

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

Status: Submitted

Last Updated: 08/08/2024 03:22 PM

Technical Review Coversheet

Applicant: The 21st Century Partnership for STEM Education (S411B240042)

Reader #1: *****

	Points Possible	Points Scored
Questions		
Selection Criteria		
Significance		
1. Significance	15	9
Strategy to Scale		
1. Strategy to Scale	40	34
Quality of Project Design		
1. Project Design	20	15
Quality of the Project Evaluation		
1. Project Evaluation	25	0
Sub Total	100	58
Priority Questions		
Competitive Preference Priority		
Competitive Preference Priority 1		
1. Promoting Equity	3	0
Sub Total	3	0
Competitive Preference Priority		
Competitive Preference Priority 2		
1. Impact of COVID-19	3	1
Sub Total	3	1
Total	106	59

Technical Review Form

Panel #5 - Mid-Phase - 6: 84.411B

Reader #1: *****

Applicant: The 21st Century Partnership for STEM Education (S411B240042)

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 the following factors:

Reader's Score: 9

Sub

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

Strengths:

The proposal improves upon its current strategy by using formative assessment of learning. This allows students to take charge of their own mathematics learning.

The program proposes comprehensive professional development to ensure teachers are trained in formative grading practices (e18).

Weaknesses:

The proposal did not provide more detailed descriptions of the specific innovative strategies and how they differ from or improve upon existing methods. More concrete examples of how the new strategies will be implemented and their expected impact would strengthen the proposal (e8).

The project relies heavily on existing frameworks and methodologies without substantial modification. There is limited evidence of truly new approaches or significant alterations to existing strategies. This dependence suggests a continuation rather than an innovation in educational practices (e7, e8).

The proposal lacks detailed evidence or results from pilot studies that demonstrate the effectiveness of the proposed strategies in new or alternative contexts. Without this evidence, it is challenging to assess the proposed methods' true novelty and potential impact (e18).

I have discussed this with my colleagues and my score represents my professional judgment.

Reader's Score: 9

Selection Criteria - Strategy to Scale

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

Reader's Score: 34

Sub

- 1. (1) 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.**

Strengths:

The proposal clearly identifies multiple barriers that have hindered the implementation and scaling of educational strategies in the past. These barriers include gaps in prerequisite knowledge, language and communication barriers, variable technological access, and varying levels of administrative support (e185).

The proposal outlines specific strategies to address each identified barrier. For example, to address gaps in prerequisite knowledge, the proposal includes diagnostic tools and tailored support for students (e185). Similarly, it includes translating materials into Spanish to overcome language barriers and developing low-tech and offline materials to address variable technological access (e186).

Weaknesses:

no weaknesses noted

Reader's Score: 10

- 2. (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.**

Strengths:

The project leverages a highly qualified team with extensive experience in managing educational initiatives and large-scale projects. The inclusion of experts from 21PSTEM, Portland Public Schools, Westat, and other partners enhances the project's capacity to achieve its objectives efficiently (e24)

The management plan specifies the responsibilities of various partners and individuals involved in the project. By delineating who is responsible for each task, the plan ensures accountability and clarity in execution (e123).

Weaknesses:

The applicant failed to identify a clear communication plan across the project, which involves multiple schools across different states. The plan lacks detailed strategies for ensuring consistent communication and coordination across these diverse contexts (e24).

Reader's Score: 3

- 3. (3) The applicant's capacity (e.g., in terms of qualified personnel, financial resources, or management capacity) to bring the proposed project to scale on a national or regional level (as defined in 34 CFR 77.1(c)) working directly, or through partners, during the grant period.**

Sub

Strengths:

The project team includes highly qualified personnel with extensive experience in managing and implementing large-scale educational projects. For example, [REDACTED], the CEO/Founder of CEN, has a track record of providing high-level oversight and strategic direction for similar initiatives. This strong leadership is crucial for scaling the project effectively (e93).

The proposal outlines a detailed budget and matching funds, demonstrating a clear commitment to financial sustainability. CEN will provide a total match of \$1,024,581 over the five-year grant period, ensuring adequate resources for the project's implementation and scale-up (e180-181).

Weaknesses:

While the project team has experience in managing educational initiatives, there is limited specific evidence provided in the proposal demonstrating past success in scaling projects to a national or regional level (e15, e78-e82).

Reader's Score: 8

4. (4) The mechanisms the applicant will use to broadly disseminate information on its project so as to support further development or replication.

Strengths:

The proposal outlines a comprehensive dissemination strategy that includes presenting ME-SBG research and implementation experiences at major national conferences such as AERA, NCTM, and the National Conference on Student Assessment by CCSSO. This approach ensures that the findings reach a wide audience of educators, researchers, and policymakers, promoting further development and replication (e26).

The project team plans to publish at least two articles in peer-reviewed journals. This contributes to the academic discourse on standards-based grading, student empowerment, and self-regulation, providing a scholarly foundation for the project's methodologies and outcomes. These publications will help disseminate the project's findings to a broader academic audience and support its replication in different contexts (e26).

The Aurora Institute will implement a strategic earned media campaign, including securing op-eds and thought pieces. This approach helps amplify the project's impact by reaching a wider audience through established media channels and increasing public awareness of the project's goals and outcomes (e26).

