

Status: Submitted

Last Updated: 08/03/2024 06:21 PM

Technical Review Coversheet

Applicant: ASSISTments Foundation, Inc. (S411A240012)

Reader #1: *****

	Points Possible	Points Scored
Questions		
Selection Criteria		
Significance		
1. Significance	15	15
Strategy to Scale		
1. Strategy to Scale	40	40
Quality of Project Design		
1. Project Design	20	20
Quality of the Project Evaluation		
1. Project Evaluation	25	0
Sub Total	100	75
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	2
Sub Total	3	2
Total	106	77

Technical Review Form

Panel #1 - Expansion - 1: 84.411A

Reader #1: *****

Applicant: ASSISTments Foundation, Inc. (S411A240012)

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 applicant comprehensively addresses the development and demonstration of strategies that build on an existing math practice and assessment platform. Building upon the success of implementing the ASSISTments platform that has been proven through numerous studies to improve student math achievement and to change teacher practice (page e153), ASSISTments Plus will innovatively use AI and technology-supported strategies to "personalize assignment recommendations" to address student readiness for grade level learning (page e157). The significance of the project lies in reversing learning losses for middle school students during the COVID-19 pandemic. Project development will include: 1) creating math content that includes "math problems with hints" using AI technology (page e157); 2) making math problems more culturally relevant; and 3) using approaches such as Dweck's growth mindset to develop the hints (page e158). Samples of the math content are shown in Exhibit J.2.D on pages e52-e55. One example using growth mindset is Prompt B shown on page e55 that prompts the teacher to work with a student who gave a wrong answer using wording that supports growth mindset.

Weaknesses:

None identified.

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: 40

Sub

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 presents sound evidence of strategies to address barriers that prevented the applicant from reaching the proposed level of scale in the past. Implementing the identified strategies will address, in part, what the applicant recognizes about the inability to bring the project to scale in the past—that is, a more systems-based approach to project adoption and implementation (page e158). Exhibit 1 on page e159 identifies the barriers and corresponding strategies for overcoming those barriers. For example, one barrier was that districts and schools did not have sufficient data for monitoring implementation and evidence of student progress (page e159). The strategy to address the barrier is to provide real-time data for districts and schools. Narrative descriptions of the strategies are clearly presented on pages e159–e161. For example, on page e160 the applicant describes the development of a data view with real-time monitoring and adjusting to individual student learning needs.

Weaknesses:

None identified.

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 presents a focused management plan for a five-year timeframe that is adequate to achieve the project objectives on time and within budget. An overview of the management plan is displayed in Exhibit 2 on page e162. Activities are shown in Exhibit 2 that relate to each of the four project goals and the timeframes for when they will be carried out. Exhibit 3 on page e163 displays defined responsibilities, timelines, and milestones for achieving the project tasks. A particular strength of the proposed project is captured in this statement on page e163—"These milestones have been used to develop the budget, ensuring work is completed on time and within budget", demonstrating the thorough and systematic steps the applicant is taking in achieving successful implementation of the project.

Weaknesses:

None identified.

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 applicant clearly states on page e165 that they have adequate systems in place for successfully implementing large grants and working with other entities to bring the project to completion. The project proposal addresses the qualified personnel, financial resources, and management capacity necessary to bring the project to scale on a national or regional level. The applicant provides evidence of project personnel with qualifications and experiences that are relevant for implementation of the project components. Exhibit 4 on pages e167–e168 describes the roles and time allocations, responsibilities, and experiences for key personnel in the project. Key personnel include ASSISTments foundation executives as well as directors from each of the primary partners for the project. As an example, the ASSISTments Foundation Executive Director participated in the development of ASSISTments, has

Sub

twelve years of experience as a middle school math teacher, and has experience with large-scale grants. She is described on page e167 as responsible for overseeing the project, writing the annual reports, and be a lead point for the outside evaluator.

Weaknesses:

None identified.

Reader's Score: 10

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 applicant provides thorough details of the plan to broadly disseminate project information for the purpose of further development or replication. Dissemination mechanisms described on pages e169-e170 include:

- Monthly newsletters to partner schools sharing implementation models, success stories, and best practices.
- Communication channels through the state department of education to reach district superintendents throughout the state.
- Utilize social media, Google Ads, and other targeted strategies to build awareness about the project outcomes.

