

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

Status: Submitted

Last Updated: 10/29/2020 06:53 PM

Technical Review Coversheet

Applicant: Digital Promise Global (S411C200054)

Reader #1: *****

	Points Possible	Points Scored
Questions		
Selection Criteria		
Quality of Project Design		
1. Quality of Project Design	40	35
Sub Total	40	35
Resources and Quality of Management Plan		
Resources and Quality of Management Plan		
1. Resources and Management	35	35
Sub Total	35	35
Selection Criteria		
Quality of the Project Evaluation		
1. Project Evaluation	25	25
Sub Total	25	25
Priority Questions		
CPP		
Competitive Preference Priority 1		
1. Computer Science	5	0
Sub Total	5	0
Total	105	95

Technical Review Form

Panel #4 - FY20 EIR Early Phase- AP2 STEM - 4: 84.411C

Reader #1: *****

Applicant: Digital Promise Global (S411C200054)

Questions

Selection Criteria - Quality of Project Design

1. The Secretary considers the quality of the design of the proposed project based on the following factors:

Reader's Score: 35

Sub

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

Strengths:

Goals, objectives, and outcomes are clearly articulated and measurable (pages e28-e29).

Weaknesses:

None noted.

Reader's Score: 10

2. (2) 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 describes the project as a coaching program intended to improve the quality of mathematics instruction of high needs middle school students (page e24).

Weaknesses:

The project design is targeting middle school students, some of whom happen to be low income, minority, or behind academically (page e21). Rather than focusing on high-needs students explicitly, the proposal aims to work with schools that have students from the high-needs categories they define as Black, Latinx, low income, or achieving below grade level (page e24).

Reader's Score: 6

3. (3) The extent to which the design of the proposed project reflects up-to-date knowledge from research and effective practice.

Strengths:

The applicant provides a comprehensive research base throughout to support all major components in the project design.

Sub

Weaknesses:

None noted.

Reader's Score: 10

4. (4) The potential contribution of the proposed project to increased knowledge or understanding of educational problems, issues, or effective strategies.

Strengths:

The project has the potential in increase the capacity for high-quality mathematics instruction and increase teacher access to instructional support.

Weaknesses:

None noted.

Reader's Score: 9

Resources and Quality of Management Plan - Resources and Quality of Management Plan

1. The Secretary considers the adequacy of resources and the quality of the management plan for the proposed project based on the following factors:

Reader's Score: 35

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 provides a detailed management plan that describes activities, milestones, timelines, and responsibilities broken down by project phase (pages e35-37). Delineation of activities by project phase aligns with the proposed budget.

Weaknesses:

None noted.

Reader's Score: 10

2. (2) The extent to which the costs are reasonable in relation to the objectives, design, and potential significance of the proposed project.

Strengths:

The proposed costs are reasonable. The applicant provides a rationale for most expenditures (pages e120-e132).

Weaknesses:

None noted.

Sub

Reader's Score: 5

3. (3) The qualifications, including relevant training and experience, of key project personnel.

Strengths:

Proposed key staff appear to be highly qualified to design, deliver, and evaluate the proposed project. The applicant has proposed at least one subject matter expert for each of the main components of the project (pages e38-e40).

Weaknesses:

None noted.

Reader's Score: 5

4. (4) The adequacy of procedures for ensuring feedback and continuous improvement in the operation of the proposed project.

Strengths:

The applicant describes a detailed and robust process for continuous improvement that includes multiple strategies for evidence generation and use (pages e40-41).

Weaknesses:

None noted.

Reader's Score: 10

5. (5) The extent to which the results of the proposed project are to be disseminated in ways that will enable others to use the information or strategies.

Strengths:

The project includes a dedicated communications team, and they propose a dissemination strategy that is intended to reach multiple stakeholders and audiences (page e42). The strategy includes innovative solutions such as leveraging the website, tapping into a national network of district leaders, media outreach, and possible WWC review, as well as more traditional venues such as conferences, symposia, and publications.

Weaknesses:

None noted.

