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

Status: Submitted
Last Updated: 07/02/2018 11:45 AM

Technical Review Coversheet

Applicant: Texas A&M University (U423A180074)
Reader #1: **********

		Points Possible	Points Scored
Questions			
Selection Criteria			
Quality of Project Design			
1. Project Design		35	34
Significance			
1. Significance		20	20
Quality of the Management Plan			
1. Management Plan		25	25
Quality of the Project Evaluation			
1. Project Evaluation		20	19
	Sub Total	100	98
Priority Questions			
Competitive Preference Priority			
Promoting STEM Education/Computer Science			
1. CPP1		3	2
	Sub Total	3	2
	Total	103	100

Technical Review Form

Panel #10 - Supporting Effective Educator Development - 10: 84.423A

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

Applicant: Texas A&M University (U423A180074)

Questions

Selection Criteria - Quality of Project Design

1. **The Secretary considers the quality of the design of the proposed project. In determining the quality of the design of the proposed project, the Secretary considers the following factors:**

   (1) The extent to which the proposed project represents an exceptional approach to the priority or priorities established for the competition.

   (2) 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.

   (3) 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.

   (4) The extent to which the services to be provided by the proposed project are focused on those with greatest needs.

   (5) The extent to which the design of the proposed project is appropriate to, and will successfully address, the needs of the target population or other identified needs.

Strengths:

The project contains both face-to-face and virtual methods of instruction, encompassing over 2800 teachers serves both the effectiveness of the project services, but also supports the evaluation with its sampling size. The virtual aspects of delivering professional development are clearly one of many strengths of the project. The goals of the project presented are appropriate for the scope do the design and outcomes (Figure B1, p. e37).

Collaborations with relationships already in existence which includes universities, and school districts (p. e40). The narrative presents curriculum examples, down to the lesson plans that will be used in the professional development (Table B2. P. e38), reflecting quality, intensity and duration.

The project also focuses on the greatest needs as indicated (p. e41) in the area of science and reading, integrating the two in professional development intended to generate highly effective teachers.

Weaknesses:

While the project meets or exceeds the criteria for quality design, it is ambitious to attempt reaching 2800 teachers (p. e26) with support from the districts, it is unclear however, and how the districts will support the virtual professional development.

Reader's Score: **34**

Selection Criteria - Significance

1. **The Secretary considers the significance of the proposed project. In determining the significance of the proposed project, the Secretary considers the following factors:**

   (1) The importance or magnitude of the results or outcomes likely to be attained by the proposed project, especially improvements in teaching and student achievement.

   (2) The extent to which the costs are reasonable in relation to the number of persons to be served and to the anticipated results and benefits.

   (3) The potential for the incorporation of project purposes, activities, or benefits into the ongoing program of the agency or organization at the end of Federal funding.

   (4) The extent to which the results of the proposed project are to be disseminated in ways that will enable others to use the information or strategies.

   Strengths:

   The project focuses on reading and comprehending texts for in service teachers with an emphasis on science. ITSS provides professional development currently in English and Spanish to teacher who serve high poverty diverse schools. The project will expand the program (pages23-25).

   The ITSS program provides text structures in the training modules that have been used in a previous US-DOE-IES grant (p. e24). The project narrative clearly indicates the correlation between the issues surrounding the high needs schools and the proposed project (p. e27).

   The use of the MOOV as a medium to provide the professional development “leverages the best of technologies in support of building teacher and support personnel”(p.e33). Moreover, the technology itself reduces the costs that are associated with face-to-face instruction, also contributing to dissemination and sustainability (p.e34).

   Weaknesses:

   No weaknesses found.

Reader's Score: 20

Selection Criteria - Quality of the Management Plan

1. **The Secretary considers the quality of the management plan for the proposed project. In determining the quality of the management plan for the proposed project, the Secretary considers the following factors:**

   (1) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable.

   (2) 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.

   (3) The adequacy of procedures for ensuring feedback and continuous improvement in the operation of the proposed project.

   Strengths:

   The management plan is well designed and comprehensive down to a table of organization that represents the management structure of the project (p. 50). There is strong support for the platform in which the virtual component will be provided by Problem Solutions, Inc.

