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

Status: Submitted
Last Updated: 08/31/2022 06:33 PM

Technical Review Coversheet

Applicant: American Institutes for Research (S411C220106)
Reader #1: **********

		Points Possible	Points Scored
Questions			
Selection Criteria			
Significance			
1. Significance		20	20
Quality of Project Design			
1. Project Design		30	29
Quality of Project Personnel			
1. Project Personnel		10	7
Quality of the Management Plan			
1. Management Plan		10	10
Quality of the Project Evaluation			
1. Project Evaluation		30	0
	Sub Total	100	66
Priority Questions			
Competitive Preference Priority			
Competitive Preference Priority 1			
1. Promoting Equity		3	3
Competitive Preference Priority 2			
1. COVID-19		3	3
	Sub Total	6	6
	Total	106	72

Technical Review Form

Panel #11 - EIR Early Phase - 11: 84.411C

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

Applicant: American Institutes for Research (S411C220106)

Questions

Selection Criteria - Significance

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

Reader's Score: 20

Sub

1. **The extent to which the proposed project involves the development or demonstration of promising new strategies that build on, or are alternatives to, existing strategies. (20 points)**

Strengths:

The proposed project is promising. For one, it involves the development/ demonstration of promising new strategies which build on existing strategies. The applicant and their partners propose to take a particular set of approaches and extend the work by testing it with more underserved populations, at the middle school level, and with math instruction (e22-29). These approaches are based on a strong foundation of research and have been used successfully in prior projects. The partners propose an impact and implementation study to determine the overall effect of the intervention and the various factors which lead to the desired outcomes (abstract).

The Individualized Math Instruction with The Modern Classrooms (MC) project uses an innovative student-centered instructional model that provides personalized, individually paced, and mastery-based instruction delivered through coordinated physical and digital learning environments (e22). Because the approach has been tested elsewhere it is likely to result in the desired outcomes here in this project.

The Modern Classrooms (MC) instructional model was recognized for its innovation in 2018 with the District of Columbia Public Schools' Excellence in Classroom Innovation Award. One aspect of the MC instructional approach that appears particularly advantageous is that students work individually and at their own pace and teachers provide customized support.

Weaknesses:

No weaknesses noted.

Reader's Score: 20

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:**

Reader's Score: 29

Sub

1. **(1) The extent to which there is a conceptual framework underlying the proposed research or demonstration activities and the quality of that framework. (10 points)**

Strengths:

The conceptual framework underlying these initiatives is very strong. Throughout the narrative, in nearly every description of the project's design features there is research cited to justify the design feature chosen. For example, the MC instructional model includes two promising strategies: personalized learning activities and individually paced learning based on mastery assessment (e25-26). These strategies are explained in detail along with numerous recent research studies which have found positive outcomes from similar strategies. The applicant also provides a detailed description with research explaining how these approaches are an innovative alternative to existing strategies (e29).

The applicant makes a strong case that there is a need for: (1) improved math instruction (2) at the middle school level (3) with underserved students (e23; 29).

They provide an easy-to-understand Logic Model showing the teacher supports, instructional model, and expected teacher and student outcomes (e30; e113).

Weaknesses:

No weaknesses noted.

Reader's Score: 10

2. **(2) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable. (5 points)**

Strengths:

The applicant has provided an excellent set of clearly specified goals, objectives, and outcomes (e30-33). The project's primary goal is to refine and test the MC program; its secondary goal is to gain an understanding for how teachers make use of the training and go on to sustain their learning over time under typical conditions.

Pages e31-32 show three objectives and 17 strategies. The three objectives are explained in sufficient detail in the narrative following the table (e32-33). Each strategy is clearly specified, with one associated outcome and a description for how each will be measured. These measures are aligned to the evaluation plan and consist of traditional, objective approaches to gathering program data.

This is all very well-done and is consistent with the goals of conducting a robust evaluation of the implementation of innovative teaching approaches.

Weaknesses:

No weaknesses noted.

Reader's Score: 5

Sub

3. **(3) 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. (15 points)**

Strengths:

The applicant provides a thorough review of the issues affecting math instruction at the middle school level among underserved students (e23;29). Additionally, they make a strong case that students in high-need schools have less access to effective teaching than do their counterparts in low-poverty schools and that these differences contribute to lower achievement (e33-34). They use many research studies in their rationale.

Following this identification of needs in the target population, the applicant clearly describes how the present initiatives will address those specific needs (e34-35). For example, they describe how individualized instruction has positive effects on achievement, especially for those who might traditionally score low or below grade level.

Weaknesses:

There is one aspect to the design which may not address or be appropriate to the target population: The project relies heavily on video-based instruction. This is a weakness because the applicant has not provided a sufficient rationale for the use (or design features) of the video instruction. Without such a rationale it cannot be determined if middle schoolers will respond well to this non-traditional approach.

Reader's Score: 14

Selection Criteria - Quality of Project Personnel

1. **The Secretary considers the quality of the personnel who will carry out the proposed project. In determining the quality of project personnel, the Secretary considers:**

Reader's Score: 7

Sub

1. **The extent to which the applicant encourages applications for employment from persons who are members of groups that have traditionally been underrepresented based on race, color, national origin, gender, age, or disability. In addition, the Secretary considers the qualifications, including relevant training and experience, of key project personnel. (10 points)**

Strengths:

The applicant addresses the first part of this criterion by stating that their partnership “represents a diverse group of individuals with experience working with communities like those that are the focus of this project” (e35). They also state on page e8 that they will not discriminate against anyone, including members of groups that have been traditionally underrepresented based on race, color, national origin, sex, age, disability, religion, pregnancy, veteran status, or any other basis prohibited by law in their corporate employment and hiring practices. These statements are a fair way of addressing the criterion.

Regarding the second part of the criterion, the partnership represented here shows an overall excellent team of highly qualified, well-trained, and experienced personnel. The resumes for each of the personnel show years of related experience and more than enough expertise for each person’s identified responsibilities.

Sub

Weaknesses:

Even though the applicant has expressed their commitment to equity in their hiring practices, they have not identified any particular strategies which they will use to accomplish these ends. Without such strategies identified it is difficult to determine their commitment to equitable hiring practices.