In addition, the applicant describes on page e170 using their extensive reach in the field and through its partners and evaluation results to present research findings at conferences and through other research leaders.

Weaknesses:

None identified.

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 information, materials processes, or techniques described by the applicant provide evidence of the utility of the products resulting from the project. Those products include student personalized assignment recommendations, guidance for teachers using ASSISTments, an Implementation Guide, a Readiness Assessment, and a Classroom Observation Tool. The resources will be available in a virtual format. As the project continues through the last two years, the applicant describes a significant contribution to the field—product development will provide adaptations to local contexts based on factors like modified state standards and differences in geography (page e171).

Weaknesses:

None identified.

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 applicant presents a conceptual framework for the project as displayed in both the abbreviated Logic Model on page e171 and the full-scale Logic Model in Appendix G on page e40. The Logic Model for the A-Plus project clearly demonstrates the support components, direct components (activities), and the short and long-term outcomes. Clear relationships between project components are shown in the Logic Model. The Conceptual Framework showing the transformation of ASSISTments to ASSISTments Plus (A-Plus) is further described in Exhibit 6 on pages e172-e173.

Weaknesses:

None identified.

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 proposed project is described by the applicant with goals, objectives, and outcomes that are clearly specified and measurable. Exhibit 7 on pages e173-e174 provides evidence of project goals and related objectives with appropriate measures for ensuring the success of the project. For example, as described on page e173, the goal to develop, pilot, and iterate the A-Plus program is identified with two objectives, the second of which is to successfully pilot and refine A-Plus. This objectives will be measured by the percentage of pilot participants demonstrating satisfaction with the program, the number of school districts, schools, and students reached, and the completion of four evaluation reports (page e173). As described in Figure 7, outcomes will be measured by satisfaction surveys, student achievement results, and participation metrics.

Weaknesses:

None identified.

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:

As described by the applicant on page e174, the project is designed to ensure A-Plus implementation that adapts to local context and meets the academic needs of high-need students. The applicant will take intentional steps to identify participating schools with the greatest demonstrated need and to build buy-in among districts and participating teachers throughout the project (page e174). Project components, from the teacher summer training, in-person teacher coaching, use of data reports to plan student interventions and teacher supports, will all contribute to addressing the math academic needs of the high-needs students in the study. In addition to responding to this criterion specifically, the applicant presents a well-constructed design that connects all components of the project in a cohesive model for successful implementation.

Sub

Weaknesses:

None identified.

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:

Not applicable.

Weaknesses:

Not applicable.

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:

Not applicable.

Weaknesses:

Not applicable.

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:

Not applicable.

Weaknesses:

Not applicable.

Sub

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 evidence provided.

Weaknesses:

No evidence provided.

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 proposes a project designed to respond to the academic impacts of the COVID-19 pandemic. The project will use evidence-based practices in response to (b) as described on page e155. The applicant references two randomized control trials demonstrating the ASSISTments formative assessment practices as proven strategies for COVID-19 recovery in 7th-grade math (page 155). Other evidence is provided for the program's utility in supporting learning acceleration. Throughout the application, there is evidence of professional development, coaching, and ongoing support for teachers participating in the project.

Weaknesses:

The applicant did not respond to item (a) for this criterion.

Reader's Score: 2

Status: Submitted
Last Updated: 08/03/2024 06:21 PM

Status: Submitted

Last Updated: 08/01/2024 07:45 PM

Technical Review Coversheet

Applicant: ASSISTments Foundation, Inc. (S411A240012)

Reader #2: *****

	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 #1 - Expansion - 1: 84.411A

Reader #2: *****

Applicant: ASSISTments Foundation, Inc. (S411A240012)

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:

n/a

Weaknesses:

n/a

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:

n/a

Weaknesses:

n/a

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:

n/a

Weaknesses:

n/a

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:

n/a

Weaknesses:

n/a

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:

n/a

Weaknesses:

n/a

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:

n/a

Weaknesses:

n/a

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:

n/a

Weaknesses:

n/a

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:

n/a

Weaknesses:

n/a

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:

n/a

Weaknesses:

n/a

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: 21

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 plans described on page e179 to use a school-level clustered randomized controlled experimental design will meet WWC standards w/o reservations.

