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

Technical Review Coversheet

Applicant: The University of Texas at Austin (U423A180139)
Reader #1: **********

		Points Possible	**Points Scored**
Questions			
Selection Criteria			
Quality of Project Design			
1. Project Design		35	35
Significance			
1. Significance		20	18
Quality of the Management Plan			
1. Management Plan		25	21
Quality of the Project Evaluation			
1. Project Evaluation		20	19
	Sub Total	100	93
Priority Questions			
Competitive Preference Priority			
Promoting STEM Education/Computer Science			
1. CPP1		3	3
	Sub Total	3	3
	Total	103	96

Technical Review Form

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

Applicant: The University of Texas at Austin (U423A180139)

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:

   On page 2 or e23, the applicant identifies an effective approach to the UTeach project designed to improve knowledge of teachers in STEM and Computer Science areas using inquiry and project-based strategies.

   Project UTeach includes services on page 8 or e29 that span the duration of the proposed project and are designed to incorporate a variety of learning strategies to foster teacher success.

   The applicant describes on page 17or e38 a partnership between four Higher Ed Institutions, UTeach Institute and American Institute Research, including letters of commitment in the proposal. These partnerships working as a collaborative entity should result in a successful project.

   On page 18 or e39, the applicant provides evidence that the project will focus on those with the greatest needs such as districts identified with underrepresented minorities, workforce locations with insufficient diversification, and STEM teacher shortage areas. Thus, if implemented as proposed, the program will increase the number of diverse teachers well prepared to provide improved instruction in high needs schools.

   Weaknesses:

   There are no weaknesses noted in this section.

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:

   The applicant provides an evidence-based PD model and research theory as a basis to support improvement in teaching and student outcomes on page 21 or e42.

   On page 23 or e44, the applicant focuses on the approximate 28,000 number of student that will benefit from UTeach as justification that the costs are reasonable for this project. As stated, by impacting such a large number of students, the UTeach model for this project is cost effective.

   The applicant proposes on page 24 or e45, existing competitive pricing, current support structures, and potential UTeach program agency adoptions as resources that will remain in the organization beyond the federal funding. The available of these resources helps to guarantee a greater number of candidates prepared to work in high needs areas.

   The applicant proposes white paper publications, conference presentations, and online communication techniques as methods it plans to use to assure dissemination of the project results on page 25 or e46. Since there are multiple methods proposed for dissemination, these methods provide increased opportunities for sharing information with others.

   Weaknesses:

   It is unclear if the ongoing program benefits are sufficient for sustaining the program once the federal funds are no longer available on page 24 or e45.

Reader's Score: 18

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 applicant includes goals, objectives, and outcomes on page 25 or e46 such as hiring qualified STEM Teachers, expanding teacher preparation programs and inquiry-based teaching methods that should ensure student success in Computer Science and STEM because the activities and strategies when implemented, will produce sufficient, qualified teachers providing STEM instruction.

On page 28 or e49, the proposal includes responsible parties and timelines detailing the program components for up to five years. The proposed management plan is well organized to ensure teacher preparation completion, learning and continuous improvement throughout the project period.

The applicant proposes to use available on demand support, focus groups and information sessions in order to ensure feedback as stated on page 32 or e53. All of the proposed methods are effective and will enhance improvement efforts in the project's design model.

Weaknesses:

It is not clear what specific milestones the applicant proposes to use in determining if the proposed tasks have been accomplished on page 25 or e46 since this information is not included in the proposal.

Reader's Score: 21

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

Strengths:

The applicant's proposed cluster randomized control condition method of evaluation should produce evidence of the effectiveness of the project that meets the WWC Standards without reservations on page 33 or e54 through the use of two conditions designed to measure results.

The plan, do, study, act and rapid-cycle tests methods of evaluation are processes that will provide the applicant with several opportunities to assess the progress of the project as stated on page 32 or e53.

On page 34 or e55, the applicant's intent to use multiple data sources including both quantitative and qualitative approaches are objective and related to supporting the intended outcomes of the project.

