

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

Status: Submitted

Last Updated: 07/07/2018 04:33 PM

Technical Review Coversheet

Applicant: WestEd (U411A180008)

Reader #1: *****

	Points Possible	Points Scored
Questions		
Selection Criteria		
Significance		
1. Significance	10	9
Strategy to Scale		
1. Strategy to Scale	35	32
Quality of the Project Design and Management Plan		
1. Project Design/Management	35	27
Quality of the Project Evaluation		
1. Project Evaluation	20	0
Total	100	68

Technical Review Form

Panel #1 - EIR Expansion - 1: 84.411A

Reader #1: *****

Applicant: WestEd (U411A180008)

Questions

Selection Criteria - Significance

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

- (1) The magnitude or severity of the problem to be addressed by the proposed project.
- (2) The national significance of the proposed project.
- (3) The extent to which the proposed project represents an exceptional approach to the priority or priorities established for the competition.

Strengths:

Information from research articles about the math abilities of pre-kindergarten students and the lack of math kindergarten readiness was provided in the grant project proposal. The applicant has also referenced factors that impact the lack of kindergarten readiness. These include: student lacking foundational math skills upon entry to kindergarten, large performance gaps in math demonstrated by low socioeconomic status students, costs, and time spent on math instruction (Page 1-2).

A comprehensive description in explaining why their approach is an exceptional approach to the priorities was provided by the applicant. The approach is based on effective past implementation of a similar project with positive results, a plan aligned to appropriate child development, and a strategic outlined process for implementation. The applicant has described their alignment the absolute priorities (strong evidence and STEM focus). The have also provided a detailed explanation of the theory and rational behind their proposed project. This has included a discussion of pre-kindergarten cognitive processing, theories of learning environment conducive to mathematical thinking and instruction, a description of their project design and evaluation processes, descriptions of the components of the intervention, follow-up support processes, and their processes for scaling up the project to a national level (Page 3-12).

Weaknesses:

The applicant has referenced research articles, but provided few specific details about the depth and significance of the issue of lack of math preparation and kindergarten math readiness (Page 1-2).

The applicant has offered few specific details about the national significance of the lack of mathematical readiness in pre-kindergarten students (Page 1-2).

Reader's Score: 9

Selection Criteria - Strategy to Scale

1. In determining the applicant's capacity to scale the proposed project, the Secretary considers the following factors:

- (1) The extent to which the applicant demonstrates there is unmet demand for the process, product, strategy, or practice that will enable the applicant to reach the level of scale that is proposed in the application.

(2) The extent to which the applicant identifies a specific strategy or strategies that address a particular barrier or barriers that prevented the applicant, in the past, from reaching the level of scale that is proposed in the application.

(3) 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 provided a detailed description of the unmet demand (kindergarten mathematics readiness) through its review of two national approaches that were implemented over the past twenty years. These studies were an attempt for teachers to apply strategies in order to improve kindergarten math readiness. They reviewed the change in certification requirements and the QRIS validation studies. Neither had a significant impact. The lack of impact by these past studies and their application of strategies provides an opportunity for this grant project to formally promote a new approach through their grant project to meet the kindergarten readiness need and to scale up a program and project that has demonstrated positive results on a smaller scale (Page 12-15).

The project contains a description of a dissemination plan that focuses on outreach to other potential schools and organizations that might have an interest in the project's programming. These include direct contact with local Head Start and state pre-school programs with follow-up phone calls also included in the process (Page 19).

Key barriers that would impact their scaling process and provided a broad range of solutions were addressed in the grant proposal. The barriers included: a lack of proper teacher preparation, cost, and a lack of consistent manipulatives. The applicant provided solid and achievable strategies to address most of the barriers (i.e. establishment of regional training centers, purchasing manipulatives, coaching, and combining professional development sessions (Page 14-18).

Weaknesses:

Within the grant project proposal, the applicant does not fully articulate how they developed the specific costs for training. In addition, identifying costs and distributing this information still does not fully address the significant issue of cost for the project. Also, their long term strategy of seeking policy change for changing professional development costs would be a challenge in the short term cycle of this grant (Page 14-18).

Reader's Score: 32

Selection Criteria - Quality of the Project Design and Management Plan

1. In determining the quality of the project design, 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.

(4) 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., SEAs, teachers' unions) critical to the project's long-term success; or more than one of these types of evidence.

