

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

Status: Submitted

Last Updated: 09/14/2023 11:58 AM

Technical Review Coversheet

Applicant: Research Collaboratory at ASU, dba Enterprise Collaboratory (S411C230180)

Reader #1: *****

	Points Possible	Points Scored
Questions		
Selection Criteria		
Significance		
1. Significance	20	20
Quality of Project Design		
1. Project Design	30	29
Quality of Project Personnel		
1. Project Personnel	10	8
Quality of the Management Plan		
1. Management Plan	10	9
Sub Total	70	66
Priority Questions		
Competitive Preference Priority		
Competitive Preference Priority 1		
1. Promoting Equity	5	5
Competitive Preference Priority 2		
1. Workforce Diversity	2	0
Sub Total	7	5
Total	77	71

Technical Review Form

Panel #13 - EIR Early-Phase - 13: 84.411C

Reader #1: *****

Applicant: Research Collaboratory at ASU, dba Enterprise Collaboratory (S411C230180)

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 factor:

Reader's Score: 20

Sub

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

Strengths:

Applicant clearly describes an innovative approach, including drama-based instruction, to improve outcomes for high-communication-needs pre-schoolers. They identify a specific need in Phoenix, AZ, where up to 60% of students with Individualized Education Plans exit pre-school without meeting language and socioemotional standards. They propose to develop and test a proven strategy, and they cite the results of two meta-analyses (e16) which show that DBI promotes learner achievement, critical thinking, problem solving, and socioemotional skills (Lee et al., 2015, 2020). Applicant offers an exceptionally detailed description of how their innovation (outlined in Tables 1-3, e23) proposes an evidence-based, focused and innovative strategy, EYEPlay, to address this significant need.

Weaknesses:

none noted.

Reader's Score: 20

Selection Criteria - Quality of Project Design

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

Reader's Score: 29

Sub

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

Sub

Strengths:

The conceptual framework clearly specifies the research-based activities that will lead to improved language development. For example, teacher PD that supports drama-based story instruction and information and materials for families to practice shared book reading at home are linked to development of mechanisms that lead to improved language, literacy, and social emotional skills.

Weaknesses:

The Logic Model (e25) does not identify resources (for example, funding and partnerships) and inputs that will be applied to address the problems.

Reader's Score: 9

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

Strengths:

Applicant specifies a comprehensive iterative process with high detail. (ADDIE, phases 1-5). Detailed objectives are clearly aligned with goals. For example, to achieve the goal to design home learning experiences for HCN children, interviews will be conducted with caregivers about specific elements during the design process (Objective 2b). Phases are appropriately timebound. For example, Phases 2 and 3 (Design and Develop Learning Experiences) will be conducted in Year 2 of the project.

Weaknesses:

none noted

Reader's Score: 5

3. (3) The extent to which the design of the proposed project is appropriate to, and will successfully address, the needs of the target population or other identified needs. (15 points)

Strengths:

Applicant demonstrates awareness of the needs of the students who will be targeted with the intervention, for example, pre-schoolers with high-communication needs, and they appropriately identify the needs of the caregivers, parents, and teachers who will deliver the approaches, citing special needs teachers' skills to adapt lessons to their students' abilities (e29). Applicant's approach is designed specifically to address the needs of this ethnically diverse population, which includes high percentage of low-income households.

Weaknesses:

none noted.

Reader's Score: 15

Selection Criteria - Quality of Project Personnel

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

Reader's Score: 8

Sub

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

Strengths:

Project personnel possess a range and depth of expertise, including researchers and practitioners in Educational Psychology, Child Development, Speech Neurology, drama educator, who demonstrate relevant qualifications to ensure a high quality project. Applicant includes personnel from partner organizations. A bilingual special needs educator and bilingual actor are appropriately assigned to this project.

Weaknesses:

Applicant does not specify a plan to encourage employment applications from members of underrepresented groups should a vacancy occur in the project. They do not identify staff recruitment tools, resources, or networks they would use to target these groups to publicize job openings.