   The management plan is clearly and comprehensively presented with personnel associated to role and responsibility (p. e46-48). Dissemination plan has been established with partner districts via the collaborative platform of MOOV (p. e49-50) that will lend itself to feedback and continuous improvement (Table D1, p. e54) with surveys, observations and weekly check-ins.

Weaknesses:

No Weaknesses found.

Reader's Score: 25

Selection Criteria - Quality of the Project Evaluation

1. **The Secretary considers the quality of the evaluation to be conducted of the proposed project. In determining the quality of the evaluation, the Secretary considers the following factors:**

   (1) The extent to which the methods of evaluation will, if well implemented, produce evidence about the project's effectiveness that would meet the WWC standards with or without reservations as described in the WWC Handbook.

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

   (3) The extent to which the methods of evaluation include the use of objective performance measures that are clearly related to the intended outcomes of the project and will produce quantitative and qualitative data to the extent possible.

   (4) The extent to which the methods of evaluation will provide valid and reliable performance data on Relevant Outcomes.

   Note: Applicants may wish to review the following technical assistance resources on evaluation: (1) WWC Procedures and Standards Handbooks: https://ies.ed.gov/ncee/wwc/Handbooks (2) "Technical Assistance Materials for Conducting Rigorous Impact Evaluations": http://ies.ed.gov/ncee/projects/evaluationTA.asp; and (3) IES/NCEE Technical Methods papers: http://ies.ed.gov/ncee/tech_methods/. In addition, applicants may view two optional webinar recordings that were hosted by the Institute of Education Sciences. The first webinar discussed strategies for designing and executing well-designed Quasi-Experimental Design Studies and is available at: http://ies.ed.gov/ncee/wwc/Multimedia.aspx?sid=23. The second webinar focused on more rigorous evaluation designs, discussing strategies for designing and executing studies that meet WWC evidence standards without reservations. This webinar is available at: http://ies.ed.gov/ncee/wwc/Multimedia.aspx?sid=18.

Strengths:

The evaluation provides a design that will provide rigorous evidence meeting WWC standards (p. 31). The formative and summative design and research questions are well thought out and align with the project's goals both in terms of impact on student achievement and research methodology. Milestones and mapped with responsible party and measures which describe the data to be collected in specifically laid out time intervals (p. e53-54).

Table D1 clearly provides for the collection of qualitative and quantitative data, aligned to project milestones which are aligned to the project's outcomes (p. e53-54). Reliability and validity have been established from previous studies (p. e54-55).

Weaknesses:

It is unclear as to whether qualitative data will be collected and analyzed other than coding implementation videos and observations. It appears data directly from teacher participants is missing (Table D1, pages e53-54).

Reader's Score: 19

Priority Questions

Competitive Preference Priority - Promoting STEM Education/Computer Science

1. **Projects designed to improve student achievement or other educational outcomes in one or more of the following areas: Science, technology, engineering, math, or Computer Science. These projects must address the following priority area:**

   Increasing the number of educators adequately prepared to deliver rigorous instruction in STEM fields, including Computer Science, through recruitment, Evidence-Based Professional Development strategies for current STEM educators, or evidence-based retraining strategies for current educators seeking to transition from other subjects to STEM fields.

   Strengths:

   The project will partially focus on science reading comprehension and instruction and teacher use of technology via MOOV.

   Weaknesses:

   It is unclear how the other components of STEM will be addressed

Reader's Score: **2**

Status: Submitted

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Technical Review Coversheet

Applicant: Texas A&M University (U423A180074)
Reader #2: **********

		Points Possible	Points Scored
Questions			
Selection Criteria			
Quality of Project Design			
1. Project Design		35	35
Significance			
1. Significance		20	20
Quality of the Management Plan			
1. Management Plan		25	25
Quality of the Project Evaluation			
1. Project Evaluation		20	19
	Sub Total	100	99
Priority Questions			
Competitive Preference Priority			
Promoting STEM Education/Computer Science			
1. CPP1		3	1
	Sub Total	3	1
	Total	103	100

Technical Review Form

Panel #10 - Supporting Effective Educator Development - 10: 84.423A

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

Applicant: Texas A&M University (U423A180074)

Questions

Selection Criteria - Quality of Project Design

1. **The Secretary considers the quality of the design of the proposed project. In determining the quality of the design of the proposed project, the Secretary considers the following factors:**

   (1) The extent to which the proposed project represents an exceptional approach to the priority or priorities established for the competition.