Strengths:

The applicant has provided goals, objectives, and specific and measurable outcomes for the proposed project. Each of these elements has been clearly described and referenced throughout other elements of the grant project proposal. The goals and objectives address barriers to kindergarten math readiness, availability of resources, and a unique approach to gathering information on different groups of students participating in the grant in order to examine differential impacts and variables among student and teacher sub groups (Page 21-24).

The applicant has presented a narrative management plan. The plan outlines how they will oversee the total project, training processes, implementation monitoring, and quality control monitoring. They provide supporting details for each of these management areas (Page 24-34).

The applicant has referenced a continuous improvement process based on monthly check-ins with administrators (Page 27).

The applicant has presented a financial model and plan that defines their costs to continue the program beyond the scale of the initial grant proposal. Their model can be used by the potential participating organizations to plan for costs (Page 36-38)

The applicant has a demonstrated commitment from research partners and program partners for the grant. The applicant is also an established entity with past experience in implementing large scale grants and other initiatives with appropriate skilled and experienced leadership to lead and guide this grant also. (Page 36-38).

Weaknesses:

Weaknesses:

The applicant has not presented a clear and precise management plan to meet the objectives of the grant project. They have provided a narrative management plan that lacks specific details about milestones, responsibilities, and timelines. In addition, the management plan relies heavily on the ongoing collection and processing of data at all levels throughout the grant process that could inhibit the success of the project if some of the systematic processes fail to be accomplished. The presented plan does not fully articulate how their leadership will be involved in this process and manage and guide the grant project (Page 24-34).

The applicant lacks detailed information on the continuous improvement process that they will integrate into their project. They provide no formal plan or description of this process within the proposal. With a large scale expansion project, this is needed to make ongoing changes and modifications as the grant is implemented (Page 27).

Reader's Score: 27

Selection Criteria - Quality of the Project Evaluation

1. In determining the quality of the project evaluation to be conducted, 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 What Works Clearinghouse standards without reservations as described in the What Works Clearinghouse Handbook (as defined in the NIA).

(2) The extent to which the evaluation will provide guidance about effective strategies suitable for replication or testing in other settings.

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

(4) The extent to which the evaluation plan clearly articulates the key project components, mediators, and outcomes, as well as a measurable threshold for acceptable implementation.

Strengths:

Not Applicable

Weaknesses:

Not Applicable

Reader's Score: 0

Status: Submitted

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Status: Submitted

Last Updated: 07/06/2018 04:09 PM

Technical Review Coversheet

Applicant: WestEd (U411A180008)

Reader #2: *****

	Points Possible	Points Scored
Questions		
Selection Criteria		
Significance		
1. Significance	10	0
Strategy to Scale		
1. Strategy to Scale	35	0
Quality of the Project Design and Management Plan		
1. Project Design/Management	35	0
Quality of the Project Evaluation		
1. Project Evaluation	20	15
Total	100	15

Technical Review Form

Panel #1 - EIR Expansion - 1: 84.411A

Reader #2: *****

Applicant: WestEd (U411A180008)

Questions

Selection Criteria - Significance

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

- (1) The magnitude or severity of the problem to be addressed by the proposed project.
- (2) The national significance of the proposed project.
- (3) The extent to which the proposed project represents an exceptional approach to the priority or priorities established for the competition.

Strengths:

Not applicable

Weaknesses:

Not applicable

Reader's Score: 0

Selection Criteria - Strategy to Scale

1. In determining the applicant's capacity to scale the proposed project, the Secretary considers the following factors:

- (1) The extent to which the applicant demonstrates there is unmet demand for the process, product, strategy, or practice that will enable the applicant to reach the level of scale that is proposed in the application.
- (2) The extent to which the applicant identifies a specific strategy or strategies that address a particular barrier or barriers that prevented the applicant, in the past, from reaching the level of scale that is proposed in the application.
- (3) 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:

Not applicable.

Weaknesses:

Not applicable.

Reader's Score: 0

Selection Criteria - Quality of the Project Design and Management Plan

1. In determining the quality of the project design, 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.
- (4) 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., SEAs, teachers' unions) critical to the project's long-term success; or more than one of these types of evidence.

Strengths:

Not applicable.

Weaknesses:

Not applicable.