Reader's Score: 8

Selection Criteria - Quality of the Management Plan

- 1. The Secretary considers the quality of the management plan for the proposed project. In determining the adequacy of resources and quality of the management plan for the proposed project, the Secretary considers the following factors:**

Reader's Score: 9

Sub

- 1. (1) The adequacy of the management plan to achieve the objectives of the proposed project on time and within budget, including clearly defined responsibilities, timelines, and milestones for accomplishing project tasks.**

Strengths:

Applicant describes a thorough and adequately detailed management plan, with activities structured in implementation, testing, and dissemination phases over four years. Responsibilities are clearly defined here and on pages e31-e35. Milestones are appropriate to complete the project on time. For example, the milestone to conduct assessment of current HCN students and caregivers is assigned to ASU, Childsplay and Design Team in specified in Year 1.

Weaknesses:

Applicant does not clarify who has primary overall responsibility to ensure objectives are achieved on time and within budget. This role is not specified in the Management Plan or in Key Project Personnel.

Reader's Score: 9

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 5 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:

The project will be implemented in partnership with Mary Lou Fulton Teachers College at Arizona State University, a Hispanic-serving institution, an eligible institution for this priority. Faculty from the college will lend essential expertise and leadership in SEL, educational linguistics, and educational psychology to develop a high quality program that increases the capacity of teachers and families to impact SEL outcomes for high communication needs children.

Weaknesses:

none noted

Reader's Score: 5

Competitive Preference Priority - Competitive Preference Priority 2

1. Competitive Preference Priority 2:

Supporting a Diverse Educator Workforce and Professional Growth to Strengthen Student Learning (up to 2 points)

Projects that are designed to increase the proportion of well-prepared, diverse, and effective educators serving students, with a focus on underserved students, through building or expanding high-poverty school districts' capacity to hire, support, and retain an effective and diverse educator workforce, through adopting or expanding comprehensive, strategic career and compensation systems that provide competitive compensation and include opportunities for educators to serve as mentors and instructional coaches, or to take on additional leadership roles and responsibilities for which educators are compensated.

Strengths:

not applicable

Weaknesses:

not applicable

Reader's Score: 0

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Technical Review Coversheet

Applicant: Research Collaboratory at ASU, dba Enterprise Collaboratory (S411C230180)

Reader #2: *****

	Points Possible	Points Scored
Questions		
Selection Criteria		
Significance		
1. Significance	20	20
Quality of Project Design		
1. Project Design	30	30
Quality of Project Personnel		
1. Project Personnel	10	9
Quality of the Management Plan		
1. Management Plan	10	9
Sub Total	70	68
Priority Questions		
Competitive Preference Priority		
Competitive Preference Priority 1		
1. Promoting Equity	5	5
Competitive Preference Priority 2		
1. Workforce Diversity	2	0
Sub Total	7	5
Total	77	73

Technical Review Form

Panel #13 - EIR Early-Phase - 13: 84.411C

Reader #2: *****

Applicant: Research Collaboratory at ASU, dba Enterprise Collaboratory (S411C230180)

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 factor:

Reader's Score: 20

Sub

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

Strengths:

The applicant provides a thorough project overview and provides relevant national and state significance. For example, the applicant notes the strong connection between students with IEP's and academic struggles including more than half of Arizona's preschool students with IEP's failing to reach preschool exit language and socioemotional standards. Further, the applicant notes that many students with IEP were delayed in receiving services during the pandemic leading to compounded learning loss. Additionally, the applicant provides empirical evidence for effectiveness of drama-based instruction (DBI) and Importance of in-home shared book reading. For example, one study showed that children experiencing shared book reading interventions displayed greater receptive and expressive language skills. The applicant makes a strong case for EYEPlay as a promising DBI Intervention for preschool children and provides adequate details that show how this is a promising new strategy that builds upon existing strategies. The applicant states that EYEPlay was not specifically crafted for high communication needs (HCN) students and would need adaptations. To expand upon the project the applicant intends to add a new component of shared book reading at home and incorporate parents and caregivers into the new program.

Weaknesses:

There were no noted weaknesses.

Reader's Score: 20

Selection Criteria - Quality of Project Design

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

Reader's Score: 30

Sub

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

Strengths:

The applicant provides ample data and research to show EYEPlay's systematic approach. For example, the applicant describes the concept of embodiment and shows research that tells that preschool age children who engage in physically performing a story produce more vocabulary words and can recall more story events. The applicant also provides research backing the support of language development and school/home interventions. The logic Model (Figure 2 e25) clearly outlines how participation in EYEPlay Inclusion supports teacher and caregiver skill in DBI during story time and HCN children's language, literacy, and socioemotional development.

