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

Technical Review Coversheet

Applicant: IDEA Public Schools (U411C190117)
Reader #1: **********

		Points Possible	Points Scored
Questions			
Selection Criteria			
Significance			
1. Significance		25	25
Quality of Project Design			
1. Project Design		35	35
Adequacy of Resources/Quality of Management Plan			
1. Resources/Management Plan		20	20
	Sub Total	80	80
Priority Questions			
Competitive Preference Priority			
Competitive Preference Priority			
1. Absolute Priority 3		5	5
	Sub Total	5	5
	Total	85	85

Technical Review Form

Panel #18 - EIR Early Phase Tier 1 - 18 - 1: 84.411C

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

Applicant: IDEA Public Schools (U411C190117)

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:**

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

   (2) 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.

   Strengths:

   The applicant proposes to build teacher capacity by adding an educative component to the math curriculum, that is, an instructional design piece that will not only teach the teacher how to implement the curriculum but in so doing will enhance teacher performance to "bolster student achievement" (pg. e24). This is significant in that information learned from implementation of this project will add to the body of knowledge related to effective teacher development and its relationship to student achievement.

   In addition, the applicant intends to serve a substantial number (43,253, pg. e18) of high – needs students over the course of the 5-year project. With such a large number of students targeted, the applicant has the potential to significantly add to the body of knowledge related to understanding how effective strategies can be used to mediate the effects of problems experienced by minority, low SES and English Language Learners.

   Further, the applicant clearly describes the national need for more trained individuals to fill the vast number of vacant computing and information science positions (pgs. e25-e26). Particularly significant is the fact that the applicant also provides research support for enhancing K-12 Computer Science participation and therefore proposes to study and share knowledge about how a computer science integrated math curriculum improves participation.

   Moreover, the Mathways initiative involves three promising new strategies. Specifically, the applicant includes sufficient details about each strategy that will have the potential to improve and impact student and teacher performance.

   Weaknesses:

   No weaknesses noted.

Reader's Score: 25

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:**

   (1) The extent to which the goals, objectives, and outcomes to be achieved by the proposed

project are clearly specified and measurable.

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

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

Strengths:

The applicant is clear in their presentation of the one overarching goal for the project. The components of the project, Mathways to STEM: comprehensive Math Curriculum Redesign; AP computer Science support; enhanced PD, *Computer Science Work Study will all help the applicant achieve that goal. The *Logic model (appendix G, pg. e360) is comprehensive and includes short-term, mid and long-term outcomes that are aligned to the overarching goal.
The applicant thoroughly demonstrates a theoretical base for the project's development in that the proposed project is built on the tenets of an educative (instructional design focus) professional development. The educative curriculum – the instructional design piece – will not only teach the teacher how to implement the curriculum but in so doing will enhance teacher performance to "bolster student achievement" (pg. e24).

The applicant also includes an extensive and comprehensive plan to ensure that information is collected and used for the purposes of program improvement and refinement. Specifically, the applicant proposes "weekly Executive Team meetings" as well as quarterly Advisory team meetings to ensure all stakeholders have input in ensuring that project objectives and activities are carried out in an efficient manner (pgs. e33-e34).

Weaknesses:

No weaknesses noted.

Reader's Score: 35

Selection Criteria - Adequacy of Resources/Quality of Management Plan

1. **The Secretary considers the adequacy of resources and 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:**

    (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.

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

    (3) The potential for continued support of the project after Federal funding ends, including, as appropriate, the demonstrated commitment of appropriate entities to such support.

    Strengths:

    The applicant, because of its previous experience with project management, clearly demonstrates via the management plan and timeline, that it has the capacity to manage a project of this magnitude and accomplish project tasks on-time and within budget.

    In addition, resumes of key personnel indicate that there is an extensive record of experience and expertise in the areas of curriculum development and instructional coaching.

    Moreover, with regard to sustainability, the applicant intends to continue budgetary support for the project beyond the

period of federal assistance, should results of the evaluation indicate goal attainment (pg. e37). In fact, the applicant includes a declaration that if project results are successful, it is committed to sustaining and supporting Mathways to STEM Success after Federal funding ends through school-based, regional, and national budget decisions (pg. 37). This level of commitment to success will ensure that participants have access to high quality Math supports.

Weaknesses:

Reader's Score: 20

Priority Questions

Competitive Preference Priority - Competitive Preference Priority

1. **Within Absolute Priority 3, we give competitive preference to applications that address the following priority:**

   Projects designed to improve student achievement or other educational outcomes in computer science (as defined in the notice). These projects must address the following priority area:

   Expanding access to and participation in rigorous computer science (as defined in the notice) coursework for traditionally underrepresented students such as racial or ethnic minorities, women, students in communities served by rural local educational agencies (as defined in the notice), children or students with disabilities (as defined in the notice), or low-income individuals (as defined under section 312(g) of the Higher Education Act of 1965, as amended).