The plan described on page 26 to include a developmental year focused on formative evaluation will be beneficial in maximizing the likelihood of success once the project is implemented at scale.

Page 30 describes a plan to minimize differential attrition of schools by pairing schools in the treatment and control groups in each cohort such that if one attrits, the other will be omitted from the analysis. As noted, this approach minimizes risk of bias due to compositional change associated with cluster-level attrition.

Per Appendix J9, the study is adequately powered to detect effects.

Weaknesses:

None noted

Reader's Score: 15

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

Strengths:

Page 31 describes a plan that will provide guidance for replication and scaling in other settings – notably the plan to strategically sample a diverse set of schools as well as interviews with administrators to document the context of implementation.

Weaknesses:

Per Exhibit 2 on Page 12, the overall study would be strengthened by beginning to scale outside of Maryland one year earlier as the current plan does not offer much time to demonstrate.

A major weakness of the study design is the failure to include plans to assess impact once the project scale beyond Maryland in the final years of the project. No details are given regarding an implementation nor evaluation plan for this cohort.

Reader's Score: 2

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:

Appendix J10 (pg. e87) clearly outlines the thresholds for implementation at various levels (i.e., in the summer training, for the coaching visits, etc.).

Sub

Appendix G (Page e40) presents a logic model that clearly delineates both the support and direct components of the project as well as the outcomes.

Page 31 describes a plan to conduct mediator analyses to assess the impact of certain mediators on program outcomes.

The outcome measure, the Maryland Comprehensive Assessment Program (MCAP) is a standardized assessment.

Weaknesses:

The logic model on page e40 lists "Mediators/Short-Term Outcomes" (and pg. 34), however the majority of the elements in the column are short-term outcomes but not necessarily mediators.

Reader's Score: 4

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:

n/a

Weaknesses:

n/a

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:

n/a

Weaknesses:

n/a

Reader's Score: 0

Status: Submitted

Last Updated: 08/01/2024 07:45 PM

Status: Submitted

Last Updated: 08/03/2024 01:11 PM

Technical Review Coversheet

Applicant: ASSISTments Foundation, Inc. (S411A240012)

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 the Project Evaluation		
1. Project Evaluation	25	20
Sub Total	100	20
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	20

Technical Review Form

Panel #1 - Expansion - 1: 84.411A

Reader #3: *****

Applicant: ASSISTments Foundation, Inc. (S411A240012)

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:

Not applicable

Weaknesses:

Not applicable

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:

Not applicable

Weaknesses:

Not applicable

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:

Not applicable

Weaknesses:

Not applicable

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:

Not applicable

Weaknesses:

Not applicable

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:

Not applicable

Weaknesses:

Not applicable

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:

Not applicable

Weaknesses:

Not applicable

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:

Not applicable

Weaknesses:

Not applicable

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:

Not applicable

Weaknesses:

Not applicable

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:

Not applicable

Weaknesses:

Not applicable

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: 20

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 applicant's chosen study design, which includes both formative and summative assessments, will be conducted via an externally contracted and experienced data team, and consisting of five research questions via a large-scale cluster (40 schools; grades 6-8) randomized control trial (RCT). If well implemented, it will meet What Works Clearinghouse Standards without Reservations (p. 28).

Weaknesses:

The applicant's reliance on low attrition, as well as on the omission of late "joiners" to the study in order for the study to produce results, has the potential to negatively impact the project's capacity to produce evidence about the project's effectiveness.

Reader's Score: 13

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

Strengths:

The proposed study's commitment to generate insightful guidance for successful replication of the intended study in other schools and districts is likely to occur (p. 31).

Weaknesses:

The applicant does not provide details as to how they define or intend to identify geographically and racially diverse schools, making it difficult to determine whether the evaluation will provide effective strategies in other settings. The proposed evaluation design does not incorporate any states outside of the host state, which does not allow for testing in other settings.

