

**U.S. Department of Education - EDCAPS  
G5-Technical Review Form (New)**

Status: Submitted

Last Updated: 08/15/2014 02:03 PM

## Technical Review Coversheet

Applicant: Rutgers, the State University (U336S140009)

Reader #1: \*\*\*\*\*

	Points Possible	Points Scored
<b>Questions</b>		
<b>Selection Criteria</b>		
<b>Significance</b>		
1. Significance	15	15
<b>Quality of Project Design</b>		
1. Project Design	45	40
<b>Quality of the Management Plan</b>		
1. Management Plan	20	17
<b>Quality of the Project Evaluation</b>		
1. Project Evaluation	20	16
<b>Priority Questions</b>		
<b>Competitive Preference Priority 1</b>		
<b>Promoting STEM Education</b>		
1. CPP 1	5	3
<b>Competitive Preference Priority 2</b>		
<b>Implementing Academic Standards</b>		
1. CPP 2	2	2
<b>Total</b>	<b>107</b>	<b>93</b>

# Technical Review Form

Panel #5 - 2014 TQP Grant Review - 5: 84.336S

Reader #1: \*\*\*\*\*

Applicant: Rutgers, the State University (U336S140009)

## Questions

### Selection Criteria - Significance

1. 1) The Secretary considers the significance of the proposed project.
- 2) In determining the significance of the proposed project, the Secretary considers the following factors:
  - i) The extent to which the proposed project is likely to build local capacity to provide, improve, or expand services that address the needs of the target population.
  - ii) The likelihood that the proposed project will result in system change or improvement.
  - iii) The extent to which the proposed project will prepare personnel for fields in which shortages have been demonstrated.

#### Strengths:

A strength of the proposal is the university's goal to redesign their 30 credit course curricula to better align with New Jersey's educational standards as well as the neighboring school district. In addition to revamping coursework, they propose delivering content knowledge for STEM classes through a local science museum (informal learning environment p.3), which creates an effective 3-part partnership. Recruiting teacher candidates from local high schools to grow future STEM teachers is also a strength. The proposal will improve and expand the Urban Teacher Education Program training teachers for fields in which shortages have been demonstrated.

#### Weaknesses:

None noted

Reader's Score: 15

### Selection Criteria - Quality of Project Design

1. 1) The Secretary considers the quality of the design of the proposed project.
- 2) In determining the quality of the design of the proposed project, the Secretary considers the extent to which the proposed project consists of a comprehensive plan that includes a description of:
  - i) The extent to which the proposed project is supported by strong theory (as defined in this notice).
  - ii) The extent to which the training or professional development services to be provided by the proposed project are of sufficient quality, intensity, and duration to lead to improvements in practice among the recipients of those services.
  - iii) The extent to which the proposed activities constitute a coherent, sustained program of training in the field.
  - iv) The extent to which the services to be provided by the proposed project involve the collaboration of appropriate partners for maximizing the effectiveness of project services.

v) The extent to which the applicant demonstrates that it has the resources to operate the project beyond the length of the grant, including a multi-year financial and operating model and accompanying plan; the demonstrated commitment of any partners; evidence of broad support from stakeholders (e.g., State educational agencies, teachers unions) critical to the project's long-term success; or more than one of these types of evidence.

**Note:** In order to address this criterion, applicants are encouraged to develop logic models to demonstrate their project's theory of action. Applicants should connect available evidence of past history of successful outcomes to their logic models. Applicants may use resources such as the Pacific Education Laboratory's Education Logic Model Application ([www.relpacific.mcrel.org/PERR.html](http://www.relpacific.mcrel.org/PERR.html)) or the Northeast and Islands REL Skill Builder Workshops ([www.relnei.org/events/skill-builder-archive.html](http://www.relnei.org/events/skill-builder-archive.html)) to help design their logic models. In addressing this criterion, applicants are also encouraged to connect the project design to the intended impact of the project, including an explanation of how the project will affect the preparation, placement, retention, induction, and professional development of teachers, and ultimately student achievement. Finally, applicants are encouraged to discuss the role and commitment of each partner and how the IHE and LEA(s) plan to sustain their partnership beyond the life of the grant.

**Strengths:**

A strength of this proposal is the partnership with Liberty Science Museum as a provider of ongoing professional development for teacher candidates. During the yearlong student teaching field experience, teacher candidates will receive PD one day per week. Authentic literacy instruction will be a focus of their Cluster 1 classes ensuring all secondary content area teachers will be well versed in diagnosing and remediating reading problems (p.22). Cluster 2 courses involve many opportunities to develop the dispositions needed to serve urban youth. Cluster 3 coursework will be taught by Liberty Science Museum staff, which is a strong collaborative effort with a partner. Induction activities and support are outlined for UTEP teacher graduates along with first year teachers from other pathways. This coordinated effort is an efficient use of limited resources and strengthens the partnership.

**Weaknesses:**

References to theory could have been stronger in this proposal. Limited connections were made to constructivism and bricolage (p.14). In the needs assessment conducted, the proposal identified more training needed for clinical evaluators to improve inter-reliability (p.13) along with better alignment between coursework and field experiences. Details were lacking regarding these areas.