Weaknesses:

There were no noted weaknesses.

Reader's Score: 10

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

Strengths:

The applicant intends to follow the ADDIE model of program development and evaluation to ultimately provide a fully developed PD ready for scaling to a larger audience. The applicant has developed a multi-phased project designed around 5 main goals and measurable objectives and outcomes. For example, Goal 2: Design Home Learning Experiences for Children with High Communication Needs.

Obj 2a: Develop and test curricular units with 10 caregiver/child dyads, revising program components in response to caregiver feedback. Obj 2b: Interview caregivers about specific design elements during the design process.

Weaknesses:

There were no noted weaknesses.

Reader's Score: 5

- 3. (3) The extent to which the design of the proposed project is appropriate to, and will successfully address, the needs of the target population or other identified needs. (15 points)**

Strengths:

The applicant clearly specifies the target population to include preschool teachers and caregivers of preschool children. They define the preschool children population as predominantly Hispanic with greater than 44% living below poverty level and including 18% ELLs. Additionally, it is noted that fewer than 38% of students reach basic or higher levels of reading proficiency by third grade.

Weaknesses:

There were no noted weaknesses.

Reader's Score: 15

Selection Criteria - Quality of Project Personnel

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

Reader's Score: 9

Sub

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

Strengths:

The applicant clearly describes a long partnership with ASU. Additionally, relevant training and experience of key project personnel is described and resumes have been provided.

Weaknesses:

The applicant does not address a specific plan for employment from persons who are members of groups that have traditionally been underrepresented should a vacancy incur.

Reader's Score: 9

Selection Criteria - Quality of the Management Plan

1. The Secretary considers the quality of the management plan for the proposed project. In determining the adequacy of resources and quality of the management plan for the proposed project, the Secretary considers the following factors:

Reader's Score: 9

Sub

1. (1) The adequacy of the management plan to achieve the objectives of the proposed project on time and within budget, including clearly defined responsibilities, timelines, and milestones for accomplishing project tasks.

Strengths:

The applicant indicates responsibilities, timelines and milestones in Table 5 (e 35-36) for example, Phase 4 includes the Implement Randomized Controlled Trial Pilot Study with teachers (N = 30) of High Needs Preschoolers. The chart indicated that ASU and CP will each be responsible for certain milestones which will take place in year 3. Letters of support strengthen the project management plan.

Weaknesses:

While Table 5 (e 35-36) provides phases and milestones with a broad outlook on timeline (by year) and responsibility (by institution), these are very broad and a more detailed approach would have offered a clearer picture of day-to-day activities and specific responsibilities.

Reader's Score: 9

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 5 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:

Arizona State University (ASU), Childsplay Theatre Company, and Phoenix Elementary School District (PESD) are applying as partners in this grant application. Arizona State University (ASU) is the main applicant and has provided ample evidence of its partnerships (letters of support) and meets the qualifications of CPP1.

Weaknesses:

There we no noted weaknesses.

Reader's Score: 5

Competitive Preference Priority - Competitive Preference Priority 2

1. Competitive Preference Priority 2:

Supporting a Diverse Educator Workforce and Professional Growth to Strengthen Student Learning (up to 2 points)

Projects that are designed to increase the proportion of well-prepared, diverse, and effective educators serving students, with a focus on underserved students, through building or expanding high-poverty school districts' capacity to hire, support, and retain an effective and diverse educator workforce, through adopting or expanding comprehensive, strategic career and compensation systems that provide competitive compensation and include opportunities for educators to serve as mentors and instructional coaches, or to take on additional leadership roles and responsibilities for which educators are compensated.

Strengths:

NA

Weaknesses:

NA

Reader's Score: 0

Status: Submitted
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Technical Review Coversheet

Applicant: Research Collaboratory at ASU, dba Enterprise Collaboratory (S411C230180)

Reader #3: *****

	Points Possible	Points Scored
Questions		
Selection Criteria		
Significance		
1. Significance	20	20
Quality of Project Design		
1. Project Design	30	29
Quality of Project Personnel		
1. Project Personnel	10	8
Quality of the Management Plan		
1. Management Plan	10	9
Sub Total	70	66
Priority Questions		
Competitive Preference Priority		
Competitive Preference Priority 1		
1. Promoting Equity	5	5
Competitive Preference Priority 2		
1. Workforce Diversity	2	0
Sub Total	7	5
Total	77	71