Reader's Score: 3

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 applicant's key project's components are in alignment with their logic model, which examines whether perceptions of support are correlated with fidelity of implementation at the teacher level (p. 33-34). The applicant's metrics which will cover three levels of implementation fidelity, will ensure the minimum thresholds for implementation are met (p. 35)

Weaknesses:

The applicant is lacking in specifics with regards to mediators; at least one of their mediators reads as an outcome.

Reader's Score: 4

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:

Not applicable

Weaknesses:

Not applicable

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:

Not applicable

Weaknesses:

Not applicable

Reader's Score: **0**

Status: Submitted

Last Updated: 08/03/2024 01:11 PM

Status: Submitted

Last Updated: 08/03/2024 01:29 PM

Technical Review Coversheet

Applicant: ASSISTments Foundation, Inc. (S411A240012)

Reader #4: *****

	Points Possible	Points Scored
Questions		
Selection Criteria		
Significance		
1. Significance	15	15
Strategy to Scale		
1. Strategy to Scale	40	40
Quality of Project Design		
1. Project Design	20	20
Quality of the Project Evaluation		
1. Project Evaluation	25	0
Sub Total	100	75
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	2
Sub Total	3	2
Total	106	77

Technical Review Form

Panel #1 - Expansion - 1: 84.411A

Reader #4: *****

Applicant: ASSISTments Foundation, Inc. (S411A240012)

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 project involves the effective development and demonstration of a promising new strategy that builds on an existing strategy. It builds on the ASSISTments evidence-base and expands its reach with adaptations for scaling through AI. The applicant proposes the project serve students in grades 6-8 attending a Title I school in Maryland (e8, e15-e18). The project aims to combine high-quality teacher training and coaching with capacity-building for designated school and district leads so they can support and sustain program success. Additionally, a data tool will be developed that allows districts and schools to monitor learning and support students (e15-e18).

The proposed project supports the need for this project based on data on 13-year-old student math scores declining from 2019-2020 on the NAEP, with typical students from the poorest districts declining double (e15-e16).

Weaknesses:

None noted.

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: 40

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

Sub

reaching the level of scale that is proposed in the application.

Strengths:

The applicant clearly identifies barriers to scale, as well as their strategies to address them. The three barriers are 1) Schools need solutions that help students from varied contexts and with different unlearned content recover from the COVID-19 pandemic; 2) Schools and districts lack data to monitor implementation and student progress; and 3) Limited capacity at the school level to support and sustain implementation (pg. 19). To address the barriers, the project will implement three strategies: 1) Automate personalized assignment recommendations for students aligned to prerequisite standards needed for learning acceleration; 2) Provide real-time data reporting for schools and districts; and 3) Develop professional learning for school champions (e19).

Weaknesses:

None 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:

A comprehensive management plan is provided (e22-e25; e63-e69). The management plan aligns the project tasks, the personnel responsible, and the milestones (outcomes). The timeline covers the five year grant period and provides overarching details in addition to describing the activities (e63-e69). One highlight of the management plan is that it includes the background of the principals in addition to their specific role in this project (e22-e25; e63-e69).

Weaknesses:

None noted.

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 applicant has demonstrated its capacity to scale the project nationally throughout the application. For instance, the team members identified to work with the project are highly qualified to meet the project's requirements and offer essential support for its successful implementation, as detailed in the grant application (e25-e28).

Overall, the applicant has proven that its team members are exceptionally qualified to meet the project's requirements and deliver the necessary support to ensure the project's successful implementation at the intended scale, as described in the grant application.

Weaknesses:

None noted.

Reader's Score: 10

Sub

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 applicant outlines a comprehensive plan for disseminating information about the project findings (e29-e30). A key strength of the dissemination plan is that it leverages the strengths of partner organizations in addition to social media channels, ex. Networks of Arnold Ventures and [REDACTED], in addition to Teaching Lab, and Open Up Resources (e29-e30)

Weaknesses:

None 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 being used effectively in a variety of other settings.

Strengths:

It is highly likely the utility of the products produced from the proposed project will result in their usage nationally and in other settings. The applicant will assess and document the effectiveness of the resources developed during the project. The availability of A-Plus ASSISTments for school districts has the potential of significantly increasing student achievement (e28).