Reader's Score: 0

Selection Criteria - Quality of the Project Evaluation

1. In determining the quality of the project evaluation to be conducted, 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 What Works Clearinghouse standards without reservations as described in the What Works Clearinghouse Handbook (as defined in the NIA).
- (2) The extent to which the evaluation will provide guidance about effective strategies suitable for replication or testing in other settings.
- (3) The extent to which the methods of evaluation will provide valid and reliable performance data on relevant outcomes.
- (4) The extent to which the evaluation plan clearly articulates the key project components, mediators, and outcomes, as well as a measurable threshold for acceptable implementation.

Strengths:

The methods of evaluation include the implementation of a cluster randomized controlled trial (RCT) that could produce evidence about the project's effectiveness that meets the What Works Clearinghouse standards without reservations (p. 39). The design is strengthened by plans to implement procedures to address potential threats to internal validity and to monitor attrition (p. 39). The applicant includes power analyses to demonstrate that the number of children and teachers in the sample is sufficient to detect treatment effects (p. e202).

The evaluation will successfully provide guidance about effective strategies suitable for replication or testing in other settings. For example, the applicant will collect implementation and contextual data that identify variables that impact scalability of the intervention (p. 12, 24). Essential features of implementation that should be included in future replications will be evaluated including: teachers' curriculum plans, fidelity of teacher implementation of the intervention, curriculum dosage delivered to children by teachers and parents, progress monitoring, and Pre-K and K math reports linked to the Common Core State Standards for Mathematics (p. 42).

The methods of evaluation will successfully provide valid and reliable performance data on many relevant outcomes. For example, the child, teacher, and classroom measures are clearly specified (p. e201). The child math outcome measures have established validity and reliability psychometrics (p. 43-44).

The evaluation plan clearly articulates the key project components, mediators, and outcomes, as well as a measurable threshold for acceptable implementation. For example, the applicant clearly identifies project components, mediation, and moderation variables as well as child outcomes in its model of causation (p. 8) and research questions (p. 46). The evaluation includes measures the degree of fidelity of implementation and clearly identifies measurable thresholds for the project's five key components (p. 22-23, 47-48).

Weaknesses:

Randomization will occur at the classroom level, in which case there is potential contamination if there are treatment and control teachers at the same school; the applicant states that it will implement procedures to prevent treatment diffusion, but these plans are not specified (p. 39-40). The applicant does not describe how it will ensure that children assigned to each group in Pre-K (treatment or control) continue to be assigned to the same group (treatment or control) in kindergarten (p.4, 22).

It is unclear if the Child Behavior Questionnaire, Early Mathematics Classroom Observation measure, or Pedagogical Content Knowledge Questionnaire will provide valid and reliable performance data on child behavior because validity or reliability psychometrics are not reported (p. 44-45).

Reader's Score: 15

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Technical Review Coversheet

Applicant: WestEd (U411A180008)

Reader #3: *****

	Points Possible	Points Scored
Questions		
Selection Criteria		
Significance		
1. Significance	10	0
Strategy to Scale		
1. Strategy to Scale	35	0
Quality of the Project Design and Management Plan		
1. Project Design/Management	35	0
Quality of the Project Evaluation		
1. Project Evaluation	20	15
Total	100	15

Technical Review Form

Panel #1 - EIR Expansion - 1: 84.411A

Reader #3: *****

Applicant: WestEd (U411A180008)

Questions

Selection Criteria - Significance

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

- (1) The magnitude or severity of the problem to be addressed by the proposed project.
- (2) The national significance of the proposed project.
- (3) The extent to which the proposed project represents an exceptional approach to the priority or priorities established for the competition.

Strengths:

n/a

Weaknesses:

n/a

Reader's Score: 0

Selection Criteria - Strategy to Scale

1. In determining the applicant's capacity to scale the proposed project, the Secretary considers the following factors:

- (1) The extent to which the applicant demonstrates there is unmet demand for the process, product, strategy, or practice that will enable the applicant to reach the level of scale that is proposed in the application.
- (2) The extent to which the applicant identifies a specific strategy or strategies that address a particular barrier or barriers that prevented the applicant, in the past, from reaching the level of scale that is proposed in the application.
- (3) 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:

n/a

Weaknesses:

n/a

Reader's Score: 0

Selection Criteria - Quality of the Project Design and Management Plan

1. In determining the quality of the project design, 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.
- (4) 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., SEAs, teachers' unions) critical to the project's long-term success; or more than one of these types of evidence.

