizes to determine practical significance. Exploratory subgroup analyses will be used to compare students by demographic variables.

For RQ5, repeated measures analysis of variance and/or multivariate analysis of variance will be used to explore differences in teachers' and principals' attitudes over time and between TTU-partnering TAP and other TAP schools.

RQ6 will be measured by *t* tests and effect sizes to determine if significant and/or substantive differences exist among the schools.

### **3) Provide Performance Feedback and Permit Periodic Assessment**

The evaluation plan outlines how the evaluation will be used to monitor progress toward achieving outcomes, provide performance feedback, and provide accountability information.

**Monitor progress toward achieving outcomes:** The evaluation plan is organized by Goal and Project Objective and includes specified timelines, tools used to collect data, methodology, reporting timeline, and how the data will be used. The evaluation plan will serve as a working document to ensure the Project is on track to meet all objectives.

**Performance Feedback:** As referenced in the evaluation table, there are consistent opportunities to obtain and review performance feedback. Performance feedback includes the following: participant instructional performance based on walkthrough and performance assessment data, participant professional dispositions based on professionalism rubric data, participant GPA, participant completion rate, graduate impact on student achievement in 1st year of teaching.

**Provide accountability information:** The plan provides a framework to hold Project personnel accountable for meeting the objectives. Each objective within the evaluation plan includes specific outcomes and timelines, along with the personnel who are responsible for those outcomes (Tables 3, 5, 7). Additionally, the three overall outcome measures are included to

provide clear accountability information on the impact of the project to NIET, TTU, and partnering districts.

#### **4) Sufficient Resources to Carry Out Project Evaluation**

The program evaluation will be conducted by NIET in collaboration with Texas Tech University and the partnering schools. With the combined efforts of the NIET Director of Research, a full-time NIET research associate, Texas Tech University's Director of Office of Program Evaluation and Research Support, and TTU graduate students, the evaluation plan is sufficiently resourced to carry out the proposed evaluation effectively.