Weaknesses:

None noted.

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 conceptual framework is appropriate and is based on the ASSISTments programmatic model (e31-e33). A logic model is provided that aligns the project key components, support components, direct components, mediators/short-term, and long-term outcomes (e31-e33).

Weaknesses:

None noted.

Sub

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 provided clearly specified, measurable, and aligned goals, objectives, and outcomes (e31-e33). Goals include 1) Develop, pilot, and iterate A-Plus in Maryland; 2) Implement A-Plus in study schools with fidelity; 3) Rigorously Evaluate A-Plus; and 4) Disseminate results and scale A-Plus within Maryland and nationally (e33-e34).

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.

Strengths:

The proposed project design will effectively meet the needs of the target population, which is 6-8 grade students attending Title I schools (e34-e36). Key strengths that support the success of the project are: 1) The professional development and coaching provided to teachers in the project; 2) product development of A-PLUS as a result of the on-going feedback from the project; and 3) partnership with the state of Maryland (e34-e36).

Weaknesses:

None 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 without reservations as described in the What Works Clearinghouse Handbook (as defined in 34 CFR 77.1(c)).

Strengths:

Not applicable.

Sub

Weaknesses:

Not applicable.

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:

Not applicable.

Weaknesses:

Not applicable.

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:

Not applicable.

Weaknesses:

Not applicable.

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:

Not addressed.

Weaknesses:

Not addressed.

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 provided compelling evidence in the use of evidence-based instructional approaches and supports to accelerate learning for high-need students in 7th grade math, a core and high stakes subject area. Two randomized controlled trials showed that when teachers use ASSISTments consistently, it increases academic success in math for all students but also specifically supports learning acceleration for those who are furthest behind (e15).

Weaknesses:

The applicant did not provide evidence on any community asset-mapping or needs assessments that were conducted.

Reader's Score: 2

Status: Submitted
Last Updated: 08/03/2024 01:29 PM

Status: Submitted

Last Updated: 08/03/2024 10:58 PM

Technical Review Coversheet

Applicant: ASSISTments Foundation, Inc. (S411A240012)

Reader #5: *****

	Points Possible	Points Scored
Questions		
Selection Criteria		
Significance		
1. Significance	15	15
Strategy to Scale		
1. Strategy to Scale	40	40
Quality of Project Design		
1. Project Design	20	20
Quality of the Project Evaluation		
1. Project Evaluation	25	0
Sub Total	100	75
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	2
Sub Total	3	2
Total	106	77

Technical Review Form

Panel #1 - Expansion - 1: 84.411A

Reader #5: *****

Applicant: ASSISTments Foundation, Inc. (S411A240012)

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 applicant clearly details the significance of the proposed project by citing on page 8 how ASSISTments partners with WPI to refine an approach for creating math content using GPT, math problems with hints. The project will increase the reach and impact of ASSISTments, which is an evidence-base math formative assessment platform for teachers, by developing a systems-based approach to implementation of ASSISTments Plus. For example, the WPI team will make math problems more culturally relevant and develop hints informed by well-regarded approaches to motivation. The effectiveness of ChatGPT-created hints on student learning within the platform, leveraging ASSISTment's backend research infrastructure will be also evaluated by the WPI team.

Weaknesses:

None noted.

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: 40

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 applicant clearly outlines three (3) strategies addressing barriers preventing the applicant from reaching the level of scale in the past as cited on (page 9). These barriers include: 1) Schools need solutions that help students from varied contexts and with different unlearned content recover from the COVID-19 pandemic; 2) Schools and districts lack data to monitor implementation and student progress; and 3) limited capacity at the school level to support and sustain implementation. The applicant has identified the following strategies to implement to overcome them, for Barrier 1) automate personalized assignment recommendations for students aligned to prerequisite standards needed for learning acceleration; Barrier 2) provide real-time data reporting for schools and districts; and Barrier 3) develop professional learning for school champions.

Weaknesses:

None 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 applicant's adequacy of the 5-year management plan is clearly outlined on page 12. Exhibit 2 provides an overview of the key activities related to each of the goals aligned to the project's timeline along with how they will collectively reach 18,000 students. Exhibit 3 provides clear objectives and a set of milestones that will be crucial to achieving each goal. The team roles and responsibilities are clearly articulated on pages 15-18.