Based upon the proposed design method as described on page 41 or e58, the performance data should be valid and reliable.

Weaknesses:

It is unclear specifically what qualifications the grant management team will possess as the proposal did not address the areas of expertise for staff.

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's suggested use of an inquiry-based approach on page 2 or e23 and throughout the proposal, is sufficient evidence of promoting STEM and Computer Science instruction in the classroom.

   Weaknesses:

   There are no weaknesses noted in this section.

Reader's Score: 3

Status: Submitted

Last Updated: 07/01/2018 07:58 AM

Technical Review Coversheet

Applicant: The University of Texas at Austin (U423A180139)
Reader #2: **********

		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	24
Quality of the Project Evaluation			
1. Project Evaluation		20	17
	Sub Total	100	95
Priority Questions			
Competitive Preference Priority			
Promoting STEM Education/Computer Science			
1. CPP1		3	3
	Sub Total	3	3
	Total	103	98

Technical Review Form

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

Applicant: The University of Texas at Austin (U423A180139)

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:

   1a. This proposed project meets an exceptional approach to the competition priority of preparing more STEM teachers, especially targeting high need schools. The UTeach preparation program is an evidenced-based model and through SEED funding, this project will expand the UTeach preparation into an alternative preparation program targeted to a population previously not served by UTeach, including STEM degree-holders, career-changes, and returning military (pg. e12).

   1b. The proposal addresses a real policy priority – addressing the teacher shortage issue, especially in the STEM fields – and will also address the invitational priority to create micro-credentials in Computer Science (pg. e22).

   1c. In addition to working on the preparation of more STEM teachers, this proposal also includes the development of a new project based UTeach Computer Science A curriculum and will provide teacher supports and implementation specialists to help teachers with the implementation of this new curriculum (pg. e24).

   1d. In addition to deep supports in preparation, the model includes coaching and induction support (pg. e30).

   2a. The proposal includes evidenced based practices targeting the strategies that will be used for this project. It is built on an existing program – UTeach – that has produced over 4,500 STEM teachers, 70% of who teach in high-need schools (p. e23).

   2b. UTeach's pre-service development approach aligns with research finding significant positive effects on student achievement in student-centered instruction in science (p. e29). The evidence supporting this model is impressive and gave the reader confidence that an alternative preparation approach targeted to career changers with already a strong background in STEM fields would also produce good results.

   3a. The UTeach program already exists at 44 universities. As such, this project has great potential to scale the alternative model to these existing partnerships.

   4a. Tables 1 and 2 on pages e39 and e40 name the partnership districts and show the student demographics to evidence their qualifications as high need districts. In addition to showing the student race and poverty levels, the table also showed the percentage of students enrolled in computer science courses, which was alarmingly low in these partnership LEAs.

   5a. The project will address the targeted population by: 1) increasing the number and diversity of STEM teachers in partnering high need schools; 2) increasing the number of students who enroll in CS coursework; and 3) increase the number of teachers who engage underrepresented students in STEM classes using inquiry and project-based

instructional strategies.

Weaknesses:

1b. The proposal indicates on page e34, that candidates will complete "approximately 40 hours of field teaching over two semesters for their Internship year as teacher of record" (p. e34). This number of hours seemed low, especially for an alternative preparation program in which the focus in primarily on practice.

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:**

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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:

1a. The proposal made a compelling case of showing how the proposed project would show demonstrable results in increasing the number and diversity of STEM teachers for these four regions and high need districts and 2) increasing the number of underrepresented students in the four partnering districts that have access to STEM courses, but especially computer science courses (pg. e40).
2a. The proposal was taking a cost-effective approach to preparing more STEM teachers as well as providing curriculum support in schools. In addition to the cost-effectiveness of this model, the project was offering significant matching funds (more than the federal ask), which showed that the project was based on an already sustainable model (pg. e44).
3a. Nationally, UTeach already has established permanent university programs to increase the STEM teacher production, which is the same structure that could be successfully tapped into by this project, to sustain the post-baccalaureate, alternative education program, if positive results from the model are seen.
3b. The proposal leverages the university infrastructure at U-Texas, Austin and well as partnership universities, which is a sustainable and effective strategy for scale (pg. e44).
4a. The UTeach existing network of 44 participating universities seems a great platform and network in which to start with the distribution of results and lessons learned from this project. The proposal mentions that project staff will also publish white papers describing the lessons learned and successful strategies for recruiting and supporting diverse and underrepresented students into the STEM teaching profession (pg. e46).