After completing the RCT in the spring of 2028, the applicant plans to support the scale-up of ME-SBG to the 35-40 control group schools, encompassing approximately 7,000 students. These schools will receive the same support as the treatment group, including access to materials, professional development, and monthly Professional Learning Community sessions through December 2029. This direct approach ensures that the project can be replicated and scaled effectively in similar educational settings (e26).

Weaknesses:

no weaknesses noted

Reader's Score: 10

5. (5) The likely utility of the products (such as information, materials processes, or techniques) that will result from the proposed project, including the potential for their

Sub

being used effectively in a variety of other settings.

Strengths:

The project will produce a comprehensive library of classroom support materials, including clear standards, rubrics for high and proficient performance, assessment materials, reteaching and enrichment resources, and resources to evaluate and support prerequisite knowledge for each standard. These materials are designed to be used across a variety of educational settings, ensuring their broad applicability and utility (e27).

The project includes developing an updated Tracker program that links standards to appropriate library materials and transparently translates standards-based ratings into report card letter grades. This tool will be integrated into widely used Learning Management Systems (LMS) such as Canvas and Schoology, making it accessible and valuable in different educational contexts (e27).

Weaknesses:

The applicant fails to discuss how they will integrate into the LMS, especially since one of the LMSs has discontinued its free versions. Further, there is no evidence in the budget of how these costs (implementation, training, etc.) will be addressed. Finally, the applicant did not specify whether the materials meet ADA digital accessibility standards.

Reader's Score: 3

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: 15

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.

Strengths:

The conceptual framework emphasizes self-regulated learning as a central element. It includes clear pathways for goal setting, formative feedback, further learning, and reassessment, which are designed to enhance student motivation and achievement. This structured process supports ongoing monitoring and adjustment, leading to significant improvements in student outcomes (e29).

The ME-SBG project presents a detailed logic model that clearly outlines the program components, core activities, support components, mediators, short-term outcomes, long-term outcomes, and systemic impacts. This model provides a coherent structure that guides both program planning and evaluation, ensuring that each component of the project is logically connected and contributes to the overall goals (e108-e109).

The framework is grounded in well-established educational theories and research. It incorporates insights from studies on formative assessment, self-regulation, growth mindset, and mastery goals, ensuring that the project's design is based on proven strategies that enhance student learning and motivation. References to key studies and educational frameworks further validate the project's approach (e20, e29).

Sub

Weaknesses:

no weaknesses noted

Reader's Score: 5

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

Strengths:

The project outlines clear and specific goals aimed at enhancing mathematics proficiency among grades 6-9 students, particularly those from historically underserved communities. The goals are directly aligned with the overall mission of the ME-SBG system and address the identified needs in mathematics education (e30, e118).

Weaknesses:

The proposal includes ambiguous targets, and there is limited discussion on potential variability in measurement and data collection methods (e124- e126).

Reader's Score: 4

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.

Strengths:

The proposal addresses support for teachers. The program includes three days of summer training before the first implementation year, followed by monthly Professional Learning Community (PLC) meetings throughout the school year.

The proposal intends to provide one day of summer professional development for principals and administrators from each participating school to enhance their understanding and support.

Weaknesses:

While it addresses general support for students and teachers, it does not provide sufficient detail on tailored interventions for varying local challenges and student demographics (e31).

While the proposal provides evidence from previous studies, it lacks comprehensive data on the long-term impact of the proposed interventions. More robust longitudinal data would help demonstrate the sustainability and lasting benefits of the project (e39).

Reader's Score: 6

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 without reservations as described in the What Works Clearinghouse Handbook (as defined in 34 CFR 77.1(c)).

Strengths:

N/A

Weaknesses:

N/A

Reader's Score: 0

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

Strengths:

N/A

Weaknesses:

N/A

Reader's Score: 0

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.

Strengths:

N/A

Weaknesses:

N/A

Reader's Score: 0

Priority Questions

Competitive Preference Priority - Competitive Preference Priority 1

1. Competitive Preference Priority 1:

Promoting Equity in Student Access to Educational Resources and Opportunities: Implementers and Partners

(up to 3 points)

Under this priority, an applicant must demonstrate how the project will be implemented by or in partnership with one or more of the following entities:

- (a) Community colleges (as defined in the NIA)
- (b) Historically Black colleges and universities (as defined in the NIA)
- (c) Tribal Colleges and Universities (as defined in the NIA)
- (d) Minority-serving institutions (as defined in the NIA)

Strengths:

No strengths noted.

Weaknesses:

The applicant did not address CPP1.

Reader's Score: 0

Competitive Preference Priority - Competitive Preference Priority 2

1. Competitive Preference Priority 2:

Addressing the Impact of COVID-19 on Students, Educators, and Faculty: Community Asset-Mapping and Needs Assessment and Evidence-Based Instructional Approaches and Supports (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 the following priority areas:

- (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 project includes a detailed plan for conducting community asset-mapping and needs assessments to identify the extent of student disengagement from learning due to the COVID-19 pandemic. This approach ensures that the specific needs of different subgroups of students are understood and addressed (e12).

Weaknesses:

The applicant fails to include a detailed discussion regarding potential implementation challenges.