Weaknesses:

None noted.

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 applicant clearly outlines their capacity to bring this proposed project to scale on a national level. The applicant notes their proven track record of successfully managing large scale multi-partner projects in which they are currently engaged with 12 projects funded through \$17M in federal grants. A listing of qualified and key personnel is provided on pages 16-18 which also includes their roles, experience and primary responsibilities. Resumes for key personnel are located in Appendix B on page e14.

Weaknesses:

None noted.

Reader's Score: 10

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

Sub

Strengths:

The applicant clearly articulates how the ASSISTments project will disseminate information and is outlined on page 19. For example dissemination efforts include prioritizing school district leaders with the goal of generating strong awareness and demand for A-Plus. Within Maryland, implementation models, success stories and best practices via a monthly newsletter to all partners will be shared. Also, through channels available through the MDSE newsletters will be disseminated to superintendents to spotlight work statewide, including testimonials from current partner district leaders. At the national level, research findings and the implementation resources that will be published will be disseminated.

Weaknesses:

None 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 being used effectively in a variety of other settings.**

Strengths:

The applicant on pages 19 and 20 clearly delineates that the research, implementation resources and related products that result from the project will be published on the website and made readily assessable in a virtual format. The implementation resources include: personalized assignment recommendation, the Implementation Planning Guide and the Classroom Observation Tool.

Weaknesses:

None noted.

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 applicant provides a logic model highlighting ASSISTment's conceptual framework underlying the proposed research, including the key components of the A-Plus program model and mediators for impact as cited on pages 21. Within the framework, the applicant highlights how the A-Plus model further strengthens the intervention and potential for impact. For example, for Immediate Feedback: ASSISTment's immediately informs students on the correctness of their answers: With the A-Plus Enhancements: Increasing the number of problems students complete through increased teacher assigning and automated assignments will provide students with more opportunities to practice with immediate feedback as cited on page 22

Sub

Weaknesses:

None 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 clearly outlines four goals and eight objectives of the project that will guide the development, evaluation and scaling up of A-Plus as cited on page 23. For example, Goal 1 outcomes ensure that a successful pilot to develop a strong, and stakeholder-informed version of A-Plus. Goals 2 and 3 support strong evaluation and meet the requirements of the EIR Expansion. Goal 4 outcomes align with the goal of further expanding the reach of A-Plus, broadly disseminating learning, research results, and open-source implementation tools and achieving a pathway to sustainability through sales. Exhibit 7 on pages 23 and 24 provide a clear depiction of the goals, objectives, outcomes and measures.

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.**

Strengths:

The applicant clearly delineates how A-Plus will ensure that the implementation of ASSISTments is adapted to local contexts and meets the needs of high-need students. The applicant proposes to work closely with the district champions to identify schools that will most benefit from the A-Plus interventions based on current math learning outcomes and the number of high-needs students served. As a means to build buy in at every step, information sessions will be hosted for school leaders, summer training will be held to help teachers determine a plan for integrating ASSISTments into their instructional routines as cited on pages 24 and 25.

Weaknesses:

None 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 without reservations as described in the What Works**

Sub

Clearinghouse Handbook (as defined in 34 CFR 77.1(c)).

Strengths:

Not applicable

Weaknesses:

Not applicable

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:

Not applicable

Weaknesses:

Not applicable

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:

Not applicable

Weaknesses:

Not applicable

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:

Not addressed.

Weaknesses:

Not addressed.

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 basically addresses the impact of Covid-19 learning losses and how ASSISTments supports evidence-based formative assessment practices and is a proven strategy for recovery in 7th grade math. The two RCTs showed that consistent use of ASSISTments increased student academic success in math for all students, but specifically supports learning for those furthest behind as cited on page 5.

Weaknesses:

The applicant does not indicate conducting any type of community asset-mapping or needs assessments that demonstrate the extent to which students have been disengaged from learning, including students not participating in in-person or remote instruction.

Reader's Score: 2

Status: Submitted
Last Updated: 08/03/2024 10:58 PM