Weaknesses:

n/a

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:

   1a. This project includes two clear goals that are listed out in the management section (pgs. e46-e48). The goals include clearly outlined objectives and outcomes that can be achieved by the project. Outcomes are clearly specified and measurable.

   2a. Table 3 on page e49 provided a five-year overview of the project that included a timeline of the activities and who was responsible for both Goal 1 and Goal 2. The timeline and activities for the ongoing monitoring and data collection were included in the evaluation section.

   2b. Project staff have extensive experience with managing large federal grants. The UTeach Institute will tap into existing services and supports that have been developed from other grants (e.g, National Science Foundation grant supported UTeach CS Principles designed to broaden participation among females and underrepresented students in Computer Science). The project includes the allocation of enough staff to adequately manage the project (pg. e52).

   3a. The existing model for UTeach is already built upon a Networked Improvement Community (NIC) that would be utilized to assure that data is regularly collected and provided back to the stakeholders in a continuous improvement feedback loop.

   Weaknesses:

   3a. While the proposal did a nice job of describing the continuous improvement feedback process in the evaluation section, it was not clear on whom would receive the data to make decisions and mid-course corrections. If the data would also be provided to the project staff, this seems to be a missed opportunity to engage the partners with the process for also receiving, reviewing and informing decisions that would impact the formative process of the project based on data collected (pg. e53).

Reader's Score: 24

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:

1a. The evaluation will include a clustered random controlled trail (CRCT) to assess the long-term impacts of the student outcomes from the project as well as a formative, continuous improvement evaluation to provide performance feedback back to the project staff (pg. e54).

2a. The evaluation plan did a nice job of outlining the process for collecting formative data for continuous improvement and included specific research questions tailored toward the continuous improvement evaluation (pg. e60).

2b. In addition to continuous improvement evaluation questions, the evaluation also included research questions tailored for the impact evaluation (pg e59).

3a. The methods of the evaluation include both qualitative and quantitative data methods and are tailored to provide valid and reliable performance data on the outcomes (pg. e55-e56).

Weaknesses:

1a. While the proposal mentioned the evaluation partner, the proposal did not include a list of the staff from AIR that would be involved with the project nor their qualifications with both quantitative and qualitative methods and working with large-scale projects. It would have been helpful to see more information on the number and qualifications of staff that AIR would provide for the evaluation (pg. e54).

2a. The evaluation plan appeared to only measure impact on student outcomes of the CS Principles PD and not for the UTeach alternative preparation program. That the project did not plan to conduct an impact evaluation also on the alternative preparation program was disappointing as it was what seemed to be the major intervention of this project (pg. e59).

Reader's Score: 17

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:

This project addresses the competitive preference priority of preparing more STEM teachers, especially computer science teachers, with a target on recruiting career changes and teachers of color. The project is also focused on recruiting and supporting more underrepresented students in computer science courses and will accomplish this in the four partnering LEAs, of which all have a very low percentage of students currently enrolled in CSS classes (peg. Ewe).