Reader's Score: 1

Status: Submitted

Last Updated: 08/08/2024 03:22 PM

Status: Submitted

Last Updated: 08/02/2024 11:00 AM

Technical Review Coversheet

Applicant: The 21st Century Partnership for STEM Education (S411B240042)

Reader #2: *****

	Points Possible	Points Scored
Questions		
Selection Criteria		
Significance		
1. Significance	15	15
Strategy to Scale		
1. Strategy to Scale	40	35
Quality of Project Design		
1. Project Design	20	20
Quality of the Project Evaluation		
1. Project Evaluation	25	0
Sub Total	100	70
Priority Questions		
Competitive Preference Priority		
Competitive Preference Priority 1		
1. Promoting Equity	3	0
Sub Total	3	0
Competitive Preference Priority		
Competitive Preference Priority 2		
1. Impact of COVID-19	3	3
Sub Total	3	3
Total	106	73

Technical Review Form

Panel #5 - Mid-Phase - 6: 84.411B

Reader #2: *****

Applicant: The 21st Century Partnership for STEM Education (S411B240042)

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 the following factors:

Reader's Score: 15

Sub

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

Strengths:

The extent to which the proposed project involves the development and demonstration of promising alternative strategies that are alternatives to existing strategies is significant. The applicant provides ample evidence of a need for their proposed project, such as only 26% of U.S. eighth graders performed at or above proficiency on the math portion of the National Assessment of Educational Progress in 2022 (e14). Furthermore, literature reviews have reported that formative assessment has important positive implications for student engagement, learning, and performance, especially for previously low-performing students (e.g., Black & Wiliam, 1998, 2010; Kingston & Nash, 2011). The applicant's proposed project, Mathematics Empowerment through Standards-based Grading (ME-SBG), remedies math deficiency by empowering students in grades 6-9 to take active control of their mathematics learning which is highly innovative (e15). The applicant explains how their project is innovative: "We provide the supports needed to implement reassessment for full credit after further study" and that this is the key feature of their system that enables it to accomplish what other standards-based grading programs have not: student empowerment, self-regulation, and increased learning (e9).

Weaknesses:

No weaknesses are noted in the application.

Reader's Score: 15

Selection Criteria - Strategy to Scale

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

Reader's Score: 35

Sub

- 1. (1) 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.**

Strengths:

The applicant identifies specific strategies that address barriers that have prevented the applicant, in the past, from reaching the level of scale that is proposed in the application. The applicant has identified the following barriers: Gaps in Prerequisite Knowledge, Language and Communication Barriers, Variable Technological Access, and Varying Levels of Administrative Support (e21-e23). The applicant details realistic and practical solutions to address each barrier, such as translating information to Spanish and culturally responsive communication, providing alternative low-tech materials and ensuring offline accessibility for core resources, and conducting dedicated professional development sessions for principals and administrators to build understanding and garner support for their ME-SBG method of teaching and reinforcing math (e186).

Weaknesses:

No weaknesses are noted in the application.

Reader's Score: 10

- 2. (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.**

Strengths:

The applicant describes a close-to-the-classroom, field tested management plan catalyzing a paradigm shift in the definition of math proficiency. To achieve the objectives of the proposed project on time and within budget, the application includes clearly defined responsibilities, timelines, and milestones for accomplishing project tasks and a reasonable budget (e155-e166) In Exhibit J3: Objectives, Milestones, Timelines, Responsibilities (e124-126), the applicant provides a detailed logic model illustrating Program Model, Support Components, Core Activities, Mediators, and Outcomes (Short-/Medium, Long-Term, and Systemic Term or Post-Project (e109). Additionally, Contextual Moderators are included in the management plan clarifying the necessary components to manage the project. For example, School-level Moderators address administrative support for changed grading practice, quality of math curriculum materials, and teacher turnover. Teacher-level Moderators manage teacher buy-in (teachers endorse growth mindsets & have high expectations for students), teacher workload, and demands on teachers' time. Student-level Moderators manage race/ethnicity; socioeconomic status; motivation (as measured by Utility Value; Intrinsic Value; Sense of Competence--also a mediator), sense of relatedness to peers & teacher (also a mediator), growth mindset (also a mediator), mastery goals (also a mediator) (e109). The application also includes a summary of project objectives and expected outcomes such as the short-term outcome of students learn more mathematics each year (e9).

Weaknesses:

No weakness are noted in the application.

Reader's Score: 5

- 3. (3) The applicant's capacity (e.g., in terms of qualified personnel, financial resources, or management capacity) to bring the proposed project to scale on a national or regional level (as defined in 34 CFR 77.1(c)) working directly, or through partners, during the grant**

Sub

period.

Strengths:

The applicant's capacity in terms of qualified personnel, financial resources, and management capacity is adequate. For example, the key personnel resumes show extensive expertise and experience in mathematics curriculum and instruction, formative assessment, standards-based grading, professional learning, software development, and rigorous mixed-methods research and evaluation (e58-e88). Additionally, the applicant describes their capacity to bring the proposed project to scale on a national level as, "We take 'quality education for all' personally. We work to make sure that everyone has it. We analyze an educational problem from all angles, studying what has been tried and conceiving what has not been done or what can be done better. We challenge conventional assumptions about curriculum organization, learning environments, instructional methods, grading practices, professional development, and teacher and administrative leadership and evaluation. We leave no assumption unexamined, and we work together to gain a 360-degree view of the problem." (e185)

Weaknesses:

The applicant failed to address how they will adjust their management capacity to different geographic area based on cultural and regional nuances that affect delivery effectiveness. The relevance of regional cultural context applicability is not discussed in describing their capacity to bring the proposed project to scale on a national or regional level (e25, e26).