**Reader's Score:** 40

**Selection Criteria - Quality of the Management Plan**

1. 1) The Secretary considers the quality of the management plan for the proposed project.

2) In determining the quality of the management plan for the proposed project, the Secretary considers the following factors:

i) The adequacy of the management plan to achieve the objectives of the proposed project on time and within budget, including clearly defined responsibilities, timelines, and milestones for accomplishing project tasks.

ii) The qualifications, including relevant training and experience, of key project personnel.

iii) The extent to which performance feedback and continuous improvement are integral to the design of the proposed project.

**Note:** In order to address this criterion, applicants are encouraged to include in the application narrative

a clear, well thought-out implementation plan that includes annual timelines, key project milestones, and a schedule of activities with sufficient time for developing an adequate implementation plan, as well as a description and qualifications of the personnel who would be responsible for each activity and the level of effort each activity entails. Applicants may also describe how the partnering organizations will communicate and coordinate in order to achieve project goals.

**Strengths:**

This proposal includes a clear outline of tasks to be accomplished with a reasonable timeline attached (pp.34-35). Project personnel have relevant training and experience to manage the proposed project. Equal emphasis was given to personnel from the university, the museum, and the LEA (pp.37-43). This is a strong foundation for a successful partnership.

**Weaknesses:**

There are broad references to experts and mentors (p.37) to help with the revision of the cluster courses. Additional specifics would improve the proposal. In addition, more attention to soliciting feedback to continuously improve the program design would make this proposal stronger.

**Reader's Score:** 17

**Selection Criteria - Quality of the Project Evaluation**

1. 1) The Secretary considers the quality of the evaluation to be conducted of the proposed project.

2) In determining the quality of the evaluation, the Secretary considers:

i) The extent to which the methods of evaluation provide valid and reliable performance data on relevant outcomes.

**Note:** In response to this selection factor, applicants are encouraged to include data on student learning.

ii) The extent to which the methods of evaluation are thorough, feasible, and appropriate to the goals, objectives, and outcomes of the proposed project.

iii) The extent to which the methods of evaluation will provide performance feedback and permit periodic assessment of progress toward achieving intended outcomes.

**Note:** In addressing this criterion, applicants are encouraged to include a plan for how the project s evaluation will address the TQP Grant Program performance measures established by the Department under the Government Performance and Results Act of 1993 (GPRA), as well as the measures established in section 204(a) of the HEA. (The specific performance measures established for the overall TQP Grant Program are discussed under Performance Measures in section VI of this notice.) Further, applicants are encouraged to describe how the applicant s evaluation plan will be designed to collect both output data and outcome data, including benchmarks, to monitor progress. Finally, each applicant is encouraged to select an independent, objective evaluator who has experience in evaluating educational programs and who will play an active role in the design and implementation of the project s evaluation.

**Strengths:**

An outside evaluator will be hired (p.44). This proposal thoroughly addressed the GPRA indicators in its evaluation plan. Also noteworthy is UTEP comparing retention rates to other novice teachers from different pathways in order to evaluate the effects of the proposal (p.45).

**Weaknesses:**

The methods of evaluation are presented in limited scope. Surveys, rubrics, interviews are mentioned as possible tools for evaluating the project. Providing a timeline of specific checkpoints with regards to evaluation would improve this proposal. Increasing student achievement is a goal of this proposal. Creating an assessment tool to measure student growth is mentioned (p.23), yet there is not a strong alignment in the evaluation plan to measure it (pp.44-45).

**Reader's Score: 16**

**Priority Questions****Competitive Preference Priority 1 - Promoting STEM Education****1. Projects that are designed to address one or both of the following priority areas:**

**a) Increasing the opportunities for high-quality preparation of, or professional development for, teachers or other educators of STEM subjects.**

**b) Increasing the number of individuals from groups traditionally underrepresented in STEM, including minorities, individuals with disabilities, and women, who are teachers or educators of STEM subjects and have increased opportunities for high-quality preparation or professional development.**

**Note: Applicants that respond to Competitive Preference Priority 1 and Absolute Priority 1 are still required to implement the required reforms within the whole teacher preparation program, as reflected in sections (a) and (b) of Absolute Priority 1.**

**In responding to this competitive preference priority, applicants are encouraged to include the following elements in their proposed projects:**

**1) Institutional collaboration to ensure that students in a college of education who intend to teach STEM courses have access to courses that build appropriate content knowledge. Such students should have access to course sequencing that is equal to the course sequencing for other STEM majors outside the college of education.**

**2) Emphasis on hands-on and inquiry-based STEM experiences for prospective teachers, including dedicated research or laboratory experiences, STEM discipline-specific pedagogical instruction, and explicit instruction in the interdisciplinary connections between learning sciences and STEM instruction; and**

**3) Early and multiple field-based instructional experiences for prospective teachers that are structured to provide exposure to a variety of teaching and learning environments, and that are coordinated and aligned with the teacher preparation curriculum.**

**Strengths:**

This proposal will recruit and train 75 secondary STEM teachers over the course of the grant. Partnering with a science museum will add a hands-on and inquiry based curriculum to UTEPs preparation curriculum.