Technical Review Form

Panel #13 - EIR Early-Phase - 13: 84.411C

Reader #3: *****

Applicant: Research Collaboratory at ASU, dba Enterprise Collaboratory (S411C230180)

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 factor:

Reader's Score: 20

Sub

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

Strengths:

The applicant gives a comprehensive and thorough explanation on the significance of the project that is based on feedback directly from early educators on how the program needs modifications to meet the needs of diverse preschool students. The program expands on the evidence based EYEPlay (Early Years Educators at Play) intervention to create EYEPlay Inclusion (E16) which provides preschool teachers training to implement drama-based instructional (DBI) strategies during storybook reading for students with high communication needs (HCN) attending specialized schools based on level of support needed.

Data outlining the significant academic impact on students with disabilities is outlined at early ages. Research is included that demonstrates how DBI promotes learner achievement, critical thinking, problem solving, and social emotional skills (E18). Research is highlighted that shows the importance of caregiver involvement in supporting the intervention at home through the shared reading project (E18).

The applicant describes how the original program, EYEPlay showing promising results to date with impact noted on diverse student populations (E19). With that noted, there is further explanation of how adjustments need to be made to meet the unique needs of children with HCN, the importance of including a parent component, and that there is currently no other program like this that the applicant is aware of (E20).

There is a detailed and comprehensive outline on how teachers will implement the project and caregiver components (E21-23) as well as a plan with intentional considerations to modify the program to meet the needs of HCN children (E23-24) through teacher PD, caregiver resources, integrated classroom lessons, and home interventions.

Weaknesses:

None.

Reader's Score: 20

Selection Criteria - Quality of Project Design

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

Reader's Score: 29

Sub

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

Strengths:

Research for the project is infused throughout the grant application. Specific frameworks that are noted to meet the needs of HCN students include, embodiment, link between language and motor development to incorporate guided movement, and strong connection between school-home interventions (E24-25).

Weaknesses:

While a detailed logic model is included in the application, it is not clear or specific what the inputs for the logic model are.

Reader's Score: 9

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

Strengths:

The project will utilize the ADDIE model (Analyze, Design, Develop, Implement, Evaluate). The applicant operationalized the ADDIE model by dividing the project into five phases utilizing ADDIE, Phase 1: Analyze Learning and Infrastructure Needs and Available Resources, Phases 2 and 3: Design and Develop Learning Experiences . Phase 4: Implement an RCT that meets WWC Group Design Standards Without Reservations and Phase 5: Evaluate to Provide Summative Conclusions that clearly communicate the plan (E26-28). The applicant then goes on to provide a thorough and detailed table outlining goals, objectives and outcomes which are specific and measurable (E28-29).

Weaknesses:

None.

Reader's Score: 5

3. (3) The extent to which the design of the proposed project is appropriate to, and will successfully address, the needs of the target population or other identified needs. (15 points)

Strengths:

The entire project is designed to meet the needs of a targeted group of students (HCN preschool aged students receiving special education services). The grant speaks to the need for preschool classroom teachers and caregivers of the targeted group of students (E29-30) to also receive support for the success of the project. The applicant further clarifies the target population and how they will meet the needs by addressing the demographics of the population of students that will be included in this project, in addition to receiving special education services, students and caregivers come from under resourced and under-served communities (FRL, ELL, immigrant, minority).

Sub

Weaknesses:

None.

Reader's Score: 15

Selection Criteria - Quality of Project Personnel

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

Reader's Score: 8

Sub

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

Strengths:

The applicant explicitly outlines the areas of expertise that each key project staff will bring to the grant, including SEL as well as highly qualified professionals to modify the program to meet the needs to students with HCN.

Weaknesses:

While the applicant indicates they have diverse project staff and have consistently recruited personnel who are underrepresented due to race, color, national origin, gender, age, or disability, it is not clear how this was done.