Reader's Score: 5

4. (4) The mechanisms the applicant will use to broadly disseminate information on its project so as to support further development or replication.

Strengths:

The mechanisms the applicant will use to broadly disseminate information on its project so as to support further development or replication include Conferences and Convenings, Journal Articles, Social Media Engagement, Earned Media, and Direct Scale-Up (e26, e27). Elaborating on Direct Scale-Up, the applicant states that they will support the scale-up of ME-SBG to the 35-40 control group schools, encompassing approximately 7,000 students. These schools will receive the same support as the treatment group, including access to materials, professional development, and monthly Professional Learning Community sessions through December 2029 (e24).

Weaknesses:

No weakness are noted in the application.

Reader's Score: 10

5. (5) The likely utility of the products (such as information, materials processes, or techniques) that will result from the proposed project, including the potential for their being used effectively in a variety of other settings.

Strengths:

The application indicates great utility of the products that will result from the proposed project, including the potential for their being used effectively in a variety of other settings. For example, all materials will be accessible to the public, free of charge, on the project-dedicated online platform. The applicant reports that these resources empower school districts to assess the impact of ME-SBG and enable districts following the Common Core State Standards for Mathematics (CCSS-M) to implement the program effectively (e28). Additionally, the application addresses

Sub

sustainability of their proposed project. For example, the applicant states that after analyzing impact findings, they plan to seek additional funding to expand the impact of the ME-SBG program via the following actions: Adapting the Library of Support Materials for states that did not adopt CCSS-M and partnering with districts to secure funding for customization; Exploring extensions of ME-SBG to older student cohorts and/or other subject areas and building on successful pilots in areas like seventh-grade science (Clymer and William, 2006); and Investigating the potential benefits of integrating ME-SBG with interventions designed to enhance student motivation (e.g., Yeager, et al., 2014a) leveraging insights from educational psychology to amplify positive educational outcomes (e29).

Weaknesses:

No weaknesses are noted in the application.

Reader's Score: 5

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: 20

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.**

Strengths:

The application presents a quality conceptual framework that underlies their proposed research and demonstration activities. For example, standards-based grading reflects what students have learned by semester's end, without penalizing early struggles (e29). Additionally, ME-SBG supports self-regulation by providing a clear pathway: learning goals are clearly defined, formative feedback informs students about their current proficiency levels, and reassessment opportunities allow them to address gaps in understanding and demonstrate improved performance. The applicant explains that this structured process of goal setting, feedback, further learning, and reassessment enables students to continuously monitor their progress, set goals based on standards, and adapt their learning strategies (e29,e30).

Weaknesses:

No weaknesses in the application are noted.

Reader's Score: 5

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

Strengths:

The applicant describes clearly specified and measurable goals, objectives, and outcomes to be achieved by the proposed project. Appendix J.4 provides a summary of the project's objectives, strategies, outcomes, and measures (e127-e136).

Sub

Weaknesses:

No weakness are noted in the application.

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.

Strengths:

The design of the proposed project is appropriate to, and will successfully address, the needs of the target population. The applicant explains that adolescents, especially those from historically underserved groups, have a critical need for recognition and respect within educational environments and that traditional approaches often fall short in meeting these needs, leading to significant learning challenges for these students (e31). The applicant targets high-need students defined as students from historically underserved groups, specifically, students of color (e9). The applicant explains that gaps in prerequisite knowledge especially affect students from historically underserved groups and that their ME-SBG project directly addresses these needs. As evidence of reaching their targeted population, the applicant points to their previous rigorous cluster RCT with 29 schools and over 2,500 algebra and geometry students and reports demonstrated success of their project intervention (██████ et al., 2023) (e31).

Weaknesses:

No weaknesses are noted in the application.

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 without reservations as described in the What Works Clearinghouse Handbook (as defined in 34 CFR 77.1(c)).

Strengths:

.

Weaknesses:

.

Reader's Score: 0

Sub

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

Strengths:

.

Weaknesses:

.

Reader's Score: 0

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.

Strengths:

.

Weaknesses:

.

Reader's Score: 0

Priority Questions

Competitive Preference Priority - Competitive Preference Priority 1

1. Competitive Preference Priority 1:

Promoting Equity in Student Access to Educational Resources and Opportunities: Implementers and Partners (up to 3 points)

Under this priority, an applicant must demonstrate how the project will be implemented by or in partnership with one or more of the following entities:

- (a) Community colleges (as defined in the NIA)
- (b) Historically Black colleges and universities (as defined in the NIA)
- (c) Tribal Colleges and Universities (as defined in the NIA)
- (d) Minority-serving institutions (as defined in the NIA)

Strengths:

No strengths observed.

Weaknesses:

No weaknesses observed.