**Weaknesses:**

Lacking in the proposal is elaboration on how this proposal will provide early and multiple field-based experiences for teacher candidates. The year-long student teaching experience is a strength, but early exposure to actual classroom teaching is unclear in the outline of the cluster courses (p.20).

**Reader's Score: 3**

## Competitive Preference Priority 2 - Implementing Academic Standards

1. Projects that are designed to support the implementation of internationally benchmarked, college- and career-ready academic standards held in common by multiple States and to improve instruction and learning, including projects in the following priority areas:

a) The development or implementation of professional development or preparation programs aligned with those standards.

b) Strategies that translate the standards into classroom practice.

### Strengths:

This proposal does a comprehensive job of aligning state standards and district expectations to its curriculum re-design. Professional development is provided one day a week using the Liberty Science Museum's staff. Building in time for professional development is a strength of this proposal. Focusing on teaching strategies that impact urban youth is equally noteworthy.

### Weaknesses:

None noted

**Reader's Score:**     **2**

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**Status:**           Submitted  
**Last Updated:**   08/15/2014 02:03 PM

Status: Submitted

Last Updated: 08/15/2014 04:09 PM

## Technical Review Coversheet

Applicant: Rutgers, the State University (U336S140009)

Reader #2: \*\*\*\*\*

	Points Possible	Points Scored
<b>Questions</b>		
<b>Selection Criteria</b>		
<b>Significance</b>		
1. Significance	15	15
<b>Quality of Project Design</b>		
1. Project Design	45	40
<b>Quality of the Management Plan</b>		
1. Management Plan	20	17
<b>Quality of the Project Evaluation</b>		
1. Project Evaluation	20	17
<b>Priority Questions</b>		
<b>Competitive Preference Priority 1</b>		
<b>Promoting STEM Education</b>		
1. CPP 1	5	3
<b>Competitive Preference Priority 2</b>		
<b>Implementing Academic Standards</b>		
1. CPP 2	2	2
<b>Total</b>	<b>107</b>	<b>94</b>

# Technical Review Form

Panel #5 - 2014 TQP Grant Review - 5: 84.336S

Reader #2: \*\*\*\*\*

Applicant: Rutgers, the State University (U336S140009)

## Questions

### Selection Criteria - Significance

1. 1) The Secretary considers the significance of the proposed project.
  - 2) In determining the significance of the proposed project, the Secretary considers the following factors:
    - i) The extent to which the proposed project is likely to build local capacity to provide, improve, or expand services that address the needs of the target population.
    - ii) The likelihood that the proposed project will result in system change or improvement.
    - iii) The extent to which the proposed project will prepare personnel for fields in which shortages have been demonstrated.

### Strengths:

- (i) The program expands the existing program by revising the teacher education curriculum, implementing effective recruitment and enrollment, revising the clinical experiences, and implementing an induction program (pages 3-4). The program builds on its success in placing teachers in urban settings as 72% of its program completers who received certification in the past three years are teaching in a New Jersey public school (page 5).
- (ii) Using results from a needs assessment using data analysis and team members (page 10), the applicant designs a program that will prepare personnel for fields in which shortages have been demonstrated (in this case, urban school teachers in STEM) (page 11). The project links with the local school district. The result is a program design that will result in systems change.
- (iii) The program provides relevant system training that will provide prepared teachers. These teachers will provide STEM instruction in urban settings. The project will aid in improving STEM education by providing relevant and in-depth workshops that reinvigorate teachers' passion for effective, hands-on science education (page 13).

### Weaknesses:

No weaknesses were noted.

Reader's Score: 15

### Selection Criteria - Quality of Project Design

- 1) The Secretary considers the quality of the design of the proposed project.
  - 2) In determining the quality of the design of the proposed project, the Secretary considers the extent to which the proposed project consists of a comprehensive plan that includes a description of:
    - i) The extent to which the proposed project is supported by strong theory (as defined in this notice).

ii) The extent to which the training or professional development services to be provided by the proposed project are of sufficient quality, intensity, and duration to lead to improvements in practice among the recipients of those services.

iii) The extent to which the proposed activities constitute a coherent, sustained program of training in the field.

iv) The extent to which the services to be provided by the proposed project involve the collaboration of appropriate partners for maximizing the effectiveness of project services.

v) The extent to which the applicant demonstrates that it has the resources to operate the project beyond the length of the grant, including a multi-year financial and operating model and accompanying plan; the demonstrated commitment of any partners; evidence of broad support from stakeholders (e.g., State educational agencies, teachers unions) critical to the project's long-term success; or more than one of these types of evidence.

**Note:** In order to address this criterion, applicants are encouraged to develop logic models to demonstrate their project's theory of action. Applicants should connect available evidence of past history of successful outcomes to their logic models. Applicants may use resources such as the Pacific Education Laboratory's Education Logic Model Application ([www.relpacific.mcrel.org/PERR.html](http://www.relpacific.mcrel.org/PERR.html)) or the Northeast and Islands REL Skill Builder Workshops ([www.relnei.org/events/skill-builder-archive.html](http://www.relnei.org/events/skill-builder-archive.html)) to help design their logic models. In addressing this criterion, applicants are also encouraged to connect the project design to the intended impact of the project, including an explanation of how the project will affect the preparation, placement, retention, induction, and professional development of teachers, and ultimately student achievement. Finally, applicants are encouraged to discuss the role and commitment of each partner and how the IHE and LEA(s) plan to sustain their partnership beyond the life of the grant.