Reader's Score: 8

Selection Criteria - Quality of the Management Plan

- 1. The Secretary considers the quality of the management plan for the proposed project. In determining the adequacy of resources and quality of the management plan for the proposed project, the Secretary considers the following factors:**

Reader's Score: 9

Sub

- 1. (1) The adequacy of the management plan to achieve the objectives of the proposed project on time and within budget, including clearly defined responsibilities, timelines, and milestones for accomplishing project tasks.**

Strengths:

The grant provides a thorough and comprehensive outline of the project throughout the application. Key components of the EYEPlay teacher professional development (including unit lessons), caregiver programming and proposed modifications, including design team considerations are included. Utilizing the ADDIE model throughout the management plan, goals, objectives and outcomes are clearly outlined (E26-29) and further timelines and

Sub

milestones (E35-36) are provided so that this information can be transferred to completing project tasks and meeting grant timelines and deliverables.

Weaknesses:

While there are broad responsibilities shared in the timeline, they lack clearly defined responsibilities addressing the entire scope of the project. As an example, it is unclear who will be managing the budget.

Reader's Score: 9

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 5 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:

Arizona State University is an HSI institution and clearly described as a partner in this project.

Weaknesses:

None.

Reader's Score: 5

Competitive Preference Priority - Competitive Preference Priority 2

1. Competitive Preference Priority 2:

Supporting a Diverse Educator Workforce and Professional Growth to Strengthen Student Learning (up to 2 points)

Projects that are designed to increase the proportion of well-prepared, diverse, and effective educators serving students, with a focus on underserved students, through building or expanding high-poverty school districts' capacity to hire, support, and retain an effective and diverse educator workforce, through adopting or expanding comprehensive, strategic career and compensation systems that provide competitive compensation and include opportunities for educators to serve as mentors and instructional coaches, or to take on additional leadership roles and responsibilities for which educators are compensated.

Strengths:

n/a

Weaknesses:

n/a

Reader's Score: **0**

Status: Submitted

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Last Updated: 09/29/2023 03:51 PM

Technical Review Coversheet

Applicant: Research Collaboratory at ASU, dba Enterprise Collaboratory (S411C230180)

Reader #1: *****

	Points Possible	Points Scored
Questions		
Selection Criteria		
Quality of the Project Evaluation		
1. Project Evaluation	30	18
Sub Total	30	18
Total	30	18

Technical Review Form

Panel #14 - Early-phase Tier II Panel - 14: 84.411C

Reader #1: *****

Applicant: Research Collaboratory at ASU, dba Enterprise Collaboratory (S411C230180)

Questions

Selection Criteria - Quality of the Project Evaluation

1. The Secretary considers the quality of the evaluation to be conducted of the proposed project. In determining the quality of the evaluation, the Secretary considers the following factors:

Reader's Score: 18

Sub

1. (1) The extent to which the methods of evaluation will, if well implemented, produce evidence about the project's effectiveness that would meet the What Works Clearinghouse standards with or without reservations as described in the What Works Clearinghouse Handbook (as defined in this notice). (20 points)

Strengths:

The proposal overall is well written and organized, with very helpful tables.

The proposed evaluation includes a randomized controlled trial (RCT) design that can produce evidence about the project's effectiveness that would meet What Works Clearinghouse standards without reservations. (e27, e37) The evaluator has proposed an RCT to determine the impact of the program, EYEPlay Inclusion, on student, teacher, and caregiver outcomes. The impact research questions are logically related (e36-e37) and map back to the project logic model. (e25) The decision to randomize 30 elementary schools to receive EYEPlay Inclusion or be assigned to business as usual is reasonable based on the programmer's working relationship with Phoenix Elementary School District. (e16) The evaluator notes that baseline equivalence should be achieved to meet WWC standards (e37) and the randomization should help ensure that. The decision to conduct this evaluation beginning in Year 3 (e37) of the project is also reasonable for an early phase proposal.

The evaluator correctly identifies a number of important issues necessary to meet WWC standards: baseline equivalence, attrition, treatment diffusion, and confounding factors. (e37) The evaluator also provides a sufficient presentation of a power analysis, including reasonable assumptions about Type I error rate and intraclass correlation coefficient (ICC). (e37) Their power analysis results in the determination of sensible minimum detectable effect sizes (MDES) of 0.42 (administrators), 0.30 (teachers), and 0.25 (students). (e37)

Outcome measures appear to be reasonable selections that align to project goals. (e39) The measures that have been developed and tested have good psychometric properties and seem appropriate for evaluator aims. (e134-136) The evaluator also accounts for differences in analyzing impacts based on level (e.g., teacher versus student). (e37-e38)

Weaknesses:

While well written and organized, there is a considerable lack of necessary detail in the proposal. The evaluator does not present a plan about how they would minimize or respond to attrition, prevent diffusion of treatment, or potential confounds. Further, the evaluator fails to identify missing data as a potential concern. Similarly, the evaluator provides enough information to suggest that they understand the importance of analytic models, but no

Sub

actual analytic models or description about how analyses will be conducted for outcome measures is provided. Typically, an evaluation of outcomes would also focus on intent-to-treat analyses, but there is no clear indication whether or not that is the strategy for this evaluation.