Strengths:

n/a

Weaknesses:

n/a

Reader's Score: 0

Selection Criteria - Quality of the Project Evaluation

1. In determining the quality of the project evaluation to be conducted, 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 What Works Clearinghouse standards without reservations as described in the What Works Clearinghouse Handbook (as defined in the NIA).
- (2) The extent to which the evaluation will provide guidance about effective strategies suitable for replication or testing in other settings.
- (3) The extent to which the methods of evaluation will provide valid and reliable performance data on relevant outcomes.
- (4) The extent to which the evaluation plan clearly articulates the key project components, mediators, and outcomes, as well as a measurable threshold for acceptable implementation.

Strengths:

The two-stage sampling plan is built on a power analysis that will help the sample to mirror the overall population in terms of race/ethnicity and urbanicity (pg. 42). Further, based on previous studies of the program, the evaluation team will offer pro-active methods to reduce attrition of particular classrooms from the study (pg. 31, G34).

The research questions are appropriate and robust for measuring the effects of the program in PreK and cumulatively over time while taking into account moderators of treatment effects (pg. 46-47, G34). Similarly, the proposed outcomes (ECLS-B) and covariates (Pre-test, age, gender, etc.) (pg. g37) are well-conceived and will capture many of the research question concepts.

The depth and breadth of data to be collected by the plan will offer significant evidence about the intervention's effectiveness in various settings, including the detailed Child Math Assessments (pg. 43) and the Pre-K pedagogical content knowledge questionnaire for teachers (pg. 45), whose in-depth content will provide numerous data points for identifying the most effective practices. Additionally, parent feedback (Appendix G, pg. e191) will help researchers

identify how critical the “at-home” dosage of math content is to student success and perhaps develop additional strategies for various home situations.

As one example of an effective strategy for replication or testing in other settings, the matrix of implementation fidelity is impressively developed through multiple measures: the amount of professional development the teacher receives; the teacher’s implementation fidelity; and the dosage of math classroom and home activity (pg. 21, Appendix G, pg. G24, G27-G29). The matrix offers a significant level of detail to pinpoint those practices that strengthen or diminish the intervention’s effect. Besides the inherent evaluative benefit of frequent classroom observations, the planned eight meetings/observations of teachers will provide teachers with the opportunity to offer formative feedback (pg. 30), which can be further used to strengthen the impact of specific issues on implementation in various settings.

The evaluation plan will utilize numerous instruments whose reliability has been established in previous studies, including the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B) math assessment, whose internal consistency is .89 and the reliability of the ECLS Math assessment for kindergarteners is .92 (pg. 43).

The Logic Model on page 8 and the preceding discussion suggest potential moderating and mediating variables, which appear reasonable and appropriate.

The applicant offers implementation thresholds of 90% implementation fidelity and 75% meeting minimum classroom and homework dosage requirements (pg. 22, 47, Appendix G). While very ambitious, based on past results, these thresholds appear achievable.

Weaknesses:

Because of issues of time and cost, the evaluation will employ a two-stage sampling strategy that is not entirely random (pg. 42). Classrooms will be randomized, but treatment and control teachers will be at the same school. The evaluation plan proposes to mitigate the chance of contamination between teacher and control teachers but does not provide more detail. Without a randomized sample, the RCT approach is compromised and may not meet WWC standards without reservation.

Reader's Score: 15

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Status: Submitted

Last Updated: 07/12/2018 01:06 PM

Technical Review Coversheet

Applicant: WestEd (U411A180008)

Reader #4: *****

	Points Possible	Points Scored
Questions		
Selection Criteria		
Significance		
1. Significance	10	9
Strategy to Scale		
1. Strategy to Scale	35	31
Quality of the Project Design and Management Plan		
1. Project Design/Management	35	27
Quality of the Project Evaluation		
1. Project Evaluation	20	0
Total	100	67

Technical Review Form

Panel #1 - EIR Expansion - 1: 84.411A

Reader #4: *****

Applicant: WestEd (U411A180008)

Questions

Selection Criteria - Significance

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

- (1) The magnitude or severity of the problem to be addressed by the proposed project.
- (2) The national significance of the proposed project.
- (3) The extent to which the proposed project represents an exceptional approach to the priority or priorities established for the competition.

Strengths:

WestEd proposes that focusing on the need to implement a Pre-K Mathematics program that will then progress over into Kindergarten for lower income students. The magnitude of the programs was developed out of the lack of a strong mathematics instructional program in PreK and K. The application provided strong statistics to show the gap in low income children's readiness for school in mathematics and the challenge that causes as children matriculate through school and into the workforce. The proposed intervention is significant so that the gap is closed and will not continue to widen among the youngest scholars in America.