#### **Strengths:**

(i) The applicant provides underlying research to support its project design (pages 14-15). Specifically, the applicant identifies bricolage and constructivism to frame its program. The applicant will install strategies to all students and have teachers focus on learning that is constructed by the student through meaningful experiences.

(ii) Within the logic model, activities such as statewide recruitment, revised curriculum, a yearlong clinical experience, the existing partnership and the new induction program ensure that the professional development services are of sufficient quality, intensity and duration to lead to improvements in practice (page 17). The model covers all aspects of the program. For example, the applicant will incorporate national, state and district academic and professional standards for teachers (page 18).

(iii) Program activities are coherent and sustainable. Program activities are designed using the Chicago Public Schools model of induction as a best practice model for induction. The topics of study have a linear design that will have defining characteristics for pre-service teachers. Clinical experience is revised and professional learning communities emphasized. Field training is expanded.

(iv) Program activities involve the partnership between a local education agency and the local science center. The pre-service teachers will work within these settings to gain training. The university will partner with these institutions to provide training for these future urban teachers. The partnership will build other connections.

(v) The applicant provides substantial proof of existing relationship between itself and the local school district. It provides evidence that teachers have been placed there for training in past years. This pre-service placement may have led to the 72% sustainability of teachers in urban settings.

#### **Weaknesses:**

(i) No weaknesses were noted.

(ii) The applicant lacks specificity as to how recruitment and marketing efforts will differ from existing activities (pages 26-27). It is unclear if the applicant will attend specific recruitment activities or design specific activities to target students interested in STEM. It is unclear how the applicant will change its evaluation of teachers as it adds consultants for this purpose. It is unclear how these evaluators will be trained. Additional information is needed for this narrative.

(iii) No weaknesses were noted.

(iv) No weaknesses were noted.

(v) Absent from the narrative is a description of how activities will be sustained after funding ends. It is unclear if the science center will continue to provide services. It is unclear how materials and technology will be sustained after the program ends.

**Reader's Score: 40**

### **Selection Criteria - Quality of the Management Plan**

**1. 1) The Secretary considers the quality of the management plan for the proposed project.**

**2) In determining the quality of the management plan for the proposed project, the Secretary considers the following factors:**

**i) The adequacy of the management plan to achieve the objectives of the proposed project on time and within budget, including clearly defined responsibilities, timelines, and milestones for accomplishing project tasks.**

**ii) The qualifications, including relevant training and experience, of key project personnel.**

**iii) The extent to which performance feedback and continuous improvement are integral to the design of the proposed project.**

**Note: In order to address this criterion, applicants are encouraged to include in the application narrative a clear, well thought-out implementation plan that includes annual timelines, key project milestones, and a schedule of activities with sufficient time for developing an adequate implementation plan, as well as a description and qualifications of the personnel who would be responsible for each activity and the level of effort each activity entails. Applicants may also describe how the partnering organizations will communicate and coordinate in order to achieve project goals.**

#### **Strengths:**

(i) The applicant provides a management plan for completing project activities (pages 32-44). The table includes timeline and milestones of key activities. For example, in year 1, the applicant will revise the curriculum, develop and implement the recruitment campaign and plan for the mentoring program. The management plan has clearly defined activities. The applicant will use curriculum experts to assist with the revision (page 17).

(ii) Qualifications and relevant training experience of team members are described within the management (pages 36-44). For example, faculty members have experience in education. Personnel at the high school and science center have qualifications relevant to program activities.

(iii) No strengths were noted.

#### **Weaknesses:**

(i) The management plan activities are not clearly defined with measures. Objectives are included; however, they are not quantified. For example, it is unclear how many workshops will be conducted for advisors at community colleges under the objective to implement effective recruitment and enrollment campaign (page 35).

(ii) No weaknesses were noted.

(iii) Absent from the narrative is an explanation of how performance feedback and continuous improvement in the design of the proposed project. It is unclear how the applicant will gather feedback from participants. It is unclear how partnering organizations will provide feedback.