Reader's Score: 5

Selection Criteria - Quality of the Project Evaluation

1. The Secretary considers the quality of the evaluation to be conducted of the proposed project based on the following factors:

Reader's Score: 25

Sub

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).

Strengths:

The proposed evaluation utilizes a cluster-RCT design what has the potential to meet WWC standards without reservations (pages e43-45).

Weaknesses:

None noted.

Reader's Score: 15

2. (2) 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 evaluation plan is of high-quality. Project components, mediators, outcomes, and thresholds for implementation are clearly articulated (page e45-e47).

Weaknesses:

None noted.

Reader's Score: 5

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

Strengths:

The applicant provided sufficient evidence in support of the validity and reliability of methods and assessments (page e47-e48).

Weaknesses:

None noted.

Reader's Score: 5

Priority Questions

CPP - Competitive Preference Priority 1

1. Competitive Preference Priority 1: Computer Science

Projects designed to improve student achievement or other educational outcomes in computer science (as defined in this notice). These projects must address the following priority area: Expanding access to and participation in rigorous computer science coursework for traditionally underrepresented students such as racial or ethnic minorities, women, students in communities served by rural local educational agencies (as defined in this notice), children or students with disabilities (as defined in this notice), or low-income individuals (as defined under section 312(g) of the Higher Education Act of 1965, as amended).

Strengths:

None noted.

Weaknesses:

The proposed project does not address the priority preference for computer science.

Reader's Score: **0**

Status: Submitted

Last Updated: 10/29/2020 06:53 PM

Status: Submitted

Last Updated: 10/28/2020 01:35 PM

Technical Review Coversheet

Applicant: Digital Promise Global (S411C200054)

Reader #2: *****

	Points Possible	Points Scored
Questions		
Selection Criteria		
Quality of Project Design		
1. Quality of Project Design	40	37
Sub Total	40	37
Resources and Quality of Management Plan		
Resources and Quality of Management Plan		
1. Resources and Management	35	32
Sub Total	35	32
Selection Criteria		
Quality of the Project Evaluation		
1. Project Evaluation	25	25
Sub Total	25	25
Priority Questions		
CPP		
Competitive Preference Priority 1		
1. Computer Science	5	0
Sub Total	5	0
Total	105	94

Technical Review Form

Panel #4 - FY20 EIR Early Phase- AP2 STEM - 4: 84.411C

Reader #2: *****

Applicant: Digital Promise Global (S411C200054)

Questions

Selection Criteria - Quality of Project Design

1. The Secretary considers the quality of the design of the proposed project based on the following factors:

Reader's Score: 37

Sub

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

Strengths:

The proposal provides a clear logic model for the goals, objectives and outcomes, and Table 1 lists the activities and measures to achieve them (page e28).

Weaknesses:

None noted.

Reader's Score: 10

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

Strengths:

The proposal highlights the needs of the target population, as well as the needs of the two partner districts, and ensures that the project will successfully support improving mathematics instruction for the target population to improve student outcomes (page e29).

Weaknesses:

None noted.

Reader's Score: 10

3. (3) The extent to which the design of the proposed project reflects up-to-date knowledge from research and effective practice.

Strengths:

The proposal provided a detailed, up-to-date research basis for its three critical areas—instructional coaching, mathematics instruction, and leveraging technology for mathematical learning. The result is a well-informed proposal that reflects effective practice (page e31).

Sub

Weaknesses:

None noted.

Reader's Score: 10

4. (4) The potential contribution of the proposed project to increased knowledge or understanding of educational problems, issues, or effective strategies.

Strengths:

The proposal's focus on mathematics instruction through leveraging coaching and effective technology practices existing in schools and districts has potential to contribute to increased understanding of how to best support high quality instruction in a mathematics classroom (page e27).

Weaknesses:

The proposal does not explicitly detail how findings from the project will contribute to better math instruction beyond the partner districts (page e27).