The proposal is also unclear about some important design issues. The evaluator indicates that 30 teachers will be randomly assigned to treatment or control, and then students in classes will be randomly selected. There are implications for randomly identifying students after the randomization process at the teacher level that the evaluator does not seem to consider. In addition, the study pilot seems to include teachers from an elementary school already receiving a version of this treatment through a Spencer project. It is unclear if this school will continue to be included in the randomization process. Moreover, although the evaluation will be conducted in PESD, the recruitment of schools is unaddressed.

Many of the outcome measures will either be developed as part of this project or are currently being tested in the Spencer grant. This seems acceptable for one or maybe two outcomes. However, when so many of the outcomes necessary for this evaluation—and meeting WWC standards without reservations—have not yet been validated psychometrically, it is difficult to be fully confident that those standards will actually be met. Further, although nothing stipulates that the evaluator for an EIR grant be external, there is no clear check in place to ensure an independent evaluation. This is especially noteworthy when the programmer and evaluator sit at the same institution, have ongoing grant work, and do not yet have validated instruments.

Reader's Score: 11

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

Strengths:

The ongoing working relationship between programmer and evaluator potentially allows for regular performance feedback and periodic assessments. Piloting the program allows for adjustments in preparation for the evaluation. Numerous relevant data sources are identified that appear to be diverse, both quantitative and qualitative in nature. (e39) They could allow for considerable triangulation of data. Data collection timelines and measures are robust. (e28-e29, e35-e36, e39) The evaluator also notes a cost effectiveness study that would be important to informing the programmer about how to consider shifts in resource allocations. (e36) The evaluator indicates that periodic feedback will be provided (e38), which seems reasonable given the ongoing nature of this work and close relationship of the programmer and evaluator.

Weaknesses:

Despite the listing of numerous, diverse data sources, there is little detail about how these diverse data will be analyzed or reported in practical ways. In addition, survey data appear to be used primarily for outcomes analyses. It is unclear if those data are also to be used in some formative way.

Reader's Score: 4

3. (3) The extent to which the evaluation plan clearly articulates the key project components, mediators, and outcomes, as well as a measurable threshold for acceptable implementation. (5 points)

Strengths:

The evaluator identifies various student, teacher, and caregiver outcomes. (e135-e136) Outcome measures appear to tie to their logic model. (e125) The evaluator also includes moderators with a high-level analytic plan. (e40, e134) The evaluators also provide some information about implementation fidelity and offer some examples based on previous experience. (e40, e136-e137)

Sub

Weaknesses:

Although the evaluator has experience and seems to have a plan to determine implementation thresholds, no current thresholds for implementation are evident. Similarly, the evaluators note mediation—including noting teacher beliefs, skills, and application (e40)—but are not clear if or how they will be analyzed for mediation. The logic model, for example, indicates that these outcomes are impact outcomes alone. Further, the research questions (e36-e37) do not include any questions about mediation. Finally, outcomes are included but so many are still either being validated or in development that it is difficult to have complete confidence in them currently.

Reader's Score: 3

Status: Submitted
Last Updated: 09/29/2023 03:51 PM

Status: Submitted

Last Updated: 10/05/2023 04:06 PM

Technical Review Coversheet

Applicant: Research Collaboratory at ASU, dba Enterprise Collaboratory (S411C230180)

Reader #2: *****

	Points Possible	Points Scored
Questions		
Selection Criteria		
Quality of the Project Evaluation		
1. Project Evaluation	30	20
Sub Total	30	20
Total	30	20

Technical Review Form

Panel #14 - Early-phase Tier II Panel - 14: 84.411C

Reader #2: *****

Applicant: Research Collaboratory at ASU, dba Enterprise Collaboratory (S411C230180)

Questions

Selection Criteria - Quality of the Project Evaluation

1. The Secretary considers the quality of the evaluation to be conducted of the proposed project. In determining the quality of the evaluation, the Secretary considers the following factors:

Reader's Score: 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 with or without reservations as described in the What Works Clearinghouse Handbook (as defined in this notice). (20 points)

Strengths:

The applicant includes a robust description of the methods they will use to evaluate the project. During the developmental phase the applicant will pilot the professional development and curriculum tools with a small group of teachers, parents and students (e-p. 26). Using an A B group method for fine-tuning the curriculum materials is a widely accepted choice for iterative development. Once fine-tuning of the tools is completed, the applicant will conduct a randomized control trial (RCT) and business as usual (BAU) with a larger group of teachers, students and parents (e-p. 27). This design choice has the potential to meet the What Works Clearinghouse standards with reservations.

The RCT will include 15 classrooms, 75 students and 75 guardians for both the treatment and control group (e-p. 27). The applicant discusses the power analysis and clearly identifies the minimum detectable effect sizes which have the potential to demonstrate effects in the impact of the project if well implemented (e-p. 37). The applicant will use baseline data to determine equivalency of the treatment and control groups and make adjustments as needed to ensure equivalency (e-p. 37).

The majority of the comprehensive list of outcome measures presented are valid and reliable tools and the applicant intends to test the tools they will develop during the proposed project for reliability and validity as part of the project activities (e-p. 39).

The applicant includes the recruitment (e-p. 9) and randomization process (e-p. 27), which are both reasonable for accomplishing the project and producing evidence on the project effectiveness.

There is a brief discussion of the applicant's intent to monitor for diffusion of treatment (contamination) and attrition (e-p. 37). This discussion demonstrates a basic understanding of the design requirements to meet WWC standards.

Weaknesses:

The application does not include a discussion of missing data and how the project will control for missing data. Another weakness is although the applicant states they will monitor attrition and contamination, there are no details

Sub

of how attrition and/or contamination will be addressed if they occur (e-p. 37). A loss of participants in either group has the potential for weakening the impact analysis. It is also not clear what type of analysis will be conducted to determine project impact.

Reader's Score: 12

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

Strengths:

The applicant includes several methods for providing performance feedback to assess progress toward achieving outcomes. For example, parents will record their interaction with their children during reading times, teacher interaction with children will be observed by a trained observer and student data will be collected at multiple time points throughout the implementation year (e-p. 135). The time points and methods for data collection on teacher, parent and student outcomes are clear for the most part and should provide evidence of project implementation. For example, during the design and developmental phases, assessment will occur every three weeks between the two groups so the project components can be fine-tuned and then re-delivered to the alternating group (e-p. 38). Also, the program plan includes monthly meetings during the developmental phase to provide feedback on the curriculum components (e-p. 36).

Weaknesses:

It is not clear how often data will be shared during years 3 and 4. The applicant states that the data will be shared periodically and the time points for the data collection are clearly included in the project measures table (e-p.39), but the applicant does not state frequency of meetings to share the data or how the data will be used to inform the program's continuous quality improvements.

Reader's Score: 4

3. (3) The extent to which the evaluation plan clearly articulates the key project components, mediators, and outcomes, as well as a measurable threshold for acceptable implementation. (5 points)

Strengths:

The applicant clearly presents the key project components from the design phase through the evaluation plan. The project plan, evaluation plan and logic model align.

There is clear consideration for demographic and dosage differences as potential moderators for differential impact (e-p. 38). The table on e-p. 39 lists demographics of teachers and caregivers as moderators, demonstrating the applicants understanding of the potential for differential effects of these factors.

Each of the three levels of outcome are discussed along with the measurement tools. Validity and reliability of the majority of the tools are included in the application (e-pp.134-137), that demonstrate the outcomes will be measured with standardized instruments. The application includes several fidelity monitoring methods and time points to ensure implementation follow through (e-p. 40). The implementation thresholds for dosage are included and are considered as part of the impact analysis (e-p. 29).

Weaknesses:

The rationale for selecting some factors as mediators and others as moderators is not clear. For example, the applicant states teacher Drama Based Instruction (DBI) beliefs, skills and applications may mediate student outcomes and then lists teacher confidence, efficacy and beliefs and student ESL status as possible moderators of DBI success (e-p. 40). More clarity in the selection of the mediators and moderators is needed to fully address this

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factor.

Reader's Score: 4

Status: Submitted

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