**Reader's Score: 17**

### **Selection Criteria - Quality of the Project Evaluation**

**1. 1) The Secretary considers the quality of the evaluation to be conducted of the proposed project.**

**2) In determining the quality of the evaluation, the Secretary considers:**

**i) The extent to which the methods of evaluation provide valid and reliable performance data on relevant outcomes.**

**Note: In response to this selection factor, applicants are encouraged to include data on student learning.**

**ii) The extent to which the methods of evaluation are thorough, feasible, and appropriate to the goals, objectives, and outcomes of the proposed project.**

**iii) The extent to which the methods of evaluation will provide performance feedback and permit periodic assessment of progress toward achieving intended outcomes.**

**Note: In addressing this criterion, applicants are encouraged to include a plan for how the project s evaluation will address the TQP Grant Program performance measures established by the Department under the Government Performance and Results Act of 1993 (GPRA), as well as the measures established in section 204(a) of the HEA. (The specific performance measures established for the overall TQP Grant Program are discussed under Performance Measures in section VI of this notice.) Further, applicants are encouraged to describe how the applicant s evaluation plan will be designed to collect both output data and outcome data, including benchmarks, to monitor progress. Finally, each applicant is encouraged to select an independent, objective evaluator who has experience in evaluating educational programs and who will play an active role in the design and implementation of the project s evaluation.**

#### **Strengths:**

(i) Methods include the use of valid and reliable performance data on relevant outcomes (pages 44-49). The applicant will compare graduates with a match sample of teachers from a variety of other pathways (page 45). This will enable it to evaluate its effectiveness compared to other programs. This is a valid and reliable performance data.

(ii) The methods of evaluation are included on pages 44-49. These appear thorough to gather relevant data. For example, the applicant will collect the percentage of highly qualified teacher hired by the urban school system (page 47). The applicant will also collect data on such teachers based on if they belong to underrepresented groups (page 47). These methods and other methods cited are appropriate to the goals, objectives and outcomes of the proposed project.

(iii) No strengths were noted.

#### **Weaknesses:**

(i) No weaknesses were noted.

(ii) No weaknesses were noted.

(iii) Absent from the methods of evaluation is a discussion of how the applicant will provide performance feedback and

permit periodic assessment toward progress of achieving outcomes. It is unclear how the applicant will use data collected during the program to make any programmatic changes. It is unclear if the applicant has mechanisms to gather feedback from project participants.

**Reader's Score: 17**

## **Priority Questions**

### **Competitive Preference Priority 1 - Promoting STEM Education**

#### **1. Projects that are designed to address one or both of the following priority areas:**

**a) Increasing the opportunities for high-quality preparation of, or professional development for, teachers or other educators of STEM subjects.**

**b) Increasing the number of individuals from groups traditionally underrepresented in STEM, including minorities, individuals with disabilities, and women, who are teachers or educators of STEM subjects and have increased opportunities for high-quality preparation or professional development.**

**Note: Applicants that respond to Competitive Preference Priority 1 and Absolute Priority 1 are still required to implement the required reforms within the whole teacher preparation program, as reflected in sections (a) and (b) of Absolute Priority 1.**

**In responding to this competitive preference priority, applicants are encouraged to include the following elements in their proposed projects:**

**1) Institutional collaboration to ensure that students in a college of education who intend to teach STEM courses have access to courses that build appropriate content knowledge. Such students should have access to course sequencing that is equal to the course sequencing for other STEM majors outside the college of education.**

**2) Emphasis on hands-on and inquiry-based STEM experiences for prospective teachers, including dedicated research or laboratory experiences, STEM discipline-specific pedagogical instruction, and explicit instruction in the interdisciplinary connections between learning sciences and STEM instruction; and**

**3) Early and multiple field-based instructional experiences for prospective teachers that are structured to provide exposure to a variety of teaching and learning environments, and that are coordinated and aligned with the teacher preparation curriculum.**

#### **Strengths:**

a) The project appears to increase opportunities for high-quality preparation for teachers of STEM subjects. Emphasis is placed on using technology to gain content knowledge. The project involved immersion of STEM.

b) No strengths were noted.

1) No strengths were noted.

2) With the partnership with the science center, teachers will have hands on experience. With the partnership with the school district, teachers will have experience in an urban school district. The applicant makes interdisciplinary connections between learning sciences and STEM instruction

3) With the focus on increasing STEM teachers within an urban school district, the applicant's plan meets this aspect of the competitive preference priority. The partnership fulfills a critical need for teachers the target school district. Support letters are provided from the target high school, target school district, and science center (page 48).

**Weaknesses:**

(b) The applicant does not clearly define how its program will specifically target groups from underrepresented populations. For example, it is unclear if program elements will target women to increase this number in STEM. It is unclear how the program will target minority students.

1) This information is unclear in the narrative. For the most part, the program is housed within the college's school of education. No cross referencing of majors is included in the project.

2) No weaknesses were noted.

3) No weaknesses were noted.

**Reader's Score: 3**

**Competitive Preference Priority 2 - Implementing Academic Standards**

**1. Projects that are designed to support the implementation of internationally benchmarked, college- and career-ready academic standards held in common by multiple States and to improve instruction and learning, including projects in the following priority areas:**

**a) The development or implementation of professional development or preparation programs aligned with those standards.**

**b) Strategies that translate the standards into classroom practice.**

**Strengths:**

This information developed throughout the narrative. The applicant aligns the program with the curriculum within the targeted public schools which in turn have been aligned with common core state standards (pages 18-20). The applicant expands already existing programs by adding a certificate to graduates of the program. Specifically from the past six years, the applicant has worked closely with the local high school for placement of pre-service teachers. It will further build on this program.

**Weaknesses:**

No weaknesses were noted.