On page e131, three personnel are to be hired later. Without knowing their job descriptions, it is difficult to determine if these personnel are qualified.

Reader's Score: 7

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, the Secretary considers:**

Reader's Score: 10

Sub

1. **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. (10 points)**

Strengths:

The management plan is more than adequate to help the applicant to achieve their goals on time and within budget. They have taken the three project objectives and 17 strategies (milestones) and plotted them on a timeline, broken down by quarters across the five years (e142-143). This timeline also shows which personnel are responsible for each of the strategies. This is very clear and explains the project timeline well. The timeline has the added benefit of showing the collection and analysis of implementation data to help provide data for continuous feedback and improvement.

To help achieve the delivery of each strategy, the various team members have been assigned to different kinds of teams, such as project management or partnerships (e39). This, combined with the timeline, helps clearly identify which personnel are responsible for which tasks and should help keep deadlines on track.

The budget narrative is well-detailed (e158-170). This level of detail should help the applicant to manage costs adequately and in real-time.

Weaknesses:

No weaknesses noted.

Reader's Score: 10

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:**

Reader's Score: 0

Sub

1. **(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 with or without reservations as described in the What Works Clearinghouse Handbook (as defined in this notice). (20 points)**

   Strengths:

   Weaknesses:

   Reader's Score:

2. **(2) The extent to which the methods of evaluation will provide performance feedback and permit periodic assessment of progress toward achieving intended outcomes. (5 points)**

   Strengths:

   Weaknesses:

   Reader's Score:

3. **(3) 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. (5 points)**

   Strengths:

   Weaknesses:

   Reader's Score:

Priority Questions

Competitive Preference Priority - Competitive Preference Priority 1

1. **Competitive Preference Priority 1:**

   Promoting Equity in Student Access to Educational Resources and Opportunities (up to 3 points).

   Projects designed to promote educational equity and adequacy in resources and opportunity for underserved students in middle school or high school that examine the sources of inequity

and inadequacy and implement responses, including rigorous, engaging, and well-rounded (e.g., that include music and the arts) approaches to learning that are inclusive with regard to race, ethnicity, culture, language, and disability status and prepare students for college, career, and civic life, including one or more of the following:

(a) Student-centered learning models that may leverage technology to address learner variability (e.g., universal design for learning (as defined in this notice), K–12 competency-based education (as defined in this notice), project-based learning, or hybrid/blended learning) and provide high-quality learning content, applications, or tools.

(b) Middle school courses or projects that prepare students to participate in advanced coursework in high school.

(c) Advanced courses and programs, including dual enrollment and early college programs.

(d) Project-based and experiential learning, including service and work-based learning.

(e) High-quality career and technical education courses, pathways, and industry-recognized credentials that are integrated into the curriculum.

Strengths:

The applicant has addressed this criterion in an excellent way. They state that the project focuses on an innovation that addresses the challenges middle school teachers face in providing students with equitable access to educational opportunities in math, while addressing individual learning needs in ways that exemplify CPP1. Specifically, the innovation includes a student-centered instructional model that leverages technology well to provide personalized and individually paced learning activities.

The applicant provides a thorough review of the issues affecting math instruction at the middle school level among underserved students (e23;29). Additionally, they make a strong case that students in high-need schools have less access to effective teaching than do their counterparts in low-poverty schools and that these differences contribute to lower achievement (e33-34). The applicant clearly describes how the present initiatives will address those specific needs (e34-35).

This project is well designed to promote equity among underserved students at the middle school level and will leverage technology. The approaches to learning proposed here are inclusive with regard to race, ethnicity, culture, language, and disability status and are designed to prepare students for success in math.

Weaknesses:

No weaknesses noted.

Reader's Score: 3

Competitive Preference Priority - Competitive Preference Priority 2

1. **Competitive Preference Priority 2:**

Addressing the Impact of COVID-19 on Students, Educators, and Faculty (up to 3 points).

Projects that are designed to address the impacts of the COVID–19 pandemic, including impacts that extend beyond the duration of the pandemic itself, on the students most impacted by the pandemic, with a focus on underserved students and the educators who serve them through:

(a) conducting community asset-mapping and needs assessments that may include an assessment of the extent to which students, including subgroups of students, have become disengaged from learning, including students not participating in in-person or remote instruction, and specific strategies for reengaging and supporting students and their families; and

(b) using evidence-based instructional approaches and supports, such as professional development, coaching, ongoing support for educators, high quality tutoring, expanded access to rigorous coursework and content across K–12, and expanded learning time to accelerate

learning for students in ways that ensure all students have the opportunity to successfully meet challenging academic content standards without contributing to tracking or remedial courses.

Strengths:

The applicant makes the case that the pandemic has threatened the mental health and social well-being of this country's children and youth and has resulted in greater absenteeism (e24). They make the case that the present initiatives will help increase student engagement and thus offset these issues (e24).

The excellent instructional model and teacher supports include features that research suggests could hold promise for improving student learning and engagement. By assessing student needs and offering personalized learning activities responsive to those needs, teachers address differences in prior knowledge in the same classroom, thus reducing the extent to which students are tracked or placed in remedial courses. Moreover, the applicant makes the case that students are more likely to engage with activities that are tailored to their learning needs in classrooms where they feel supported.

The appropriate approaches used here are evidence-based and will utilize teacher professional development to accelerate learning for students in math.

An additional strength is that the applicant will take additional time during early conversations with participating districts to perform extensive needs-sensing to better understand the environments and conditions with which teachers are grappling (e9).

Weaknesses:

No weaknesses noted.