   Note: Projects addressing this priority must be administered in a manner consistent with nondiscrimination requirements contained in the U.S. Constitution and Federal civil rights laws.

   Strengths:

   The applicant proposes to increase participation and improve student achievement in Advanced Placement computer science courses via a linked math and computer science curriculum - which is directly in – line with the definition of computer science as indicated for the EIR program. In addition, the Microsoft Internship program is committed to assisting the applicant in creating computer science opportunities for the proposed work study high school (pg. e129).

   Weaknesses:

   No weaknesses noted.

Reader's Score: 5

Status: Submitted
Last Updated: 06/14/2019 07:41 AM

Technical Review Coversheet

Applicant: IDEA Public Schools (U411C190117)
Reader #2: **********

		Points Possible	**Points Scored**
Questions			
Selection Criteria			
Significance			
1. Significance		25	25
Quality of Project Design			
1. Project Design		35	32
Adequacy of Resources/Quality of Management Plan			
1. Resources/Management Plan		20	17
	Sub Total	80	74
Priority Questions			
Competitive Preference Priority			
Competitive Preference Priority			
1. Absolute Priority 3		5	5
	Sub Total	5	5
	Total	85	79

Technical Review Form

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

Applicant: IDEA Public Schools (U411C190117)

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:**

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

   (2) 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.

   Strengths:

   (1) The applicant's proposed program has the potential to contribute increased knowledge of educational problems and effective strategies regarding the use of educative curricula (e24), whether enrollment in AP Computer Science Principles courses alters students' performance in computer science in high school and college (e26), and whether internships in STEM-related fields has an effect on students interest in and academic performance on, STEM-related subjects (e26).

   (2) The applicant's proposed project involves the development of promising new strategies (an educative curriculum (e28)) that build ons an existing strategy as well as expands on an existing strategy by making its AP-level coursework available to a broader number of students (e29).

   Weaknesses:

   None

Reader's Score: 25

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:**

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

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

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

Strengths:

(1) The applicant's narrative, logic model, and supporting appendices shops to a great extent how the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable. The applicant provides a year by year plan to develop and pilot specific curricular elements (e30 & e38) and provides clearly articulated goals for their impact on the participating students (e360).

(2) The conceptual framework underlying the proposed development of an "educative curriculum" is well established through research in the narrative (e32); the conceptual framework underlying the proposed activity of expanding AP courses to more students also appears to be well grounded in research and theory (ibid).

(3) The applicant's procedures for ensuring feedback and continuous improvement in the operation of the proposed project are well thought out and have sufficient regularity to ensure the process, as exemplified by the description of daily, weekly, monthly, quarterly, semi-annual, and annual planned reviews and activities detailed in Appendix I.8 (e386).

Weaknesses:

(1) The applicant's Performance Measures lack any specificity around several goals and thus do not support the Narrative and other appendices (e146-148). For example, the Project Objectives for "Improve teacher outcomes" and Address Computer Science workforce shortage" have performance measure that provide no target benchmarks or ratios for quantitative review (e147).

(2) The proposed internship program (e33) has no underlying conceptual framework nor does the applicant provide any research to evidence the value of this component.

(3) None.

Reader's Score: 32

Selection Criteria - Adequacy of Resources/Quality of Management Plan

1. **The Secretary considers the adequacy of resources and 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:**

    (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.

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

    (3) The potential for continued support of the project after Federal funding ends, including, as appropriate, the demonstrated commitment of appropriate entities to such support.

    Strengths:

    (1) The applicant's management plan to achieve the objectives of the proposed project on time and within budget includes clearly defined responsibilities and timelines for accomplishing project tasks. The detailed plan included in Appendix I.9 (e387 et seq) explains how the major milestones in the narrative will be achieved (e35).

    (2) The qualifications of the applicant's key project personnel (e35-e36), including their relevant training and experience, are of a high caliber, evidencing their experience in running the IDEA charter system and implementing programming.

(3) None.

Weaknesses:

(3) The applicant has not truly demonstrated the potential for continued support of the project after Federal funding ends. The applicant states that, if the project "meets the proposed expectations for success" (e37), it will continue to support the program but makes no firm commitment to doing so outside of this conditional statement. The continued support for the internship program lacks the demonstrated commitment of appropriate entities to such support.