**Reader's Score: 2**

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**Status:** Submitted  
**Last Updated:** 08/15/2014 04:09 PM

Status: Submitted

Last Updated: 08/19/2014 11:33 PM

## Technical Review Coversheet

Applicant: Rutgers, the State University (U336S140009)

Reader #3: \*\*\*\*\*

	Points Possible	Points Scored
<b>Questions</b>		
<b>Selection Criteria</b>		
<b>Significance</b>		
1. Significance	15	15
<b>Quality of Project Design</b>		
1. Project Design	45	42
<b>Quality of the Management Plan</b>		
1. Management Plan	20	18
<b>Quality of the Project Evaluation</b>		
1. Project Evaluation	20	16
<b>Priority Questions</b>		
<b>Competitive Preference Priority 1</b>		
<b>Promoting STEM Education</b>		
1. CPP 1	5	3
<b>Competitive Preference Priority 2</b>		
<b>Implementing Academic Standards</b>		
1. CPP 2	2	2
<b>Total</b>	<b>107</b>	<b>96</b>

# Technical Review Form

Panel #5 - 2014 TQP Grant Review - 5: 84.336S

Reader #3: \*\*\*\*\*

Applicant: Rutgers, the State University (U336S140009)

## Questions

### Selection Criteria - Significance

1. 1) The Secretary considers the significance of the proposed project.
  - 2) In determining the significance of the proposed project, the Secretary considers the following factors:
    - i) The extent to which the proposed project is likely to build local capacity to provide, improve, or expand services that address the needs of the target population.
    - ii) The likelihood that the proposed project will result in system change or improvement.
    - iii) The extent to which the proposed project will prepare personnel for fields in which shortages have been demonstrated.

### Strengths:

- i) The applicant has clearly demonstrates proposed project is likely to build local capacity to provide, improve, or expand services that address the needs of the target population. The applicant indicates the proposed project to bring together a high school, a teacher preparation program will create a learning environment which trains pre-service teachers to prepare all of their future students for college and careers in a global, digital society. The applicant states the proposed project will expand the capacity of the proposed partner school district by developing and implementing a new recruitment campaign aimed at high schools and two-year community colleges. (pgs. 2-4)
- ii) The applicant provides a comprehensive description adequately demonstrating the likelihood the proposed project will result in system change or improvement. The applicant proposes to revise existing curriculum to create a new standards-based curriculum, in addition to offering training which will enable educators to effectively diagnose and effectively which may possibly result a systemic changes or improvements within the Newark Public Schools (NPS), the East Side High School (ESHS), and/or the Liberty Science Center (LSC) (pgs. 6-10).
- iii) The extent to which the proposed project will prepare personnel for fields in which shortages have been demonstrated. The applicant indicates the proposed program will lead pre-service teachers through nine courses divided into four clusters designed to build upon a semester of student teaching in Newark Public Schools (NPS). The proposed program is proposing to comprehensively prepare pre-service teachers who are equipped to teach a racially, ethnically, economically, and linguistically diverse student population. Teacher quality will be enhanced in the STEM studies (pgs. 12-13)

### Weaknesses:

- i). None noted.
- ii.) None noted.
- iii) None noted.

## Selection Criteria - Quality of Project Design

### 1. 1) The Secretary considers the quality of the design of the proposed project.

2) In determining the quality of the design of the proposed project, the Secretary considers the extent to which the proposed project consists of a comprehensive plan that includes a description of:

i) The extent to which the proposed project is supported by strong theory (as defined in this notice).

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iii) The extent to which the proposed activities constitute a coherent, sustained program of training in the field.

iv) The extent to which the services to be provided by the proposed project involve the collaboration of appropriate partners for maximizing the effectiveness of project services.

v) The extent to which the applicant demonstrates that it has the resources to operate the project beyond the length of the grant, including a multi-year financial and operating model and accompanying plan; the demonstrated commitment of any partners; evidence of broad support from stakeholders (e.g., State educational agencies, teachers unions) critical to the project's long-term success; or more than one of these types of evidence.

**Note:** In order to address this criterion, applicants are encouraged to develop logic models to demonstrate their project's theory of action. Applicants should connect available evidence of past history of successful outcomes to their logic models. Applicants may use resources such as the Pacific Education Laboratory's Education Logic Model Application ([www.relpacific.mcrel.org/PERR.html](http://www.relpacific.mcrel.org/PERR.html)) or the Northeast and Islands REL Skill Builder Workshops ([www.relnei.org/events/skill-builder-archive.html](http://www.relnei.org/events/skill-builder-archive.html)) to help design their logic models. In addressing this criterion, applicants are also encouraged to connect the project design to the intended impact of the project, including an explanation of how the project will affect the preparation, placement, retention, induction, and professional development of teachers, and ultimately student achievement. Finally, applicants are encouraged to discuss the role and commitment of each partner and how the IHE and LEA(s) plan to sustain their partnership beyond the life of the grant.