Reader's Score: **3**

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Technical Review Coversheet

Applicant: American Institutes for Research (S411C220106)
Reader #2: **********

		Points Possible	Points Scored
Questions			
Selection Criteria			
Significance			
1. Significance		20	18
Quality of Project Design			
1. Project Design		30	29
Quality of Project Personnel			
1. Project Personnel		10	8
Quality of the Management Plan			
1. Management Plan		10	10
Quality of the Project Evaluation			
1. Project Evaluation		30	0
	Sub Total	100	65
Priority Questions			
Competitive Preference Priority			
Competitive Preference Priority 1			
1. Promoting Equity		3	3
Competitive Preference Priority 2			
1. COVID-19		3	3
	Sub Total	6	6
	Total	106	71

Technical Review Form

Panel #11 - EIR Early Phase - 11: 84.411C

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

Applicant: American Institutes for Research (S411C220106)

Questions

Selection Criteria - Significance

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

Reader's Score: 18

Sub

1. The extent to which the proposed project involves the development or demonstration of promising new strategies that build on, or are alternatives to, existing strategies. (20 points)

Strengths:

1. The proposal addresses the need to "help math teachers in high-need middle schools" provide STEM opportunities for all students with a comprehensive plan for training and supporting teachers in using the "Individualized Math Instruction with The Modern Classrooms Project." The narrative identifies previous awards, achievements, and scalability of the original project, this evidence implies the success of the original program as foundation to future success of the proposed version. This unique documentation of successfully scaling the methodology from eight teachers to 3,000 teachers over three years strengthens the significance of the proposal. (Page e22)
2. The applicant identifies national data demonstrating academic achievement gaps in math that were exacerbated by the COVID-19 pandemic and describes the importance as a "national urgency." As a response, the applicant offers their "student-centered instructional model that leverages technology to provide personalized and individually paced learning activities" as a means of addressing these academic challenges. The strategies offered within the instructional model provide clear research based solutions to the identified challenges, and if successful, a repeatable model to the national community facing similar issues strengthens the proposal. (Page e24)
3. The proposal aims to "assess student needs and offer personalized learning activities responsive to those needs..." allowing “teachers to address differences in prior knowledge in the same classroom." The ability to provide differentiated learning and individual learning plans is a daunting task for classroom teachers, however the proposal establishes the expertise and support within the current infrastructure to aid and support the teachers as they execute the program with their students. (Page e25)

Weaknesses:

1. The proposal lacks an operational definition for the action "take-up." The application establishes significance for the term through continuous usage as a key focus of the project and main objective. Operational definitions are essential to determining the significance of the proposal, and the lack of an operational definition for this term weakens this application and limits the understanding of the specific scope of the project. (Page e32)

Reader's Score: 18

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:**

Reader's Score: 29

Sub

1. **(1) The extent to which there is a conceptual framework underlying the proposed research or demonstration activities and the quality of that framework. (10 points)**

Strengths:

1. The applicant proposes a framework that "includes (a) an evidence-based, student-centered instructional model that leverages technology and (b) evidence-based teacher supports designed to provide equitable access to education for students in high-need schools." Included is a table illustrating four core components (teacher supports, MC instructional model, teachers' instructional practice, student outcomes) supporting the MC Project Program. The narrative and table emphasize the interconnectedness of their program and further includes evidence of research to support the inclusion of each core framework selected. The comprehensive approach and evidence-based support included strengthen the quality of the project framework. (Page e25-30, e33).

Weaknesses:

There are no weaknesses for this criterion.

Reader's Score: 10

2. **(2) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable. (5 points)**

Strengths:

1. The applicant recognizes primary and secondary goals of the proposal "to refine and test the MCP Program" and "to gain an understanding of program “take-up” and sustainability under typical conditions." More clarity is added when these goals are further broken down into objectives, strategies, and outcomes. The proposal organizes these categories and sub-categories in table format, including measures identifying what is being collected during implementation. The proposal is further strengthened with a comprehensive plan to use data collected to "monitor feedback to inform continuous improvement" of their goals. (Page e30, e45)
2. The program documents an intentionality for monitoring implementation and program refinement with two strategies, "(a) routines for generating and using feedback and (b) sequenced cohort structure.” Providing a loop for feedback within the project to make changes immediately or for the consecutive years shows a well thought out plan that encourages iterative reflection and development. (Page e32).
3. The proposal acknowledges that "the primary student outcome for the project evaluation is students' math achievement at the end of the program year as measured by state test scores," and includes a well thought out statistical analysis for setting the target minimum detectable effect size for the students' math achievement. The proposal provides similar analysis for justification of the measures of teacher instructional practice. The inclusion of the statistical explanation of data to be used strengthens the validity of the data to be collected within the proposal. (Page e146-148)

Weaknesses:

1. There are no weaknesses for this criterion

Sub

Reader's Score: 5

3. **(3) 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. (15 points)**

Strengths:

1. The proposal is committed to collecting project data from a variety of sources, including student feedback via student focus groups. Seeking feedback directly from students to gather "students' perspectives of their engagement," strengthens the design project and their commitment to giving a voice to the targeted population. (Page e14)
2. The proposal provides a unique commitment to early communication materials given to parents and includes specific efforts to provide consent materials with "English and Spanish versions (and other languages identified as needed for potential participants)." This is supported within the budget for the certified translation of parent materials. The applicant also states that a "team will conduct outreach in a manner that is both culturally and contextually appropriate. We will take additional time during early conversations with participating districts to perform extensive needs-sensing to better understand the environments and conditions with which teachers are grappling. AIR will use these data to tailor our messaging to potential participants." This support of early communication and early needs assessment demonstrates a comprehensive commitment to the targeted population. (Page e9, e15, e164)
3. The proposal recognizes that "teachers face greater variability in student engagement and learning needs than they did prior to the pandemic " and specifically targets the variability of learning loss of middle school students that have not seen improvement with previous national initiatives. The provided program course companion manual supports the targeted group by emphasizing age-appropriate content and giving recommendations for structure, length, and format and curriculum based on the targeted age. This level of responsive planning to educational needs of the targeted population strengthens the design of proposed MC Project. (Page e23-24, 129-141)

Weaknesses:

1. The proposal uses the standard of having a Title I status as definition for identifying high-needs populations and bases selection for program participation upon that qualification. While qualifying for Title I status is standardized process, the proposal uses that status to imply a commonality of the demographics between schools; however, the provided chart of "Characteristics of Study Districts" shows landscapes that are unique to each district. Specifically, the districts vary significantly (~20%) with regard to populations of English Language Learners and students with disabilities, but the proposal does not address varying strategies for these populations. (Page 145)

Reader's Score: 14

Selection Criteria - Quality of Project Personnel

1. **The Secretary considers the quality of the personnel who will carry out the proposed project. In determining the quality of project personnel, the Secretary considers:**