Reader's Score: 7

Resources and Quality of Management Plan - Resources and Quality of Management Plan

1. The Secretary considers the adequacy of resources and the quality of the management plan for the proposed project based on the following factors:

Reader's Score: 32

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 proposal provides a management plan that includes clearly defined responsibilities, timelines, and milestones for completing the five phases of the project (page e35).

Weaknesses:

None noted.

Reader's Score: 10

2. (2) The extent to which the costs are reasonable in relation to the objectives, design, and potential significance of the proposed project.

Strengths:

The proposal details a per-student cost for the program, noting the importance of scaling efforts to keep costs down in relation to the number of students served (page e38).

Sub

Weaknesses:

The budget includes some elements (travel, supplies) that could be mitigated through the use of virtual sessions (page e121).

Reader's Score: 4

3. (3) The qualifications, including relevant training and experience, of key project personnel.

Strengths:

The project team includes a wide range of experience with research, writing and managing grants, mathematics education, instructional coaching, and education technology (page e39).

Weaknesses:

None noted.

Reader's Score: 5

4. (4) The adequacy of procedures for ensuring feedback and continuous improvement in the operation of the proposed project.

Strengths:

The plan includes a systematic use of quantitative and qualitative data collection to ensure that feedback is incorporated into the design (page e41).

Weaknesses:

The feedback and continuous improvement plan does not include specific details of how the feedback will be analyzed and incorporated into the overall improvement of the project. Additionally, the plan has some timeframes for feedback collection, but it is unclear how this will span the length of the project (page e41).

Reader's Score: 8

5. (5) The extent to which the results of the proposed project are to be disseminated in ways that will enable others to use the information or strategies.

Strengths:

The plan includes ways to disseminate information that reaches both researchers and practitioners in the field (page e42).

Weaknesses:

None noted.

Reader's Score: 5

Selection Criteria - Quality of the Project Evaluation

1. The Secretary considers the quality of the evaluation to be conducted of the proposed project based on the following factors:

Reader's Score: 25

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).**

Strengths:

The proposal outlines methods to ensure the RCT evaluation will meet WWC standards without reservations, and includes a plan for recruiting and assigning schools into treatment and control groups (page e44).

Weaknesses:

None noted.

Reader's Score: 15

- 2. (2) 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 I includes key project components, mediators, outcomes, and measurable thresholds for implementation (page e55).

Weaknesses:

None noted.

Reader's Score: 5

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

Strengths:

The evaluation includes independently verified tools and assessments to ensure validity (page e48).

Weaknesses:

None noted.

Reader's Score: 5

Priority Questions

CPP - Competitive Preference Priority 1

1. Competitive Preference Priority 1: Computer Science

Projects designed to improve student achievement or other educational outcomes in computer science (as defined in this notice). These projects must address the following priority area: Expanding access to and participation in rigorous computer science coursework for

traditionally underrepresented students such as racial or ethnic minorities, women, students in communities served by rural local educational agencies (as defined in this notice), children or students with disabilities (as defined in this notice), or low-income individuals (as defined under section 312(g) of the Higher Education Act of 1965, as amended).

Strengths:

None noted.

Weaknesses:

The proposal does not address computer science as a component of the project.

Reader's Score: **0**

Status: Submitted

Last Updated: 10/28/2020 01:35 PM

Status: Submitted

Last Updated: 10/28/2020 02:58 PM

Technical Review Coversheet

Applicant: Digital Promise Global (S411C200054)

Reader #3: *****

	Points Possible	Points Scored
Questions		
Selection Criteria		
Quality of Project Design		
1. Quality of Project Design	40	35
Sub Total	40	35
Resources and Quality of Management Plan		
Resources and Quality of Management Plan		
1. Resources and Management	35	33
Sub Total	35	33
Selection Criteria		
Quality of the Project Evaluation		
1. Project Evaluation	25	25
Sub Total	25	25
Priority Questions		
CPP		
Competitive Preference Priority 1		
1. Computer Science	5	0
Sub Total	5	0
Total	105	93