#### **Strengths:**

i) The applicant adequately illustrates the proposed project is supported by strong theory, Bricolage and Constructivism. The Bricolage theory provides the framework for considering how to create learning environments for all learners at any development stage or level that promote discovery, exploration, and critical thinking, placing students at the center of instruction (pgs. 14-16)

ii) The applicant provides a comprehensive illustration of proposed training or professional development services to be provided by the proposed project that appear to be of sufficient quality, intensity, and duration to lead to improvements in practice among the recipients of those services. The applicant notes LSC staff members will facilitate STEM training as part of Cluster III courses. LSC will focus on building the confidence of pre-service teachers in their own understanding, training, and support for translating science into a language that is meaningful to learners, and presenting STEM content in engaging, developmentally appropriate ways (pgs. 23-25).

iii) The applicant's logic model provides sufficient evidence illustrating the proposed activities constitute a coherent, sustained program of training in the field. The applicant's proposed activities includes revising the curriculum, offering year long clinical experience, a tSTEM partnership with LSC, and induction program for pre-service teachers, and statewide recruitment efforts (pg. 17)

iv) The applicant clearly notes proposed services to be provided by the proposed project involve the collaboration of appropriate partners for maximizing the effectiveness of project services. The applicant indicates the proposed partners for the purposes of this solicitation are between the Urban Teacher Education Program (UTEP), a division of the Department of Urban Education at Rutgers University-Newark (the applicant), the Newark Public Schools (NPS), East Side High School (ESHS), and the Liberty Science Center (LSC) (pg. 1). Roles are clearly defined for each proposed partner and key staff person. (pgs. 32-43)

v) The applicant sufficiently demonstrates that it has the resources that will be needed to operate the proposed project including a multi-year financial and operating model and accompanying plan; the demonstrated commitment of any partners; evidence of broad support from stakeholders critical to the project's long-term success. The applicant provides a comprehensive budget which illustrates budgets and budget justifications for the proposed curriculum revision and instruction via the UTEP Division as well as the Library Science Center for a five-year grant cycle period. Finally, the applicant is seeking a hardship waiver due to the state's harsh economic climate (pgs. e149-164).

**Weaknesses:**

i) None noted.

ii) None noted.

iii) None noted.

iv)None noted.

v) The application fails to demonstrate a plan to sustain the project beyond funding.

**Reader's Score: 42**

**Selection Criteria - Quality of the Management Plan**

**1. 1) The Secretary considers the quality of the management plan for the proposed project.**

**2) In determining the quality of the management plan for the proposed project, the Secretary considers the following factors:**

**i) The adequacy of the management plan to achieve the objectives of the proposed project on time and within budget, including clearly defined responsibilities, timelines, and milestones for accomplishing project tasks.**

**ii) The qualifications, including relevant training and experience, of key project personnel.**

**iii) The extent to which performance feedback and continuous improvement are integral to the design of the proposed project.**

**Note: In order to address this criterion, applicants are encouraged to include in the application narrative a clear, well thought-out implementation plan that includes annual timelines, key project milestones, and a schedule of activities with sufficient time for developing an adequate implementation plan, as well as a description and qualifications of the personnel who would be responsible for each activity and the level of effort each activity entails. Applicants may also describe how the partnering organizations will communicate and coordinate in order to achieve project goals.**

**Strengths:**

- i) The applicant provides a comprehensive timeline (pgs. 33-32) which illustrates proposed goals, specific partner responsible proposed activities, and an estimated time frame for the completion of those activities.
- ii) The applicant clearly demonstrates the qualifications, including relevant training and experience, of all key project personnel (pgs. 36-43). Experts and mentors will be required to have extensive experience in schools, and in their content area. Bios are provided for NextGen team members (pgs. 37-43), in addition to curriculum vitae and resumes in the Appendices (e79-147).
- iii) The applicant clearly describes performance feedback and continuous improvement efforts which are integral to the design of the proposed project. The applicant states UTEP will create surveys and interview protocols to investigate how graduates are developing and learning during their initial years, their needs, and the quality of the mentoring system. The program also proposed to compare retention rates to other NPS novice teachers from different pathways in order to evaluate the effects of NextGen's induction model on retention (pgs. 46-47).

**Weaknesses:**

- i) The applicant's objectives as described are not quantified. Therefore, it is unclear if the applicant will be able to achieve them within the proposed project period, or how those objectives will be assessed.
- ii) None noted.
- iii) None noted.

**Reader's Score:** 18

**Selection Criteria - Quality of the Project Evaluation**

**1. 1) The Secretary considers the quality of the evaluation to be conducted of the proposed project.**

**2) In determining the quality of the evaluation, the Secretary considers:**

**i) The extent to which the methods of evaluation provide valid and reliable performance data on relevant outcomes.**

**Note: In response to this selection factor, applicants are encouraged to include data on student learning.**

**ii) The extent to which the methods of evaluation are thorough, feasible, and appropriate to the goals, objectives, and outcomes of the proposed project.**

**iii) The extent to which the methods of evaluation will provide performance feedback and permit periodic assessment of progress toward achieving intended outcomes.**

**Note: In addressing this criterion, applicants are encouraged to include a plan for how the project s evaluation will address the TQP Grant Program performance measures established by the Department under the Government Performance and Results Act of 1993 (GPRA), as well as the measures established in section 204(a) of the HEA. (The specific performance measures established for the overall TQP Grant Program are discussed under Performance Measures in section VI of this notice.) Further, applicants are encouraged to describe how the applicant s evaluation plan will be designed to collect both output data and outcome data, including benchmarks, to monitor progress. Finally, each applicant is encouraged to select an independent, objective evaluator who has experience in evaluating educational programs and who will play an active role in the design and implementation of the project s evaluation.**