Reader's Score: 8

Sub

1. **The extent to which the applicant encourages applications for employment from persons who are members of groups that have traditionally been underrepresented based on race, color, national origin, gender, age, or disability. In addition, the Secretary considers the qualifications, including relevant training and experience, of key project personnel. (10**

Sub

points)

Strengths:

1. The applicant provides a GEPA statement acknowledging equitable practices of selecting participating teachers and students within the proposal. The inclusion of this statement demonstrates an effort to take steps to encourage participation from underrepresented groups and strengthens the proposal. (Page e8)
2. The established principal investigator has a diverse and successful background with demonstrated experience and related publications and training. Additional personnel positions and descriptions provide a well thought out plan for how staffing will be used, selected project support personnel are experienced in their field as it applies to the project goals. Emphasis is placed throughout the narrative regarding reducing teacher burdens and those responsibilities are delegated to project staff, such as the school transformation lead who will lead "relationship with districts and school" and "oversee implementation of MCP teacher supports". (Page e37)
3. The proposal includes letters of commitment from potential schools. Each letters acknowledges support of the program, offers assistance with recruiting teachers, and promises to "help implement the program." The support demonstrated within the letters regarding the involvement of the individual schools and teachers within the district add strength to the sustainability of the proposal and the likelihood that the proposal will reach the targeted populations. (Page e121-122)

Weaknesses:

1. The budget table identifies four key personnel positions as TBD; however, the budget narrative does not provide a job description or responsibilities for the four positions. Without having a job description it is hard to know if potential applicants will be qualified for the positions. Additionally, the TBD status make it impossible to determine the quality of the personnel. The combination of an absence of job descriptions/responsibilities and the TBD status weaken the proposal. (Page e159-160)
2. The included GEPA Statement does not acknowledge the hiring practices for selection of the key personnel employed as part of the grant proposal. Additionally, there is no evidence of a system or practice for how the proposal encourages or advertises to candidates to submit an application for employment of the unfilled personnel positions.

Reader's Score: 8

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, the Secretary considers:

Reader's Score: 10

Sub

1. 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. (10 points)

Strengths:

1. The management plan is detailed and aligns with goals and objectives presented in the project design. The proposed management plan includes a clear delineation of responsibilities and explicit timelines of project tasks that will ensure the project is on time and accurately implemented. The comprehensiveness, and the inclusion of all the requirements on the credentialed staff and their responsibilities for implementing the project strengthen the

Sub

proposal. (Page e38 – 40)

Weaknesses:

1. There are no weaknesses associated with this criterion.

Reader's Score: 10

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:

Reader's Score: 0

Sub

1. (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 with or without reservations as described in the What Works Clearinghouse Handbook (as defined in this notice). (20 points)

Strengths:

Weaknesses:

Reader's Score:

2. (2) The extent to which the methods of evaluation will provide performance feedback and permit periodic assessment of progress toward achieving intended outcomes. (5 points)

Strengths:

Weaknesses:

Reader's Score:

3. (3) 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. (5 points)

Strengths:

Sub

Weaknesses:

Reader's Score:

Priority Questions

Competitive Preference Priority - Competitive Preference Priority 1

1. Competitive Preference Priority 1:

Promoting Equity in Student Access to Educational Resources and Opportunities (up to 3 points).

Projects designed to promote educational equity and adequacy in resources and opportunity for underserved students in middle school or high school that examine the sources of inequity and inadequacy and implement responses, including rigorous, engaging, and well-rounded (e.g., that include music and the arts) approaches to learning that are inclusive with regard to race, ethnicity, culture, language, and disability status and prepare students for college, career, and civic life, including one or more of the following:
(a) Student-centered learning models that may leverage technology to address learner variability (e.g., universal design for learning (as defined in this notice), K–12 competency-based education (as defined in this notice), project-based learning, or hybrid/blended learning) and provide high-quality learning content, applications, or tools.
(b) Middle school courses or projects that prepare students to participate in advanced coursework in high school.
(c) Advanced courses and programs, including dual enrollment and early college programs.
(d) Project-based and experiential learning, including service and work-based learning.
(e) High-quality career and technical education courses, pathways, and industry-recognized credentials that are integrated into the curriculum.

Strengths:

1. Middle school students in participating Title I schools will obtain differentiated and individualize learning with their core math content classes. Students will engage in materials using a learning model that leverages technology, such as pre-recorded individualized unit lessons that the students can watch over and over again, and tracked on the teacher's LMS.

Weaknesses:

1. There are no weaknesses associated with this criterion.

Reader's Score: 3

Competitive Preference Priority - Competitive Preference Priority 2

1. Competitive Preference Priority 2:

Addressing the Impact of COVID-19 on Students, Educators, and Faculty (up to 3 points).

Projects that are designed to address the impacts of the COVID–19 pandemic, including impacts that extend beyond the duration of the pandemic itself, on the students most impacted by the pandemic, with a focus on underserved students and the educators who serve them through:
(a) conducting community asset-mapping and needs assessments that may include an assessment of the extent to which students, including subgroups of students, have become

disengaged from learning, including students not participating in in-person or remote instruction, and specific strategies for reengaging and supporting students and their families; and

(b) using evidence-based instructional approaches and supports, such as professional development, coaching, ongoing support for educators, high quality tutoring, expanded access to rigorous coursework and content across K–12, and expanded learning time to accelerate learning for students in ways that ensure all students have the opportunity to successfully meet challenging academic content standards without contributing to tracking or remedial courses.