Reader's Score: 0

Competitive Preference Priority - Competitive Preference Priority 2

1. Competitive Preference Priority 2:

Addressing the Impact of COVID-19 on Students, Educators, and Faculty: Community Asset-Mapping and Needs Assessment and Evidence-Based Instructional Approaches and Supports (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 the following priority areas:

(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 addresses the impacts of the COVID-19 pandemic by reporting that it has exacerbated an existing problem: gaps in prerequisite knowledge needed to master math standards, especially among historically underserved students (Deitz & Freyman, 2024). ME-SBG will perform asset mapping, collaborating with pilot schoolteachers to identify existing resources and pinpoint knowledge gaps intensified by the pandemic. Furthermore, the applicant states that “Informed by what we learn, ME-SBG will offer: 1) Diagnostic Tools that identify gaps in prerequisite knowledge essential for understanding specific mathematical standards; 2) Just-in-Time Support, i.e., Targeted instructional materials to address these foundational gaps, enabling effective student progression; and 3) Professional Development training for educators to utilize diagnostic tools and integrate just-in-time support into their teaching (e12, e13).”

Weaknesses:

No weaknesses are noted in the application.

Reader's Score: 3

Status: Submitted

Last Updated: 08/02/2024 11:00 AM

Status: Submitted

Last Updated: 08/01/2024 08:50 PM

Technical Review Coversheet

Applicant: The 21st Century Partnership for STEM Education (S411B240042)

Reader #3: *****

	Points Possible	Points Scored
Questions		
Selection Criteria		
Significance		
1. Significance	15	0
Strategy to Scale		
1. Strategy to Scale	40	0
Quality of Project Design		
1. Project Design	20	0
Quality of Project Evaluation		
1. Project Evaluation	25	24
Sub Total	100	24
Priority Questions		
Competitive Preference Priority		
Competitive Preference Priority 1		
1. Promoting Equity	3	0
Sub Total	3	0
Competitive Preference Priority		
Competitive Preference Priority 2		
1. Impact of COVID-19	3	0
Sub Total	3	0
Total	106	24

Technical Review Form

Panel #5 - Mid-Phase - 6: 84.411B

Reader #3: *****

Applicant: The 21st Century Partnership for STEM Education (S411B240042)

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 the following factors:

Reader's Score: 0

Sub

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

Strengths:

NA

Weaknesses:

NA

Reader's Score: 0

Selection Criteria - Strategy to Scale

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

Reader's Score: 0

Sub

1. (1) 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.

Strengths:

NA

Weaknesses:

NA

Sub

Reader's Score: 0

2. (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.

Strengths:

NA

Weaknesses:

NA

Reader's Score: 0

3. (3) The applicant's capacity (e.g., in terms of qualified personnel, financial resources, or management capacity) to bring the proposed project to scale on a national or regional level (as defined in 34 CFR 77.1(c)) working directly, or through partners, during the grant period.

Strengths:

NA

Weaknesses:

NA

Reader's Score: 0

4. (4) The mechanisms the applicant will use to broadly disseminate information on its project so as to support further development or replication.

Strengths:

NA

Weaknesses:

NA

Reader's Score: 0

5. (5) The likely utility of the products (such as information, materials processes, or techniques) that will result from the proposed project, including the potential for their being used effectively in a variety of other settings.

Strengths:

NA

Weaknesses:

NA

Reader's Score: 0

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: 0

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.

Strengths:

NA

Weaknesses:

NA

Reader's Score: 0

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

Strengths:

NA

Weaknesses:

NA

Reader's Score: 0

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.

Strengths:

NA

Weaknesses:

NA

Reader's Score: 0

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: 24

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 without reservations as described in the What Works Clearinghouse Handbook (as defined in 34 CFR 77.1(c)).**

Strengths:

The evaluation methods for the ME-SBG project are robustly designed to meet the What Works Clearinghouse (WWC) standards without reservations. The plan employs a school-level, clustered randomized controlled trial (RCT) ensures rigorous random assignment (p. e33). The use of reliable and valid measures, such as state-provided standardized test scores for assessing mathematics achievement, further bolsters the study's credibility (Table 1, pg. e32). By incorporating strategies to mitigate attrition, such as over-recruitment and ensuring teacher and administrator buy-in, the evaluation design safeguards against differential attrition that could otherwise compromise the study's integrity (pg. e34). Additionally, the detailed power analysis, which considers a variety of conservative assumptions, confirms that the sample size is sufficient to detect meaningful effects (p. e33-34). The comprehensive approach to data analysis, employing multilevel hierarchical models to account for student- and school-level covariates, further strengthens the study's capacity to produce valid and reliable findings (Appendix J. 6). Moreover, the inclusion of cost and cost-effectiveness analyses, as well as replication strategies, ensures that the evaluation not only assesses the efficacy of the intervention but also its practicality and scalability (pg. e37).

Weaknesses:

While random assignment is designed to create equivalent groups on average, assessing and reporting baseline equivalence is still important to confirm that the groups are comparable on key characteristics at the outset of the study. This verification is essential for ensuring that any differences observed post-intervention can be attributed to the intervention itself rather than pre-existing differences between the groups. For the ME-SBG project, the absence of detailed information on how baseline equivalence will be established and assessed is a noted weakness.