**Strengths:**

- i) The applicant provides strong evidence of an evaluation plan which will allow for the valid and reliable assessment of performance data on programmatic outcomes. The applicant proposes to assess the effectiveness of its recruitment plan through surveys and questionnaires, by the number of students per year, and by collecting qualitative and quantitative data to identify strengths and areas in need of improvement (pgs. 44-49).
- ii) The applicant clearly proposes sound methods of evaluation which are thorough, feasible, and appropriate to the goals, objectives, and outcomes of the proposed project. The applicant is proposing to develop surveys and interview protocols to investigate how graduates progress during their initial years, their needs, as well as the quality of the mentoring system. The applicant will compare retention rates to other NPS novice teachers from different pathways in order to evaluate the effects of NextGen's induction model on retention (pgs. 45-46). These methods should allow the applicant to adequately and objectively assess the outcomes of the proposed project.

iii) None noted

**Weaknesses:**

i) None noted.

ii) None noted.

iii) The applicant fails to clearly illustrate proposed methods of evaluation which will provide performance feedback and permit periodic assessment of progress toward achieving intended outcomes. The applicant does not describe how data collected during the program period will be disseminated, when it will be disseminated, or provide a corrective action plan/timeline for adverse discoveries during the evaluation process (pgs. 45-49). Without this information it is unclear whether appropriate interventions and corrections will be made in a timely fashion, and/or how progress will be shared with key stakeholders. 4 pts not awarded.

**Reader's Score: 16**

**Priority Questions****Competitive Preference Priority 1 - Promoting STEM Education****1. Projects that are designed to address one or both of the following priority areas:**

**a) Increasing the opportunities for high-quality preparation of, or professional development for, teachers or other educators of STEM subjects.**

**b) Increasing the number of individuals from groups traditionally underrepresented in STEM, including minorities, individuals with disabilities, and women, who are teachers or educators of STEM subjects and have increased opportunities for high-quality preparation or professional development.**

**Note: Applicants that respond to Competitive Preference Priority 1 and Absolute Priority 1 are still required to implement the required reforms within the whole teacher preparation program, as reflected in sections (a) and (b) of Absolute Priority 1.**

**In responding to this competitive preference priority, applicants are encouraged to include the following elements in their proposed projects:**

**1) Institutional collaboration to ensure that students in a college of education who intend to teach STEM courses have access to courses that build appropriate content knowledge. Such students should have access to course sequencing that is equal to the course sequencing for other STEM majors outside the college of education.**

**2) Emphasis on hands-on and inquiry-based STEM experiences for prospective teachers, including**

**dedicated research or laboratory experiences, STEM discipline-specific pedagogical instruction, and explicit instruction in the interdisciplinary connections between learning sciences and STEM instruction; and**

**3) Early and multiple field-based instructional experiences for prospective teachers that are structured to provide exposure to a variety of teaching and learning environments, and that are coordinated and aligned with the teacher preparation curriculum.**

**Strengths:**

a) The applicant's proposed plan clearly illustrates an effort to increase the opportunities for high-quality preparation of, or professional development for, teachers or other educators of STEM subjects. The applicant indicates the proposed effort includes providing content-rich curriculum with literacy at the core, an enriched clinical experience, and support through the first two years of teaching (pgs. 2,9-10, 17-20).

b) None noted.

**Weaknesses:**

a) None noted.

b). The applicant does not provide a specific plan relative to increasing the number of individuals from groups traditionally underrepresented in STEM, including minorities, individuals with disabilities, and women, who are teachers or educators of STEM subjects and have increased opportunities for high-quality preparation or professional development.

**Reader's Score: 3**

**Competitive Preference Priority 2 - Implementing Academic Standards**

**1. Projects that are designed to support the implementation of internationally benchmarked, college- and career-ready academic standards held in common by multiple States and to improve instruction and learning, including projects in the following priority areas:**

**a) The development or implementation of professional development or preparation programs aligned with those standards.**

**b) Strategies that translate the standards into classroom practice.**

**Strengths:**

a) The applicant clearly proposes a project are designed to support the implementation of internationally benchmarked, college- and career-ready academic standards held in common by multiple States and to improve instruction and learning. The applicant indicates the proposed curriculum will be based upon national, state, and district academic and professional standards for teachers. The proposed preparation program is based upon the Chicago Public Schools model of induction for new teachers (pg.18-20)

b) The applicant clearly proposes strategies that translate the standards into classroom practice. The applicant notes prospective teachers will build and execute strategies to provide instruction based on literacy, accommodations and modifications, community and culture, data-driven instruction, differentiated instruction, classroom management and organization, and creating individual growth plans (pg. 20)

**Weaknesses:**

a) None noted.

b) None noted.

**Reader's Score:**     **2**

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**Status:**           Submitted

**Last Updated:**   08/19/2014 11:33 PM