   (2) 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.

   (3) 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.

   (4) The extent to which the services to be provided by the proposed project are focused on those with greatest needs.

   (5) The extent to which the design of the proposed project is appropriate to, and will successfully address, the needs of the target population or other identified needs.

Strengths:

A virtual approach allows for flexibility in teacher learning and growth as shown on page e38. The plan includes training for teacher, and school leaders through in/out of school time and coaching or co-teaching strategies, as well as open discussion forums, as stated in p. e38. The ability of the proposal to meet students where they are in their learning and move them forward is a strong capability (p. e42).

A team of partners is evident in the approach to the project (p. e39-40). These partners have vast experiences (p. e40). The MOOV platform will be maintained and supported by its developer, Problem Solutions (p. e49).

Research data explains the need for addressing those high-need areas (p. e41). The case for science reading comprehension is also tied to addressing the greatest need (p. e41).

The 5 systematic approaches of the project will address the needs of the target population (p. e42).

Weaknesses:

none

Reader's Score: **35**

Selection Criteria - Significance

1. **The Secretary considers the significance of the proposed project. In determining the significance of the proposed project, the Secretary considers the following factors:**

(1) The importance or magnitude of the results or outcomes likely to be attained by the proposed project, especially improvements in teaching and student achievement.

(2) The extent to which the costs are reasonable in relation to the number of persons to be served and to the anticipated results and benefits.

(3) The potential for the incorporation of project purposes, activities, or benefits into the ongoing program of the agency or organization at the end of Federal funding.

(4) The extent to which the results of the proposed project are to be disseminated in ways that will enable others to use the information or strategies.

Strengths:

Data to identify need is strong (p. e22).

The basis for the ITSS program is identified. The correlation between high needs areas and how MOOV/ITSS address these needs is indicated clearly and match up (p. e27). Sustainability is warranted through continuous learning as outlined on p. e29.

Dissemination includes lessons learned as the future is considered and includes sharing of lessons learned and successes (p. e34).

Cost is in line with the proposed increase of 2800 trained teachers (p. e26) to impact 70,000 students (p. e35).

Weaknesses:

none

Reader's Score: 20

Selection Criteria - Quality of the Management Plan

1. **The Secretary considers the quality of the management plan for the proposed project. In determining the quality of the management plan for the proposed project, the Secretary considers the following factors:**

(1) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable.

(2) 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.

(3) The adequacy of procedures for ensuring feedback and continuous improvement in the operation of the proposed project.

Strengths:

Goals are addressed through a blend of face to face and virtual PD - all to customize learning - these are critical elements for the modern-day teacher (p. e44).

Responsibilities are responsible parties are identified clearly with qualifications stated (p.e47-48).

The management plan includes a detailed management structure outlining the various teams, persons, and clearly outlined activities (p. e50).

The MOOV platform will be maintained and supported by its developer, Problem Solutions (p. e49) which will lead to feedback for continuous improvement according to guidelines and standards.

Weaknesses:

none

Reader's Score: 25

Selection Criteria - Quality of the Project Evaluation

1. **The Secretary considers the quality of the evaluation to be conducted of the proposed project. In determining the quality of the evaluation, the Secretary considers the following factors:**

   (1) The extent to which the methods of evaluation will, if well implemented, produce evidence about the project's effectiveness that would meet the WWC standards with or without reservations as described in the WWC Handbook.

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

   (3) The extent to which the methods of evaluation include the use of objective performance measures that are clearly related to the intended outcomes of the project and will produce quantitative and qualitative data to the extent possible.

   (4) The extent to which the methods of evaluation will provide valid and reliable performance data on Relevant Outcomes.

   Note: Applicants may wish to review the following technical assistance resources on evaluation: (1) WWC Procedures and Standards Handbooks: https://ies.ed.gov/ncee/wwc/Handbooks (2) "Technical Assistance Materials for Conducting Rigorous Impact Evaluations": http://ies.ed.gov/ncee/projects/evaluationTA.asp; and (3) IES/NCEE Technical Methods papers: http://ies.ed.gov/ncee/tech_methods/. In addition, applicants may view two optional webinar recordings that were hosted by the Institute of Education Sciences. The first webinar discussed strategies for designing and executing well-designed Quasi-Experimental Design Studies and is available at: http://ies.ed.gov/ncee/wwc/Multimedia.aspx?sid=23. The second webinar focused on more rigorous evaluation designs, discussing strategies for designing and executing studies that meet WWC evidence standards without reservations. This webinar is available at: http://ies.ed.gov/ncee/wwc/Multimedia.aspx?sid=18.