Reader's Score: 17

Priority Questions

Competitive Preference Priority - Competitive Preference Priority

 1. **Within Absolute Priority 3, we give competitive preference to applications that address the following priority:**

   Projects designed to improve student achievement or other educational outcomes in computer science (as defined in the notice). These projects must address the following priority area:

   Expanding access to and participation in rigorous computer science (as defined in the notice) coursework for traditionally underrepresented students such as racial or ethnic minorities, women, students in communities served by rural local educational agencies (as defined in the notice), children or students with disabilities (as defined in the notice), or low-income individuals (as defined under section 312(g) of the Higher Education Act of 1965, as amended).

   Note: Projects addressing this priority must be administered in a manner consistent with nondiscrimination requirements contained in the U.S. Constitution and Federal civil rights laws.

   Strengths:

   Based on the description of its student population (e21), the applicant will expand access to and participation in rigorous computer science coursework for traditionally underrepresented students through the proposed project. The applicant's student population appears to meet several of the definitions of high needs students, as contained in the Notice.

   Weaknesses:

   None

Reader's Score: 5

Technical Review Coversheet

Applicant: IDEA Public Schools (U411C190117)
Reader #3:   **********

		Points Possible	Points Scored
Questions			
Selection Criteria			
Significance			
1. Significance		25	25
Quality of Project Design			
1. Project Design		35	26
Adequacy of Resources/Quality of Management Plan			
1. Resources/Management Plan		20	15
	Sub Total	80	66
Priority Questions			
Competitive Preference Priority			
Competitive Preference Priority			
1. Absolute Priority 3		5	5
	Sub Total	5	5
	Total	85	71

Technical Review Form

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

Applicant: IDEA Public Schools (U411C190117)

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:**

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

   (2) 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.

   Strengths:

   This project has high significance due to its contribution to increasing knowledge and providing highly effective strategies for integrating Computer Science learning into Math curriculum to students in rural communities of Texas.(p. e23)

   This project proposed an alternative to traditional teacher training to the use of an Educative Professional Development program which will elevate traditional teacher training to increase teacher content knowledge as well providing the resources needed for lesson planning. This type of Professional Development helps to increase the pool of teachers and raises the knowledge of novice teachers often found in high needs rural school districts. (p.e24)

   This proposed project will develop a comprehensive computer science integrated math curriculum to prepare students for high school AP Computer Science, and STEM readiness. (p,e26)

   Weaknesses:

   none noted

Reader's Score: 25

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:**

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

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

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

Strengths:

The proposal includes a logic model containing a comprehensive list of outcomes for the long and short term as well the timelines for accomplishment of each objective. (p.e31).

The conceptional framework Mathways to STEM Success uses Educative Curriculum that provides high quality professional development for teachers who work with high needs minority students. (p.e32)

Weaknesses:

Built into the framework, is a proposal for an AP for All, a networked based curriculum to increase participation in AP Computer Science, but no goals, objectives outcomes address how the schools will be equipped with the technology to offer the program.(p.e33)

A goal, and objective of promised paid internships in STEM/CS is planned for High School Students, but it is unclear if the schools served have easy access to places of business which are willing to accept the students.(p.e33).

To ensure feedback for continuous improvement the executive team states it will monitor AP test score and distribute a yearly teacher feedback survey (p. e386). However, there should be further discussion of the tools and feedback methods to be used in the proposal. (p.e33)

Reader's Score: 26

Selection Criteria - Adequacy of Resources/Quality of Management Plan

1. **The Secretary considers the adequacy of resources and 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:**

   (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.

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

   (3) The potential for continued support of the project after Federal funding ends, including, as appropriate, the demonstrated commitment of appropriate entities to such support.

Strengths:

This management company is well experienced in both writing curriculum and providing quality professional development. A clear chart of the major project components and milestones for each year of the project are included in the narrative. Additionally, an appendix table provides a highly detailed list of activities, milestone and responsible positions for each year. (e387)

Key personnel of the management team are listed and well credentialed giving this management plan high level staffing. Appendix B broadens the information on the Team with well detailed Bio's, and resumes.(p.e16)

Weaknesses:

Continued support of the project after Federal funding ends includes possible financial support from school based, regional and national budgets as well as possible peer support from nearby schools. However, the funding and support are predicated with the results of the study meeting its the proposed expectations for success. (p. e37)

Reader's Score: 15

Priority Questions

Competitive Preference Priority - Competitive Preference Priority

1. **Within Absolute Priority 3, we give competitive preference to applications that address the following priority:**

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   Note: Projects addressing this priority must be administered in a manner consistent with nondiscrimination requirements contained in the U.S. Constitution and Federal civil rights laws.

   Strengths:

   The applicant proposes a high quality teacher professional development project to integrate Computer Science into the Math curriculum and an AP for All designed curriculum to encourage high needs students to participate in AP Computer Science Courses.

   Weaknesses:
   none noted

Reader's Score: 5

Status: Submitted
Last Updated: 06/14/2019 07:34 AM