As discussed on pages 9-10, the proposed project represents an exceptional approach to the priorities because pre-K programs have not previously focused on mathematics learning using a systematic and intentional approach. The focus will be on training teachers, math lessons and activities in class, progress monitoring and parental engagement. The components of the Pre-K Mathematics project make it an exceptional approach.

Weaknesses:

The national significance of the proposed project was not clearly stated and lacked sufficient evidence.

Reader's Score: 9

Selection Criteria - Strategy to Scale

1. In determining the applicant's capacity to scale the proposed project, the Secretary considers the following factors:

- (1) The extent to which the applicant demonstrates there is unmet demand for the process, product, strategy, or practice that will enable the applicant to reach the level of scale that is proposed in the application.
- (2) The extent to which the applicant identifies a specific strategy or strategies that address a particular barrier or barriers that prevented the applicant, in the past, from reaching the level of scale that is proposed in the application.
- (3) 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 application cites a number of research sources to demonstrate the unmet demand for the strategy of a PreK mathematics program focusing on students of low-income economic status. The research states that American students' math performance is well below and the major challenge is to immediately align instructions starting in lower elementary. To scale this project, they will use the scaling framework from McDonald, Keesler, Kauffman and Schneider (2006). The stages in this scale up require initial study, accumulation of evidence, understanding impact, and then focusing on sifting the effectiveness to the intervention. They will also scale up to include new populations that were not included in prior projects. A thorough implementation plan was provided on page 12 using Coburns framework of four interrelated dimensions of scale.

The proposal presented several barriers that they had already encountered or anticipated. The solutions are thought-out, explained and reflective from training teachers to creating manipulatives for the parent involvement area of their proposal to the concern of cost for startup and curriculum roll out.

The application described two strategies for dissemination of the project findings that they are already doing; to local agencies and programs, email's, website and phone calls. The next strategy would target national and state stakeholders via newsletter, and conferences.

Weaknesses:

The proposed project has limited information on how they will scale the work with teachers and keeping the implementation plan on track.

Reader's Score: 31

Selection Criteria - Quality of the Project Design and Management Plan**1. In determining the quality of the project design, 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.**
- (4) 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., SEAs, teachers' unions) critical to the project's long-term success; or more than one of these types of evidence.**

Strengths:

Table 1 and Appendix G give a nice overview of the approach for management plan and measurable project goals, objectives and outcomes.

The management plan coordinates activities between training of teachers on a local level and then crating the national directors who will check in with LEA's on a monthly basis. The communication structure included in the application shows the flow of meetings, training and dissemination of information.

Weaknesses:

The management plan lacked specific details on milestones and the ongoing collection and processing of data. It is not clear on how leadership is involved in the management process. There is not a lot of depth in the description of the continuous improvement process; ongoing changes and modifications were not articulated.

Reader's Score: 27

Selection Criteria - Quality of the Project Evaluation

1. In determining the quality of the project evaluation to be conducted, 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 What Works Clearinghouse standards without reservations as described in the What Works Clearinghouse Handbook (as defined in the NIA).
- (2) The extent to which the evaluation will provide guidance about effective strategies suitable for replication or testing in other settings.
- (3) The extent to which the methods of evaluation will provide valid and reliable performance data on relevant outcomes.
- (4) The extent to which the evaluation plan clearly articulates the key project components, mediators, and outcomes, as well as a measurable threshold for acceptable implementation.

Strengths:

N/A

Weaknesses:

N/A

Reader's Score: 0

Status: Submitted
Last Updated: 07/12/2018 01:06 PM

Status: Submitted

Last Updated: 07/11/2018 07:05 PM

Technical Review Coversheet

Applicant: WestEd (U411A180008)

Reader #5: *****

	Points Possible	Points Scored
Questions		
Selection Criteria		
Significance		
1. Significance	10	9
Strategy to Scale		
1. Strategy to Scale	35	32
Quality of the Project Design and Management Plan		
1. Project Design/Management	35	30
Quality of the Project Evaluation		
1. Project Evaluation	20	0
Total	100	71

Technical Review Form

Panel #1 - EIR Expansion - 1: 84.411A

Reader #5: *****

Applicant: WestEd (U411A180008)

Questions

Selection Criteria - Significance

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

- (1) The magnitude or severity of the problem to be addressed by the proposed project.
- (2) The national significance of the proposed project.
- (3) The extent to which the proposed project represents an exceptional approach to the priority or priorities established for the competition.