Reader's Score: 14

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

Strengths:

Utilizing a mixed-methods approach that combines qualitative data from document reviews, interviews, and training observations with quantitative analyses such as correlations, regressions, and multilevel analyses, the study seeks to provide a thorough understanding of implementation fidelity and impacts. By focusing on a representative sample from multiple states, diverse school contexts, and varied student populations, the evaluation ensures the findings are widely applicable. Additionally, the cost-effectiveness analysis and examination of factors such as student motivation, teacher buy-in, and administrator support will offer crucial insights into the practicalities and advantages of ME-SBG. The detailed framework addressing adoption, adaptation, replication, and reinvention further enhances the evaluation's ability to inform scalable and sustainable strategies tailored to local needs. This comprehensive approach strengthens the study's capacity to generate actionable guidance for replicating or testing ME-SBG in diverse educational settings (pg. e38-e39).

Weaknesses:

No weakness 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.**

Sub

Strengths:

The evaluation plan clearly articulates the key project components, including standards-based grading, formative feedback, reassessment opportunities, and ongoing professional development for teachers. It also identifies critical mediators such as student self-regulation and motivation-related mindsets, and outlines student mathematics achievement as the primary outcome. The plan sets clear, measurable thresholds for acceptable implementation, specifying principal support, teacher agreement, and participation rates in training and PLC sessions. This thorough articulation of components, mediators, and outcomes, alongside defined metrics for implementation fidelity, demonstrates a comprehensive approach to evaluating the project's impact (pg. e40-e41).

Weaknesses:

No weakness noted.

Reader's Score: 5

Priority Questions

Competitive Preference Priority - Competitive Preference Priority 1

1. Competitive Preference Priority 1:

Promoting Equity in Student Access to Educational Resources and Opportunities: Implementers and Partners (up to 3 points)

Under this priority, an applicant must demonstrate how the project will be implemented by or in partnership with one or more of the following entities:

- (a) Community colleges (as defined in the NIA)
- (b) Historically Black colleges and universities (as defined in the NIA)
- (c) Tribal Colleges and Universities (as defined in the NIA)
- (d) Minority-serving institutions (as defined in the NIA)

Strengths:

NA

Weaknesses:

NA

Reader's Score: 0

Competitive Preference Priority - Competitive Preference Priority 2

1. Competitive Preference Priority 2:

Addressing the Impact of COVID-19 on Students, Educators, and Faculty: Community Asset-Mapping and Needs Assessment and Evidence-Based Instructional Approaches and Supports (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 the following priority areas:

(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:

NA

Weaknesses:

NA

Reader's Score: 0

Status: Submitted

Last Updated: 08/01/2024 08:50 PM

Status: Submitted

Last Updated: 08/02/2024 05:04 PM

Technical Review Coversheet

Applicant: The 21st Century Partnership for STEM Education (S411B240042)

Reader #5: *****

	Points Possible	Points Scored
Questions		
Selection Criteria		
Significance		
1. Significance	15	0
Strategy to Scale		
1. Strategy to Scale	40	0
Quality of Project Design		
1. Project Design	20	0
Quality of the Project Evaluation		
1. Project Evaluation	25	21
Sub Total	100	21
Priority Questions		
Competitive Preference Priority		
Competitive Preference Priority 1		
1. Promoting Equity	3	0
Sub Total	3	0
Competitive Preference Priority		
Competitive Preference Priority 2		
1. Impact of COVID-19	3	0
Sub Total	3	0
Total	106	21

Technical Review Form

Panel #5 - Mid-Phase - 6: 84.411B

Reader #5: *****

Applicant: The 21st Century Partnership for STEM Education (S411B240042)

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 the following factors:

Reader's Score: 0

Sub

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

Strengths:

NA

Weaknesses:

NA

Reader's Score: 0

Selection Criteria - Strategy to Scale

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

Reader's Score: 0

Sub

1. (1) 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.

Strengths:

NA

Weaknesses:

NA

Sub

Reader's Score: 0

2. (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.

Strengths:

NA

Weaknesses:

NA

Reader's Score: 0

3. (3) The applicant's capacity (e.g., in terms of qualified personnel, financial resources, or management capacity) to bring the proposed project to scale on a national or regional level (as defined in 34 CFR 77.1(c)) working directly, or through partners, during the grant period.

Strengths:

NA

Weaknesses:

NA

Reader's Score: 0

4. (4) The mechanisms the applicant will use to broadly disseminate information on its project so as to support further development or replication.

Strengths:

NA

Weaknesses:

NA

Reader's Score: 0

5. (5) The likely utility of the products (such as information, materials processes, or techniques) that will result from the proposed project, including the potential for their being used effectively in a variety of other settings.

Strengths:

NA

Weaknesses:

NA

Reader's Score: 0

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: 0

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.

Strengths:

NA

Weaknesses:

NA

Reader's Score: 0

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

Strengths:

NA

Weaknesses:

NA

Reader's Score: 0

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.

Strengths:

NA

Weaknesses:

NA

Reader's Score: 0

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:

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 without reservations as described in the What Works Clearinghouse Handbook (as defined in 34 CFR 77.1(c)).

Strengths:

The application proposes a school-level, clustered Randomized Control Trial (RCT) to evaluate the impact of the Mathematics Empowerment through Standards-Based Grading (ME-SBG) program on 6th – 9th grade students' mathematics achievement. The proposed impact evaluation design (pages e32-e37), if well implemented, has the potential to produce reliable evidence about ME-SBG's effectiveness that would meet the What Works Clearinghouse (WWC) standards without reservations.