Strengths:

1. The applicant identifies "pandemic fatigue" as a barrier resulting from the COVID-19 pandemic and offers the solution that a "team will conduct outreach in a manner that is both culturally and contextually appropriate. We will take additional time during early conversations with participating districts to perform extensive needs-sensing to better understand the environments and conditions with which teachers are grappling. AIR will use these data to tailor our messaging to potential participants" These early needs assessments demonstrate a comprehensive commitment to addressing the impact of COVID-19. (Page e9, e15, e164)
2. The proposals uses research based data to inform their decisions and best practices within the project in response to "achievement gaps" exacerbated by the pandemic. The proposal provides well cited and relevant research to support the instructional strategies with the proposal. (Page e23)

Weaknesses:

1. There are no weaknesses associated with this criterion.

Reader's Score: 3

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Status: Submitted
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Technical Review Coversheet

Applicant: American Institutes for Research (S411C220106)
Reader #3: **********

		Points Possible	Points Scored
Questions			
Selection Criteria			
Significance			
1. Significance		20	16
Quality of Project Design			
1. Project Design		30	30
Quality of Project Personnel			
1. Project Personnel		10	8
Quality of the Management Plan			
1. Management Plan		10	10
Quality of the Project Evaluation			
1. Project Evaluation		30	0
	Sub Total	100	64
Priority Questions			
Competitive Preference Priority			
Competitive Preference Priority 1			
1. Promoting Equity		3	3
Competitive Preference Priority 2			
1. COVID-19		3	2
	Sub Total	6	5
	Total	106	69

Technical Review Form

Panel #11 - EIR Early Phase - 11: 84.411C

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

Applicant: American Institutes for Research (S411C220106)

Questions

Selection Criteria - Significance

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

Reader's Score: 16

Sub

1. The extent to which the proposed project involves the development or demonstration of promising new strategies that build on, or are alternatives to, existing strategies. (20 points)

Strengths:

1. This project focuses on grades 6-8 mathematics instruction in three high-needs public school districts. It involves implementing an evidence-based, student-centered instructional model, leveraging the use of technology to provide personalized, individually-paced instruction. The approach described has great potential to meet students where they are in regard to their learning needs. As we emerge from the pandemic, concern has been expressed about “learning loss” as more variation in student knowledge, understanding, and readiness to learn exists within classrooms. Effective personalized approaches are helpful in providing learning experiences that help all students continue to learn and grow, which is a challenge in traditional classroom settings when large gaps in knowledge and understanding exist (e18,23).
2. In 2018, the model the study is based upon was recognized with the District of Columbia Public Schools’ Excellence in Classroom Innovation Award. In 2018, eight teachers were trained and supported in use of the model. By 2021, this expanded to serve nearly 3,000 teachers. This indicates a high-level of interest and buy-in over a relatively short period of time, pointing to the likihood of continued interest and support during the applicant’s study (e22).
3. The applicant focuses on interventions with teachers focused on student engagement, learning needs, social emotional competencies, and opportunities later in life, recognizing the important role teachers play in student outcomes. The proposed activities will support teachers in acquiring new, innovative, evidence-based approaches to meet the needs of students in the presence of the large learning gaps that exist within classrooms post-pandemic (e24).
4. The model coordinates physical and digital learning environments with progress monitoring and feedback to support individual student learning paths. Students review instructional videos on their learning paths and receive personalized tutoring from their teacher as they work through lesson activities. This blending of physical and digital environments is beneficial in providing students flexibility in learning with an opportunity to revisit lesson content to support the unique learning needs of individual students (e26).
5. The proposed strategy involves students moving on to new topics once mastery has been demonstrated through assessment with checks “woven into the learning process.” The short assessments to be implemented with teacher support and guidance will serve as an effective prompt for students to revisit lesson materials, collaborate with peers, or work with the teacher.

Sub

Weaknesses:

1. The applicant proposes, “Students are encouraged to rewatch the videos until they understand the material, request support from the teacher when needed, and track their progress.” Watching videos with repetition that show algorithmic processes may be helpful in the event that steps are missed in a process or to provide clarification. However, when students do not understand video content, they typically do not want to watch the video again. If students are not performing well, they may not be motivated to request support from the teacher or track their own progress (e26).
2. It is unclear how students who get stuck on a particular lesson topic and are unable to meet success proceed in the program. A lack of success deflates student motivation and can serve as a barrier to student engagement.

Reader's Score: 16

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:

Reader's Score: 30

Sub

1. (1) The extent to which there is a conceptual framework underlying the proposed research or demonstration activities and the quality of that framework. (10 points)

Strengths:

1. The applicant is proactive in proposing solutions to barriers that have potential to negatively impact the success of the proposed interventions (e8-9).
   a. The applicant recognizes that while it may be narrowing, the digital divides exists and may impact the project. The applicant plans to work directly with districts to develop plans to purchase and provide equipment where needed. Training will be provided to assist participants with skill development. Recruitment materials will include information about the optional training as well to ensure that participants have access to and basic proficiency with technology.
   b. The applicant also recognizes the impact of pandemic fatigue on educators and the potential struggle with desire of teachers to learn something new. The applicant plans to conduct “needs-sensing” interactions to better understand the issues teachers are facing. The efforts to be employed may prove helpful in increasing the efficiency and effectiveness of math instruction while not adding stress to the typical teaching day.
2. The applicant has plans to include treatment and control teachers in Impact Cohorts 1 and 2. The use of control groups is an effective strategy for evaluating the impact of interventions within school environments given the vast differences that may exist between participating locations in the study (e13).
3. The applicant has developed a considerate and effective plan for providing the opportunity for the same interventions applied with the training group to be provided to the control group teachers the year following participation in the control group (e13).
4. The applicant has a well-developed plan for disseminating information about the study and its associated risks and benefits. Materials to be developed include:
   a. brochures
   b. letters requesting support from families for student participation
   c. consent forms for teachers, parents, and guardians; and
   d. questions and answers for both staff and families.

The applicant plans to make these materials available in both English and Spanish (e15).

Sub

6. The proposal includes an initial small, eight teacher pilot group in year one, followed by two implementation groups in years two and three. This structure paired with the gathering of feedback from study participants supports continuous improvement. Data gathered from cohorts will inform modifications made in the iterations developed as the study progresses (e23).
7. Lesson activities are delivered through the participating schools' LMS, allowing for students and teachers to engage in the study using a familiar platform for digital resource sharing, organization, and interactions (e28).
8. It is evident that the applicant has a well-developed plan to support the professional learning needs of teachers. Participating teachers will engage in a four-week, mostly virtual, summer institute that is primarily self-paced and asynchronous. Portfolio exercises with the support of a mentor will be used to develop lessons and tools for instruction. Each teacher will have a minimum of three individualized mentor consultations, six district discussion sessions with project staff, and two site visits which will include observation and debriefing with teachers. Online resources will also be available, which include exemplar units (p. 7, e28).
9. In Exhibit 2, the applicant provides a clear diagram of the supports provided to teachers, the basic components of the model, and outcomes regarding both teachers' instructional practice and student outcomes, clearly delineating proposed inputs and anticipated outcomes (p. 9, e30).
10. District administrators, serving 3 districts and 38 high-needs middle schools collectively, will be involved as points of contact for scheduling recruitment meetings, planning for implementation, discussing project progress, and addressing challenges. Inclusion of the district leaders in this manner helps to ensure the district-level support that is essential for programmatic success (p. 19, e40).