Strengths:

In terms of Significance, the proposal aptly addresses the magnitude of the issue, clearly pointing to the divide in early learners' mathematics' abilities as children move from informal mathematics knowledge (ages 1-3) to formal knowledge (ages 4-6), and how children from lower socio-economic backgrounds often make this transition more slowly. While the proposal focuses on 4 particular geographic areas, children's early mathematics competencies is clearly a national issue facing the U.S., as detailed early within the proposal. The proposed intervention Pre-K Mathematics has been cited by WWC as verifiably effective, and the team builds upon prior efforts in an i3 Validation project, making this reviewer confident that the tools and strategies proposed have demonstrated success behind them.

Weaknesses:

Given its particular focus on a select number of states, the proposal could have addressed the particular mathematics and early childhood development needs of this range of participating states; however, as noted above, early childhood mathematics competencies are clearly a national issue.

Reader's Score: 9

Selection Criteria - Strategy to Scale

1. In determining the applicant's capacity to scale the proposed project, the Secretary considers the following factors:

- (1) The extent to which the applicant demonstrates there is unmet demand for the process, product, strategy, or practice that will enable the applicant to reach the level of scale that is proposed in the application.
- (2) The extent to which the applicant identifies a specific strategy or strategies that address a particular barrier or barriers that prevented the applicant, in the past, from reaching the level of scale that is proposed in the application.
- (3) 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:

In terms of Strengths around the Scale-ability of this proposal, the proposal (1) well identifies the challenges of taking early childhood mathematics interventions to scale, and (2) the uniqueness of its strategy to work with Head Start instructors through the creation of regional training centers (pp.17-18). Content is tiered to the particular entering mathematical capabilities of students (pp. 9-10) and available in multiple languages (English and Spanish). Team recognizes potential barriers to scale and address them, and the dissemination plan is solid in terms of its proposed outreach to academic/ research communities.

Weaknesses:

In terms of Weaknesses around the Scale-ability of this proposal, the dissemination plan (item 3) could have been more detailed on pages 19-20, noting how ongoing findings would inform the particular regions of implementation. Moreover, how are the various areas for implementation communicating with each other, such that what is happening in VA informs what is happening in sites in CA, AZ, and FL, among others? Each of the 4 areas for implementation have unique challenges, and it would have been useful for the proposal to address this as it focuses on the challenges of taking such an intervention to scale.

Reader's Score: 32

Selection Criteria - Quality of the Project Design and Management Plan**1. In determining the quality of the project design, 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.**
- (4) 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., SEAs, teachers' unions) critical to the project's long-term success; or more than one of these types of evidence.**

Strengths:

In terms of the Quality of Project Design & Management, the proposal well identifies the goals/ objectives in terms of (i) removing barriers that impede scaling, (2) to improve low SES children's readiness for elementary school math, and (iii) obtain scientific evidence on whether and why the effectiveness varies among population/ settings (p. 20). It is good that the proposal addressed this third focus (iii), given the range of site implementations. The team is clearly well-qualified to conduct such outreach and evaluation and have the necessary resources to conduct this ambitious program; their procedures for feedback and continued tenuous improvement are clearly identified around each of their goals (p. 24, 27, 30-31).

Weaknesses:

There were two minor weaknesses to the Quality of Project Design & Management. First, given the second goal of improving low SES children's readiness for elementary school math, it would have been helpful to learn the outcomes and measures from their i3 grant here. The team predicts children who participate in the program will score at an average of above average in math on the ECLS-B in pre-K (p. 23). It would have been good to understand where this prediction came from—in other words, the proposal needed to identify past research demonstrating why this could be expected.

Second, simply in terms of connecting goals and objectives to outcomes, this section would have benefited from a table aligning these elements.

Reader's Score: 30

Selection Criteria - Quality of the Project Evaluation

1. In determining the quality of the project evaluation to be conducted, 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 What Works Clearinghouse standards without reservations as described in the What Works Clearinghouse Handbook (as defined in the NIA).

(2) The extent to which the evaluation will provide guidance about effective strategies suitable for replication or testing in other settings.

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

(4) The extent to which the evaluation plan clearly articulates the key project components, mediators, and outcomes, as well as a measurable threshold for acceptable implementation.

Strengths:

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Weaknesses:

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Reader's Score: 0

Status: Submitted

Last Updated: 07/11/2018 07:05 PM