Technical Review Form

Panel #4 - FY20 EIR Early Phase- AP2 STEM - 4: 84.411C

Reader #3: *****

Applicant: Digital Promise Global (S411C200054)

Questions

Selection Criteria - Quality of Project Design

1. The Secretary considers the quality of the design of the proposed project based on the following factors:

Reader's Score: 35

Sub

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

Strengths:

There are three project goals listed. These include increasing mathematics engagement and achievement for students who are underserved, improving the quality of mathematics instruction through strategic use of technology, and designing and evaluating the role of coaching innovations to enable non-specialist coaches to support mathematics teachers (page e27). A concise table is provided that aligns the goals, objectives, outcomes, and measures. The objectives are time-bound and measurable.

Weaknesses:

None noted.

Reader's Score: 10

2. (2) 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 proposes developing and evaluating a school-based, one-to-one teacher coaching program to raise the quality of middle school mathematics instruction for students with high needs. The applicant clearly defines high needs students as students whose test scores are a year or more behind grade level. Underserved students are students who identify as Black, Latino, or low-income (page e24). The initial two participating school districts for the design portion of the project and their target schools are adequately described. One school district is in Oregon and one school district is in Pennsylvania (page e30).

Weaknesses:

The applicant clearly describes the initial two school districts involved in the design portion of the project. However, the applicant states another two school districts will participate, but does not provide any information beyond that. It is unclear who is the target population in the additional school districts. More information is needed on the additional partnering school districts and that target population.

Sub

Reader's Score: 8

3. (3) The extent to which the design of the proposed project reflects up-to-date knowledge from research and effective practice.

Strengths:

The proposal cites sufficient research. Their project design is based on three major areas: instructional coaching as an effective means to improve teacher practice and student achievement; observational frameworks for high quality mathematics instruction; and, strategic use of technology to increase mathematics learning in underserved students. Innovative technology is used less often in schools where students experience poverty (page e31). The strategic use of technology can stimulate student engagement in math, provide academic achievement data for students, and give teachers information to adapt instruction.

Weaknesses:

None noted.

Reader's Score: 10

4. (4) The potential contribution of the proposed project to increased knowledge or understanding of educational problems, issues, or effective strategies.

Strengths:

The participating school districts span two states, which the applicant indicates will help guard against developing a program overly specific to one state's standards (page e30). The applicant provides a table with the proposed program components for coaching activity, supports for teachers, and school and district leader supports (page e35). The project focus on improving mathematics achievement, teacher coaching, and the use of innovative technology is notable.

Weaknesses:

The applicant did not specifically discuss the potential contribution the proposed project has on addressing educational issues or adding to the knowledge base. While it is clear the project goals are to increase student math achievement and improve teacher coaching, there are few additional details on why this program is important and how it is different from existing initiatives focusing on mathematics instruction in high needs or underrepresented populations.

Reader's Score: 7

Resources and Quality of Management Plan - Resources and Quality of Management Plan

1. The Secretary considers the adequacy of resources and the quality of the management plan for the proposed project based on the following factors:

Reader's Score: 33

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.

Sub

Strengths:

A detailed table is provided that aligns the project activities to the milestones, timeframe, and person responsible. The activities are divided into three phases. These phases include program launch, development, piloting, full implementation, and dissemination and reporting (pages e35-e37).

Weaknesses:

The applicant did not align the management plan to the project objectives. For example, two activities listed are codesign coaching and training mentorship (page e36). It was not clear which activities were associated with the previously listed project objectives in Table 1 (pages e28-e29).

Reader's Score: 8

2. (2) The extent to which the costs are reasonable in relation to the objectives, design, and potential significance of the proposed project.

Strengths:

The applicant justifies the project costs with a per-participant analysis. If the project is expected to reach 25,200 students, then the per student cost is \$43.95 per student (page e38). Program support costs associated with the mentor coaches, coach training, district administrative support, and continuous improvement activities are approximately \$82.03 per student. The travel budget is very detailed, including the number of trips needed to school district sites, project meetings, and conferences (pages e123-e124). Costs are also described for the participating school districts.