Weaknesses:

None noted.

Reader's Score: 10

2. (2) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable. (5 points)

Strengths:

1. The applicant clearly defines its primary and secondary goals as follows:
   a. to refine and test the Modern Classrooms Project (MCP) Program; and
   b. to gain an understanding of program "take-up" and sustainability under typical conditions.
2. The proposal includes 3 objectives which are clearly identified and well-aligned to project activities. Several specific strategies are provided under each objective, supporting outcomes and measures for each strategy in Exhibit 3. The three objectives focus on implementation and revision of the program, assessing the program impact, and providing feedback on take-up and sustainability (p. 10, e31).
3. Exhibit J.6.1 outlines a thorough plan for evaluating instructional practices. The plan includes academic progress monitoring to analyze the impact of teaching adjustments on student acheivement and academic progress. The sequenced cohort structure, paired with this thorough monitoring plan sets the stage for continuous improvement throughtout the grant term (e148).

Weaknesses:

None noted.

Reader's Score: 5

3. (3) 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. (15 points)

Sub

Strengths:

1. The proposed activities hold promise in addressing differences in math achievement and engagement within the underserved grades 6-8 math student population in high-needs schools. Gaps that existed pre-pandemic have not only persisted--they have been exacerbated by the COVID-19 pandemic. This proposal has potential to narrow those gaps by training teachers in the application of evidence-based, student-centered instruction that leverages technology use to individualize learning for students and monitor their progress over time (p. 12, e33).
2. The project activities address mastery of learning in math, which is important in that the development of new skills in math, which often requires mastery of a prerequisite skill for mastery of new skills to be possible. By meeting students where they are with a student-paced platform that addresses learning gaps, more students will be able to advance in mathematics, a course which is a common barrier to high school graduation for students in high-poverty districts (p.13, e34).
3. The tutoring interactions of teachers with students are likely to foster student motivation as teachers will interact on a more personal level with students. This in turn helps create a sense of belonging for students in their mathematics classrooms (p. 14, e35).

Weaknesses:

None noted.

Reader's Score: 15

Selection Criteria - Quality of Project Personnel

1. The Secretary considers the quality of the personnel who will carry out the proposed project. In determining the quality of project personnel, the Secretary considers:

Reader's Score: 8

Sub

1. The extent to which the applicant encourages applications for employment from persons who are members of groups that have traditionally been underrepresented based on race, color, national origin, gender, age, or disability. In addition, the Secretary considers the qualifications, including relevant training and experience, of key project personnel. (10 points)

Strengths:

1. The team leading the proposed activities includes a diverse group of individuals with experience working with communities like those included in the project. All members identified have extensive experience in project implementation, programmatic design, educational research, mathematics teaching and learning, and evaluation (p. 14-16, e35-38).
2. An organizational chart is provided in Exhibit 4, which clearly identifies those responsible as members of implementation “teams.” The leadership teams include: Project Management; Evaluation; and Advising and Quality Assurance teams. The implementation teams include Modern Classroom Project (MCP) and School Districts, with roles named and arrows between the various groups to indicate the interactions involved in the project (p. 18, e39).
3. The applicant has a track record of success in coordinating and implementing related projects (p. 19, e40).
4. The MCP program has been implemented since 2016, and includes a continuous improvement process that is in place for gathering feedback and implementing refinements, providing a helpful starting point for the implementation of this project.
5. The applicant’s personnel manual includes Section 1.1, a non-discrimination policy, which provides evidence of a prioritization of a work environment and actions that support and value diversity. In the policy, the

Sub

applicant states that it will “not discriminate against anyone, including members of groups that have been traditionally underrepresented based on race, color, national origin, sex, age, disability, religion, pregnancy, veteran status, or any other basis prohibited by law in their corporate employment and hiring practices” (e8).

Weaknesses:

While the applicant indicates that the project staff is a diverse group of individuals and that the applicant “will not discriminate against anyone, including members of groups that have been traditionally underrepresented based on race, color, national origin, sex, age, disability, religion, pregnancy, veteran status, or any other basis prohibited by law in their corporate employment and hiring practices,” the diverse nature of the individuals identified is not clear, nor is there any mention of hiring or recruitment practices that reflect the encouragement of the involvement of those who are members of underrepresented groups (e8).

Reader's Score: 8

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, the Secretary considers:**

Reader's Score: 10

Sub

1. **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. (10 points)**

Strengths:

1. The organizational chart provided in Exhibit 4 clearly identifies responsibilities for project activities. The flow-chart structure (with names of associated staff included), makes it easy to understand the chain of command and responsibilities associated with project activities. The applicant has a strong structure in place which will serve to support project success (p. 18, e39).
2. The objectives, strategies, outcomes, and measures included in Exhibit 3 provide a clear structure that identifies all project activities as they support the applicant’s objectives. This chart provides thorough project details, making it easy to understand what the applicant is setting out do accomplish and the measures used to evaluate related success (p. 10, e31).
3. A detailed timeline chart is provided in Appendix J.2, which expands upon the objectives table provided in Exhibit 3. The timeline chart indicates by year and quarter the strategies to be completed and where appropriate, the group responsible. This tool is a helpful visual tool for tracking the implementation of proposed strategies over the term of the grant (p. 142).
4. The Budget Narrative clearly identifies expenditures in alignment with and is appropriate for supporting the proposed activities. The information contained in the narrative breaks down project costs covered by grant funds (including hourly rates for project staff) and [redacted]

Weaknesses:

None noted.