Weaknesses:

N/a

Reader's Score: **3**

Status: Submitted
Last Updated: 06/29/2018 11:46 AM

Technical Review Coversheet

Applicant: The University of Texas at Austin (U423A180139)
Reader #3:   **********

		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	24
Quality of the Project Evaluation			
1. Project Evaluation		20	18
	Sub Total	100	97
Priority Questions			
Competitive Preference Priority			
Promoting STEM Education/Computer Science			
1. CPP1		3	3
	Sub Total	3	3
	Total	103	100

Technical Review Form

Panel #6 - Supporting Effective Educator Development - 6: 84.423A

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

Applicant: The University of Texas at Austin (U423A180139)

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 applicant's project successfully represents an exceptional approach in that 80% of UTeach teachers are still teaching after five years. (p. e23) Additionally, diverse and high-needs students who have had a UTeach teacher have already shown significant gains in math and science. (pp. e25 – e26)
   The Professional Development is clearly of excellent quality, intensity, and duration. UTeach prepares new teachers to not only teach effectively but to also be prepared to teach high-needs students. (p. e 31)
   There are four universities that have a well-established relationship in UTeach and they are all experienced with preparing sorely needed STEM teachers. Also, the partner school districts provided letters of support. (pp. e38 – e39)
   The applicant effectively describes how their project serves students with the greatest needs. Their partner schools possess 69% underrepresented minority students and 53% economically disadvantaged students; only 6% of these students were recently enrolled in CS courses. (pp. e 39 – e40)
   The UTeach program required their teachers to serve at high-needs schools. (p. e40)
   The applicant presents a compelling project that will more than meet the needs of high-needs students. (p. e41)

   Weaknesses:

   No weaknesses noted in this section.

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:

    The applicant presents two project goals that provide compelling evidence that their project outcomes will result in improvements in the STEM teaching force. The UTeach project has already positively impacted the national STEM teacher shortage. (p. e 42 – e43)
    The project costs are not only reasonable but the applicant argues that the strength of their program lies in leveraging the universities infrastructure and that the new program pathways will easily continue in the future. (p. e44)
    The applicant presents a sound and robust dissemination plan that includes: white papers, conference presentations, publications in peer-reviewed journals, and networking with the CS Teachers Association and utilizing their online communications. (p. e36)

    Weaknesses:

    No weaknesses noted in this section.

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 proposed project presents two project goals with appropriate objectives and measurable outcomes. (pp. e46 – e48) They will increase the number of STEM teachers in high-needs schools and will also increase the number of CS teachers in high-needs schools.
    The management presents an all-encompassing plan with activities and appropriate timelines. (pp. e48 – e51)
    Responsibilities were defined and specific. (pp. e48 – e51)
    The applicant displays confidence with large grants and grant budgets. The present a confident plan to reach their project goals on time and within budget primarily due to their experience and huge infrastructure. (pp. e51 – e53)

The proposed project has several impressive plans for purposeful feedback and for continuous improvement. Each of the two goals has its own separate set of feedback plans and continuous improvement plans. Also, the plan specifies regular site visits to the participating schools as well as the collection of data each semester for analysis. (p. e53)

Weaknesses:

Milestones were not explicitly presented within this proposal. The lack of milestones may result in a project veering off course either in program implementation or in budget management. (pp. e46 - e53)

Reader's Score: 24

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:

   In order to monitor performance feedback, the proposed project plans to utilize a Plan, Do, Study, Act (PDSA) approach as well as Rapid Cycle Studies. Both of these approaches view feedback in short intervals and support course corrections before too much time has gone by. (pp. e54 – e55)
   The proposed project implements several objective performance measure that will result in both qualitative and quantitative data. (pp. e55 – e57)
   The applicant presents a detailed plan to provide valid and reliable performance data from the district level all the down to the student level. (pp. e57 – e61)
   The proposed plan will evaluate their project by comparing student outcomes for two groups: teachers who receive the PD intervention and teachers who did not receive the PD interventions. This meets the WWC evidence standards without reservations. (pp. e54 - e58)

   Weaknesses:

   Proposed plan fails to identify who will train the observers. The observers are a key component to the collection of data and their training is a critical piece to project implementation and evaluation.

Reader's Score: 18

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 proposed plan will increase the number of CS teachers in high-needs schools. Additionally, the plan indicates that it will result in the increase of student achievement scores. (p. e56)

   Weaknesses:

   No weaknesses noted in this section.

Reader's Score: 3

Status: Submitted
Last Updated: 07/02/2018 02:51 PM