Weaknesses:

None noted.

Reader's Score: 5

3. (3) The qualifications, including relevant training and experience, of key project personnel.

Strengths:

The qualifications of the project personnel appear relevant to the project described. One of the team members is described as a math education and instructional technology expert (page e40). Several team members have large federal grant experience, as well as private grant management experience. Several team members also have extensive experience with teacher coaching. School-level personnel are also mentioned as key project team members.

Weaknesses:

None noted.

Reader's Score: 5

4. (4) The adequacy of procedures for ensuring feedback and continuous improvement in the operation of the proposed project.

Strengths:

The applicant provides a clear feedback and continuous improvement plan. During the development and pilot phase of the project, data will be used to refine program components and prepare for full implementation in additional districts. Ongoing, data collection will help inform each component of the logic model that will identify conditions for the project's success (page e40). There will be bimonthly questionnaires for the participating teachers, coaches,

Sub

and school principals (page e41).

Weaknesses:

None noted.

Reader's Score: 10

5. (5) The extent to which the results of the proposed project are to be disseminated in ways that will enable others to use the information or strategies.

Strengths:

The dissemination plan is thorough. The applicant's research communications team will be responsible for disseminating the research produced through the project. The team has experience with innovative research communications outputs, including data visualizations and video productions (page e42). The applicant will submit to peer-reviewed journals related to math learning and instruction, as well as propose conference presentations at symposia for math researchers and practitioners. The applicant publishes a biweekly newsletter and hosts a semi-annual convening which will also be used to communicate project findings.

Weaknesses:

None noted.

Reader's Score: 5

Selection Criteria - Quality of the Project Evaluation

1. The Secretary considers the quality of the evaluation to be conducted of the proposed project based on the following factors:

Reader's Score: 25

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).

Strengths:

The evaluation will assess the extent to which the project components are implemented as intended and measure the impact of the project on teachers and students. The evaluation features a cluster-randomized controlled trial which meets the WWC standards without reservations (page e43). There will be treatment and control group schools, which will be randomly assigned by the evaluation team. Schools will be grouped by site and school poverty level data, and within the groups each school will have a 50 percent chance of assignment to treatment or control (page e44).

Weaknesses:

None noted.

Sub

Reader's Score: 15

2. (2) 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 project's key components, mediators, and outcomes are listed in the logic model (page e26). A table is provided that aligns the component to an individual threshold, site threshold, and data source (pages e55-e56). Data includes teacher training content documents, program attendance, and coach survey. The evaluator will conduct site visits to treatment and control schools to examine the contextual factors that contribute to, or are barriers to, program implementation (page e46). A variety of qualitative methods will be used for data collection on local contextual factors.

Weaknesses:

None noted.

Reader's Score: 5

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

Strengths:

The study team will use the MQI observation instrument on teacher practice in 168 classrooms. The MQI observation is considered a WWC teacher excellence review protocol and predictive of student achievement (page e47). To assess student mathematics achievement, the evaluator will collect annual student-level test scores from state assessments, which were referenced as valid and reliable (page e48). A mediation analysis will be conducted to test whether the path from the intervention to each of the teacher outcomes and student outcomes is statistically significant.

Weaknesses:

None noted.

Reader's Score: 5

Priority Questions

CPP - Competitive Preference Priority 1

1. Competitive Preference Priority 1: Computer Science

Projects designed to improve student achievement or other educational outcomes in computer science (as defined in this notice). These projects must address the following priority area: Expanding access to and participation in rigorous computer science coursework for traditionally underrepresented students such as racial or ethnic minorities, women, students in communities served by rural local educational agencies (as defined in this notice), children or students with disabilities (as defined in this notice), or low-income individuals (as defined under section 312(g) of the Higher Education Act of 1965, as amended).

Strengths:

None noted.

Weaknesses:

Competitive Preference Priority 1 was not addressed.

Reader's Score: **0**

Status: Submitted

Last Updated: 10/28/2020 02:58 PM