Sub

Reader's Score: 10

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:**

Reader's Score: 0

Sub

1. **(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 with or without reservations as described in the What Works Clearinghouse Handbook (as defined in this notice). (20 points)**

Strengths:

Weaknesses:

Reader's Score:

2. **(2) The extent to which the methods of evaluation will provide performance feedback and permit periodic assessment of progress toward achieving intended outcomes. (5 points)**

Strengths:

Weaknesses:

Reader's Score:

3. **(3) 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. (5 points)**

Strengths:

Weaknesses:

Reader's Score:

Priority Questions

Competitive Preference Priority - Competitive Preference Priority 1

1. **Competitive Preference Priority 1:**

Promoting Equity in Student Access to Educational Resources and Opportunities (up to 3 points).

Projects designed to promote educational equity and adequacy in resources and opportunity for underserved students in middle school or high school that examine the sources of inequity and inadequacy and implement responses, including rigorous, engaging, and well-rounded (e.g., that include music and the arts) approaches to learning that are inclusive with regard to race, ethnicity, culture, language, and disability status and prepare students for college, career, and civic life, including one or more of the following:

(a) Student-centered learning models that may leverage technology to address learner variability (e.g., universal design for learning (as defined in this notice), K–12 competency-based education (as defined in this notice), project-based learning, or hybrid/blended learning) and provide high-quality learning content, applications, or tools.

(b) Middle school courses or projects that prepare students to participate in advanced coursework in high school.

(c) Advanced courses and programs, including dual enrollment and early college programs.

(d) Project-based and experiential learning, including service and work-based learning.

(e) High-quality career and technical education courses, pathways, and industry-recognized credentials that are integrated into the curriculum.

Strengths:

1. The proposal serves three high-needs, low-income districts in grades 6-8 mathematics. Mathematics achievement is a common barrier to advanced coursework in high school, graduation, employment, and access to post-secondary learning.
2. The proposal includes a student-centered learning model that leverages technology to personalize learning and narrow learning gaps. Educators will be trained in effective personalized approaches through learning experiences that help all students continue to learn and grow along a learning pathway that meets the needs of individual students (e18, 23).

Weaknesses:

None noted.

Reader's Score: 3

Competitive Preference Priority - Competitive Preference Priority 2

1. **Competitive Preference Priority 2:**

Addressing the Impact of COVID-19 on Students, Educators, and Faculty (up to 3 points).

Projects that are designed to address the impacts of the COVID–19 pandemic, including impacts that extend beyond the duration of the pandemic itself, on the students most impacted by the pandemic, with a focus on underserved students and the educators who serve them through:

(a) conducting community asset-mapping and needs assessments that may include an assessment of the extent to which students, including subgroups of students, have become disengaged from learning, including students not participating in in-person or remote instruction, and specific strategies for reengaging and supporting students and their families; and

(b) using evidence-based instructional approaches and supports, such as professional development, coaching, ongoing support for educators, high quality tutoring, expanded access to rigorous coursework and content across K–12, and expanded learning time to accelerate

learning for students in ways that ensure all students have the opportunity to successfully meet challenging academic content standards without contributing to tracking or remedial courses.

Strengths:

1. The applicant plans to work with districts and their teachers in the early stages of implementation, taking additional time for “needs-sensing” conversations. These conversations should help project staff better understand the environments, conditions, and needs related to the project and proposed activities (e9).
2. The applicant proposes a strategy, involving meeting student needs through an evidence-based, personalized approach to learning, that holds promise in narrowing the learning gaps in mathematics that widened as a result of pandemic-related conditions (pp. 2,12, e23,33).
3. The activities proposed develop a learning structure that creates a structure for individualized student support that is likely to prove helpful in keeping students motivated and engaged (e25).
4. The proposed instructional model may help move teachers out of “pandemic fatigue” as they will be trained to deliver more efficient and effective instruction and support interventions to students. Narrowing learning gaps through accelerated mastery of foundational math skills will reduce teacher stress levels (e9).

Weaknesses:

While “needs-sensing” through conversations with districts will certainly be helpful to the project, the project would benefit from a more detailed analysis of the needs using performance data, teacher and student interviews, or other available local data that can inform the project in each of the districts involved. While there are certain global impacts of the pandemic, there are significant variations based on geographic location and capacity of districts to adapt to the challenges faced when schools closed.

Reader's Score: **2**

Status: Submitted
Last Updated: 09/01/2022 02:56 PM

Status: Submitted
Last Updated: 10/10/2022 09:41 PM

Technical Review Coversheet

Applicant: American Institutes for Research (S411C220106)
Reader #1: **********

		Points Possible	Points Scored
Questions			
Selection Criteria			
Quality of the Project Evaluation			
1. Project Evaluation		30	30
	Total	30	30

Technical Review Form

Panel #1 - EIR Tier 2 - 1: 84.411C

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

Applicant: American Institutes for Research (S411C220106)

Questions

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:**

Reader's Score: **30**

Sub

1. **(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 with or without reservations as described in the What Works Clearinghouse Handbook (as defined in this notice). (20 points)**

Strengths:

The proposed project design meets the What Works Clearinghouse (WWC) Group Design Standards with Reservation because the blocked cluster random control trial (RCT) will include students as joiners to the classrooms of teachers who were randomly assigned to treatment and control groups prior to the school year of treatment implementation (pp. e41-43). Participating schools will be requested to place students in classrooms as they normally would minimizing the potential for bias risk on the intervention outcome meeting WWC standards (p. e43). A sample size of 128 teachers, including 8 in a pilot study, and 120 teachers in two additional cohorts, and 10,600 students in the classrooms of 106 teachers (assuming 12% attrition), each teaching five sections of math with 20 students per section (pp. e13-14). A power analysis was conducted to determine the minimum number of teachers needed for sufficient statistical power to identify the project's impact on the primary outcome for students' math achievement, resulting in a .10 target minimal detectable effect size (p. e42, pp. e146-147). The project proposes to use the fixed-effect model to estimate the impact of teacher random assignment to the treatment condition on student outcomes, which is an acceptable WWC statistical adjustment (pp. e149-151). Standardized state test scores measuring students' math achievement are proposed as the primary student outcome for the project evaluation plan, which are considered valid and reliable by WWC standards (p. e43). Two aspects of teacher practice that the project's instructional model is expected to affect include (a) instructional adaptations based on student learning needs and (b) academic progress monitoring, which will be measured using two existing survey scales meeting WWC standards for reliability (p. e148). The American Institute for Research (AIR) will be the independent evaluator, through a unit separate from the project team, that has experience evaluating four similar projects meeting the WWC guidelines for outcome collection (pp. e37-40, p. e144). To avoid the possibility of within school contamination, internal validity is expected to be maintained because all project training, supports, staff, and mentors will target only individual treatment teachers within participation schools making it unlikely that control group teachers will adopt and implement the project instructional model on their own aligning with WWC standards for causal validity (p. e42).