In line with WWC guidelines, the application proposes an appropriate randomization technique, i.e., randomization of 72 schools into treatment versus control groups by blocking on school variables such as geography and grade level organization (page e33). In addition, the application clearly demonstrates that the proposed sample size (a total of 72 schools, 216 teachers, and 1400 students) is adequate for achieving acceptable statistical power and eliciting a minimum detectable effect size of 0.214 (page e33, e137-e138).

Moreover, the application proposes practical and appropriate strategies for addressing the threat of attrition including effective communication of expectations to sustain administrator and teacher buy-in, conducting intent-to-treat analysis, oversampling to correct for unanticipated recruitment challenges, use of a wait-list control group study design allows control schools to receive the intervention later, etc. (page e35). In line with WWC guidelines, the application also proposes appropriate strategies for minimizing the threat of missing data, joiners, contamination, and non-compliance with randomization. The proposed use of maximum likelihood methods to address missing data and proposed estimation of complier average causal effects as a sensitivity check to for non-compliance with randomization (page e35-e36) are in alignment with WWC guidelines.

The application demonstrates that tools measuring the key student outcomes (e.g., trust in teacher and growth mindset) are reliable with indices ranging from .80 to .90 (page e41).

Weaknesses:

The evaluation plan does not include specific method for ensuring baseline equivalence beyond randomization (page e36). Relatedly, given the demonstrated interest in historically underserved groups (page e137), the application does not provide a strategy for ensuring adequate representation of historically underserved groups in both treatment and control groups.

The application noted that 14,000 students are nested within 216 teachers and nested within 72 schools. However, the planned analyses is based on 2-level models that account for nesting within schools but do not account for nesting within teachers/classrooms (page e37). Given that teachers will play a critical role in the implementation of the ME-SBG program, ignoring the nesting of students within teachers inhibits the opportunity to conduct meaningful empirical exploration to understand teacher effects and hinders the robustness of the estimates of program impact.

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

Sub

Strengths:

The evaluation plan clearly demonstrates that the program evaluation will provide guidance about effective strategies suitable for replication or testing in other settings. Specifically, the evaluation plan proposes to address several research questions related to ME-SBG implementation, cost effectiveness and differential impact (pages e33, e38-e39). For example, Research Question 1 focusses on whether the implementation of ME-SBG meet the threshold of acceptable implementation and whether teachers participate in the intervention at expected levels, while Research Questions 3 and 5 explore differential effects by grade level and for underserved groups. These planned fidelity studies, if well implemented, will help uncover the mechanism of impact and for whom the program works—all of which are useful information for drawing out key lessons to guide scale-up and replication in other contexts.

Weaknesses:

No weaknesses 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.**

Strengths:

The application clearly describes ME-SBG program components including the accompanying teacher and student activities and resources (pages e27-e32). Moreover, the logic model clearly lays out and demonstrates conceptual and expected connections among program components, core activities, mediators, and tiers of outcomes (page e109). The planned multilevel mediation analyses (page e142) have the potential the extent to which student variables (self-regulation and motivation-related mindset) mediate math achievement.

The application also clearly articulates measurable thresholds for acceptable implementation—including meaningful threshold for principal support, implementation compliance, and teacher professional development. For example, it is expected that 75% of math teachers in target grades at the treatment schools will attend all three days of summer professional development training (page e40).

Weaknesses:

No weaknesses noted.

Reader's Score: 5

Priority Questions

Competitive Preference Priority - Competitive Preference Priority 1

1. Competitive Preference Priority 1:

Promoting Equity in Student Access to Educational Resources and Opportunities: Implementers and Partners (up to 3 points)

Under this priority, an applicant must demonstrate how the project will be implemented by or in partnership with one or more of the following entities:

- (a) Community colleges (as defined in the NIA)**
- (b) Historically Black colleges and universities (as defined in the NIA)**

- (c) Tribal Colleges and Universities (as defined in the NIA)
- (d) Minority-serving institutions (as defined in the NIA)

Strengths:

NA

Weaknesses:

NA

Reader's Score: 0

Competitive Preference Priority - Competitive Preference Priority 2

1. Competitive Preference Priority 2:

Addressing the Impact of COVID-19 on Students, Educators, and Faculty: Community Asset-Mapping and Needs Assessment and Evidence-Based Instructional Approaches and Supports (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 the following priority areas:

(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:

NA

Weaknesses:

NA

Reader's Score: 0

Status: Submitted

Last Updated: 08/02/2024 05:04 PM

Status: Submitted

Last Updated: 08/05/2024 11:51 PM

Technical Review Coversheet

Applicant: The 21st Century Partnership for STEM Education (S411B240042)

Reader #4: *****

	Points Possible	Points Scored
Questions		
Selection Criteria		
Significance		
1. Significance	15	15
Strategy to Scale		
1. Strategy to Scale	40	36
Quality of Project Design		
1. Project Design	20	20
Quality of the Project Evaluation		
1. Project Evaluation	25	0
Sub Total	100	71
Priority Questions		
Competitive Preference Priority		
Competitive Preference Priority 1		
1. Promoting Equity	3	0
Sub Total	3	0
Competitive Preference Priority		
Competitive Preference Priority 2		
1. Impact of COVID-19	3	3
Sub Total	3	3
Total	106	74

Technical Review Form

Panel #5 - Mid-Phase - 6: 84.411B

Reader #4: *****

Applicant: The 21st Century Partnership for STEM Education (S411B240042)

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 the following factors:

Reader's Score: 15

Sub

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

Strengths:

The proposed Mathematics Empowerment through Standards-Based Grading (ME-SBG) project supports program implementation in over 70 schools across two states (Pennsylvania and Oregon), impacting more than 14,000 students in grades 6-9, including more than 5,700 from historically underserved (primarily Black and Hispanic/Latino) student groups. ME-SBG tackles this challenge by empowering students in grades 6-9 to take active control of their mathematics learning. It leverages five existing ME-SBG components, such as Standards-based grading and professional development, but also develops novel strategies, such as Mastery Learning and Formative Assessment (e19).