Strengths:

Clear expectations of the project to meet the WWC standards is evident (p. e51).

Data sources include attendance throughout MOOV implementation, participation, teacher knowledge and video evidence - these will be critical in the gathering of qualitative data (p. e39).

The project allows for a variety of evaluation sources - local and national (p. e51).

Research questions are valid and measurable (e.53-54).

The project allows for Analytica, Inc. – an independent evaluation and research firm to work with the data (p. e51).

Weaknesses:

Qualitative data is not used as effectively as it should be. Videos, observation, and surveys are all good sources of data collection, but how the data is interpreted or analyzed and how they will be incorporated into evaluation is not clearly outlined (p. e39).

Reader's Score: **19**

Priority Questions

Competitive Preference Priority - Promoting STEM Education/Computer Science

1. **Projects designed to improve student achievement or other educational outcomes in one or more of the following areas: Science, technology, engineering, math, or Computer Science. These projects must address the following priority area:**

   Increasing the number of educators adequately prepared to deliver rigorous instruction in STEM fields, including Computer Science, through recruitment, Evidence-Based Professional Development strategies for current STEM educators, or evidence-based retraining strategies for current educators seeking to transition from other subjects to STEM fields.

   Strengths:

   The case for a focus on science reading comprehension to connect literacy and STEM fields is made in the proposal. The tie to computational thinking is also relevant (p. e22).

   Weaknesses:

   In the overall proposal, the tie to STEM is not made clear past the case made for it in the beginning (p. e22). The connection is weak or nonexistent.

Reader's Score: **1**

Status: Submitted
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Status: Submitted
Last Updated: 06/26/2018 11:26 AM

Technical Review Coversheet

Applicant: Texas A&M University (U423A180074)
Reader #3: **********

		Points Possible	Points Scored
Questions			
Selection Criteria			
Quality of Project Design			
1. Project Design		35	31
Significance			
1. Significance		20	20
Quality of the Management Plan			
1. Management Plan		25	22
Quality of the Project Evaluation			
1. Project Evaluation		20	19
	Sub Total	100	92
Priority Questions			
Competitive Preference Priority			
Promoting STEM Education/Computer Science			
1. CPP1		3	2
	Sub Total	3	2
	Total	103	94

Technical Review Form

Panel #10 - Supporting Effective Educator Development - 10: 84.423A

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

Applicant: Texas A&M University (U423A180074)

Questions

Selection Criteria - Quality of Project Design

1. **The Secretary considers the quality of the design of the proposed project. In determining the quality of the design of the proposed project, the Secretary considers the following factors:**

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   (3) 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.

   (4) The extent to which the services to be provided by the proposed project are focused on those with greatest needs.

   (5) The extent to which the design of the proposed project is appropriate to, and will successfully address, the needs of the target population or other identified needs.

Strengths:

The proposal brings together multiple partners with expertise related to science literacy and language acquisition and local school systems with target populations (e49-50).

The applicant describes multiple modalities for interacting with teacher participants (e53) (video, webinars, chat rooms, lesson plans, etc.). This can improve the likelihood of participant participation.

The sequence of requirements identified in Table B3 (e55-56) are targeted to provide increased skills for teacher participants over time.

The PD design (e39-40) appears appropriate and should address the teachers' ability to implement a science curriculum in combination with follow-up activities and access to online resources.

Weaknesses:

The concept of "crowd-sourcing" badges/intellectual credentials (e.g., e37, e46) is not defined sufficiently to assess the utility/significance of this activity, especially as a significant ("National Impact") outcome.

The applicant describes the needs and successful approaches to serving high-needs schools but does not identify how these schools will be selected/recruited for participation in the project (e50-53).

Reader's Score: **31**

Selection Criteria - Significance

1. **The Secretary considers the significance of the proposed project. In determining the significance of the proposed project, the Secretary considers the following factors:**

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   (2) The extent to which the costs are reasonable in relation to the number of persons to be served and to the anticipated results and benefits.