Weaknesses:

No weaknesses detected.

Sub

Reader's Score: 20

2. (2) The extent to which the methods of evaluation will provide performance feedback and permit periodic assessment of progress toward achieving intended outcomes. (5 points)

Strengths:

The evaluation plan proposes to monitor project implementation using routines for generating and using feedback to plan and make program improvements and maintaining a structured cohort approach (p. e32). Feedback will be collected from a variety of instruments including administrative data, surveys, logs, focus groups, and interviews with teachers, as well as student focus groups to monitor and assess program implementation and needed refinements (p. e44, pp, e142-143). The frequency of periodic assessment towards anticipated outcomes is described on the Project Timeline Table and the Details About Implementation Data Collection Table illustrating a schedule that includes monthly, quarterly, bi-annual, and annual cycles and responsibilities (pp. e142-143, pp. e155-156).

Weaknesses:

No weaknesses detected.

Reader's Score: 5

3. (3) 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. (5 points)

Strengths:

The key project components of goals, objectives, and outcomes, management plan, quality of project personnel, and evaluation plan (pp. e31-32, pp. e35-40, pp. e 40-47) are aligned with the project timeline (pp. e142-143), and Logic Model (p. e113) demonstrating the potential for acceptable implementation. The project mediators are described related to teacher instructional practice adaptations based on student learning needs and academic progress monitoring (pp e152-153). The fidelity thresholds will be finalized using data from the pilot cohort for the implementation of impact cohorts in years two to five (pp. e45-46). Teacher practice outcomes will be further analyzed using a Random-Effects Approach to ensure the treatment effect will be estimated based on treatment-control comparisons within schools and a precision-weighted average will be applied to detect within-school treatment effect combined across all schools to capture the level in which the school-specific treatment effect differs across participating schools (p. e151).

Weaknesses:

No weaknesses detected.

Reader's Score: 5

Status: Submitted
Last Updated: 10/10/2022 09:41 PM

Status: Submitted
Last Updated: 10/10/2022 06:06 PM

Technical Review Coversheet

Applicant: American Institutes for Research (S411C220106)
Reader #2: **********

		Points Possible	Points Scored
Questions			
Selection Criteria			
Quality of the Project Evaluation			
1. Project Evaluation		30	27
	Total	30	27

Technical Review Form

Panel #1 - EIR Tier 2 - 1: 84.411C

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

Applicant: American Institutes for Research (S411C220106)

Questions

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:**

Reader's Score: **27**

Sub

1. **(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 with or without reservations as described in the What Works Clearinghouse Handbook (as defined in this notice). (20 points)**

Strengths:

The evaluation design is a blocked cluster randomized control trial at the teacher level (p. e41), with the possibility of students joining the sample after group assignment (p. e43), which can produce evidence that meets What Works Clearinghouse (WWC) standards with reservations.

Baseline equivalence of treatment and control groups, based on students' prior achievement and background characteristics (p. e43) will be measured and included as covariates in the analyses. Further, any student joiners to the study are equally likely to be placed into treatment or comparison classrooms (i.e., schools are asked to roster students in the usual way regardless of teachers' assignment to group in this study, p. e43). An analysis plan for missing data is included (p. e153 – e154). All of these together mitigate the risk of bias due to group differences other than participation in the intervention and so maintain the likelihood of generating evidence that will meet WWC standards.

The evaluation questions (pp. e40-e41) are appropriate and aligned with proposed analyses, so the design can produce evidence that meets WWC standards.

There is consideration given to the possibility of treatment "creep" (or "contamination") into the comparison group, and the justifications for why this is not a grave concern in this project is reasonable (p. e42).

The minimum detectable effect size that this sample (120 teachers, p. e41) is powered to detect is 0.10 (p. e42), therefore the study is appropriately powered to generate evidence that will meet WWC standards.

The quantitative measures to be used in the evaluation (pp. e42 – e43) are published, valid, and reliable scales, so the data gathered by them can support evidence that meets WWC standards.

Weaknesses:

The evaluation team is from the applicant organization (e.g., p. e37 & e39), suggesting at least perceived alignment of interests between the applicants and the evaluators in program success. If such an alignment exists, there is a

small risk of not maintaining a rigorous and independent evaluation process that is likely to generate evidence that meets the WWC standards.

Although the study is powered to allow an attrition rate of 12%, this is less than the 2011-12 national average of 14.8% (p. e147). Given increased employee turnover in the last 2 years (in education as in many sectors), attrition may exceed 12% and the study will be underpowered to detect effects of the stated 0.10.

Reader's Score: 17

2. **(2) The extent to which the methods of evaluation will provide performance feedback and permit periodic assessment of progress toward achieving intended outcomes. (5 points)**

Strengths:

The evaluation appropriately includes periodic collection, and monthly review and sharing, of feedback on program implementation from teachers, site visitors, mentors, and students, along with program data, to assess progress towards achieving intended outcomes (p. e44). In addition, an interim assessment of progress will also be given to teachers at the end of the first year of the impact study to determine progress toward achieving intended outcomes (p. e45).

Weaknesses:

No weaknesses were noted.

Reader's Score: 5

3. **(3) 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. (5 points)**

Strengths:

The evaluation plan details all project components and subcomponents and aligned outcomes (pp. e30 – e32, e46) in addition to initial measurable thresholds for acceptable implementation for each component (p. e46).

Teacher outcomes are stated to be included in analyses as mediators (p. e46), and a detailed mediation analysis is specified to do this (pp. e152-153).

Weaknesses:

No weaknesses were noted.

Reader's Score: 5

Status: Submitted
Last Updated: 10/10/2022 06:06 PM