Weaknesses:

No weakness observed.

Reader's Score: 15

Selection Criteria - Strategy to Scale

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

Reader's Score: 36

Sub

1. (1) 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.

Sub

Strengths:

The proposal identified seven barriers for scale up, such as lack of software integration and inconsistent administrator support. For each barrier, the proposal has a strategy to move forward, which is promising and actionable, e.g., “create a one-day professional development session for principals and administrators to deepen their understanding of ME-SBG.”

Weaknesses:

No weakness noted.

Reader's Score: 10

- 2. (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.**

Strengths:

The proposal has a thorough management plan, budget (e155), and timeline structure (e136) to accomplish the proposed tasks. The division of the three phases is reasonable, and the timeline and budget are clearly defined.

Weaknesses:

No weakness observed.

Reader's Score: 5

- 3. (3) The applicant's capacity (e.g., in terms of qualified personnel, financial resources, or management capacity) to bring the proposed project to scale on a national or regional level (as defined in 34 CFR 77.1(c)) working directly, or through partners, during the grant period.**

Strengths:

The proposal team has the necessary expertise and track record to deliver the promised outcome of such a proposal (e15). They have experts in mathematics curriculum and instruction, formative assessment, standards-based grading, professional learning, software development, and rigorous mixed-methods research and evaluation.

Weaknesses:

The applicant's capacity lacks information related to how the management team will communicate to address the different regional and national contexts in bringing the project to scale.

Reader's Score: 7

- 4. (4) The mechanisms the applicant will use to broadly disseminate information on its project so as to support further development or replication.**

Strengths:

The proposal team describes a mechanism to disseminate information via mechanisms, such as social media and conferences. The strategy balances the dissemination plan by including both in-person and online channels to reach different populations.

Weaknesses:

No weakness noted.

Sub

Reader's Score: 10

5. (5) The likely utility of the products (such as information, materials processes, or techniques) that will result from the proposed project, including the potential for their being used effectively in a variety of other settings.

Strengths:

The proposed project will result in six types of products which can be generalized, such as Student and Parent Support Materials, and Evaluation and Research Documentation.

Weaknesses:

The budget plan lacks appropriate details and resource allocations to support the generalization of the utility to other settings.

Reader's Score: 4

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: 20

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.

Strengths:

There is a conceptual framework (logic model) identified is based on prior research works and evidence. The applicant details the interconnectivity among the different elements of the model.

Weaknesses:

No weakness observed.

Reader's Score: 5

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

Strengths:

The proposal has a list of objectives and goals in Appendix J.4. For example, Objective 1 is to develop the training and digital tools, and Objective 35 is to earn media audience. The goals, objectives, and outcomes are clearly specified and measurable.

Weaknesses:

No weakness observed.

Reader's Score: 5

Sub

- (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.**

Strengths:

The proposal identifies students, especially those from historically underserved groups (e14), having a critical need for recognition and respect within educational environments, and strategies to directly address their needs. Based on the cited research, the approaches are appropriate to and will successfully address the needs of the target population.

Weaknesses:

No weakness noted.

Reader's Score: 10

Selection Criteria - Quality of the Project Evaluation

- 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) 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 34 CFR 77.1(c)).**

Strengths:

Weaknesses:

Reader's Score:

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

Strengths:

Weaknesses:

Reader's Score:

- (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.**

Sub

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: Implementers and Partners (up to 3 points)

Under this priority, an applicant must demonstrate how the project will be implemented by or in partnership with one or more of the following entities:

- (a) Community colleges (as defined in the NIA)
- (b) Historically Black colleges and universities (as defined in the NIA)
- (c) Tribal Colleges and Universities (as defined in the NIA)
- (d) Minority-serving institutions (as defined in the NIA)

Strengths:

No strength noted.

Weaknesses:

The applicant does not address CPP1.

Reader's Score: 0

Competitive Preference Priority - Competitive Preference Priority 2

1. Competitive Preference Priority 2:

Addressing the Impact of COVID-19 on Students, Educators, and Faculty: Community Asset-Mapping and Needs Assessment and Evidence-Based Instructional Approaches and Supports (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 the following priority areas:

- (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 proposal directly targets a student population who have been impact by the COVID-19 pandemic. The applicant states that math achievement has declined among historically underserved students. As a result of COVID-19, many of the students lack prerequisite knowledge and skills needed to master math standards (e12).

Weaknesses:

No weakness noted.

Reader's Score: 3

Status: Submitted

Last Updated: 08/05/2024 11:51 PM