   (3) The potential for the incorporation of project purposes, activities, or benefits into the ongoing program of the agency or organization at the end of Federal funding.

   (4) The extent to which the results of the proposed project are to be disseminated in ways that will enable others to use the information or strategies.

Strengths:

Pages e31-33 present information supportive of the effectiveness of MOOV/ITSS in improving student performance in science. This reinforces the applicant's claim of potential effectiveness for the activities contained in the proposal. This includes WWC review of the applicant's research and a "without reservations" rating.

The proposal targets 2800 teachers (e34) in randomized cluster sample. This size sample should produce data that are statistically significant in determining program impact.

The bulleted list on pages e35 and table on e35-36 demonstrates the potential impact of the project on reading comprehension, science performance, teacher turnover, teacher preparation and support.

The applicant proposes sharing findings through the activities of CUSP at A&M University as well as through research partners (e43).

Weaknesses:

None.

Reader's Score: 20

Selection Criteria - Quality of the Management Plan

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   (2) 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.

   (3) The adequacy of procedures for ensuring feedback and continuous improvement in the operation of the proposed project.

Strengths:

The responsibilities for program implementation in the table on pages e57 show activities of each project member. In combination with the management structure diagram on e61 these provide a picture of the management plan and feedback functions.

The logic model (e47) shows the relationship of project activities to project outcomes in a manner that will provide a

framework for project implementation and interpretation of outcomes.

Weaknesses:

The Table B.1. (e44-46) (goals and objectives) does not adequately define the measures to be used in assessing the "target" outcomes. An example, Goal 1 "Support the development of highly effective teachers". The improving retention objective is targeted at "20%". It is not possible to assess the level of impact of the proposed project without knowing what the baseline level of retention is. Similarly, Goal 2 specifies a target of "50% Spanish speaking English learners…." This describes the schools but not the number of these schools to be served. If 50% ESL and/or FRL is a requirement for school participation, then the number of school recruited/participating should be the target.

Reader's Score: 22

Selection Criteria - Quality of the Project Evaluation

1. **The Secretary considers the quality of the evaluation to be conducted of the proposed project. In determining the quality of the evaluation, the Secretary considers the following factors:**

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   (3) The extent to which the methods of evaluation include the use of objective performance measures that are clearly related to the intended outcomes of the project and will produce quantitative and qualitative data to the extent possible.

   (4) The extent to which the methods of evaluation will provide valid and reliable performance data on Relevant Outcomes.

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Strengths:

The research questions included on pages e63-64 provide a basis for analyzing both the project process and outcomes in an effective manner. In addition, the implementation checklist (e64-65) will enable the researchers to measure implementation fidelity.

The validity and reliability data provided on page e66 will assure that measures used will provide valid data to measure program impact on teachers and students.

The randomized cluster design (e69) to be employed as well as the size of the population to be included in the analysis should produce data that are valid and reliable for interpreting the program's outcomes.

HLM modeling (e71) for the analysis is appropriate for controlling school/teacher effects and providing valid statistical results.

Weaknesses:

The applicants does not collect process evaluation data directly from participants (e66) but rather through observation and survey. The “teacher log” does not specify that it measures teacher opinions or attitudes regarding implementation and the means of interpreting the data provided in them is not specified.

Reader's Score: 19

Priority Questions

Competitive Preference Priority - Promoting STEM Education/Computer Science

1. **Projects designed to improve student achievement or other educational outcomes in one or more of the following areas: Science, technology, engineering, math, or Computer Science. These projects must address the following priority area:**

   Increasing the number of educators adequately prepared to deliver rigorous instruction in STEM fields, including Computer Science, through recruitment, Evidence-Based Professional Development strategies for current STEM educators, or evidence-based retraining strategies for current educators seeking to transition from other subjects to STEM fields.

Strengths:

The applicant targets improved science achievement as an outcome of the study and includes science instruction in the PD design (e74).

Weaknesses:

The applications methodology shows a relationship to improved science test performance in elementary SPED students (e41) in one school. However, this is not a representative sample across all schools and does not include the N necessary to gauge the overall impact of the intervention.

Reader's Score: 2

Status: Submitted
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