

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

Status: Submitted

Last Updated: 09/22/2013 07:36 PM

Technical Review Coversheet

Applicant: Cabarrus County Schools (U411C130073)

Reader #1: *****

	Points Possible	Points Scored
Questions		
Summary Statement		
Summary Statement		
1. Summary Statement	0	
Selection Criteria		
Significance		
1. Significance	35	33
Quality of Project Design		
1. Project Design	25	23
Quality of the Management Plan		
1. Management Plan	15	15
Quality of Project Personnel		
1. Personnel	10	8
Quality of the Project Evaluation		
1. Project Evaluation	15	0
Total	100	79

Technical Review Form

Panel #8 - i3 Development - 8: 84.411C

Reader #1: *****

Applicant: Cabarrus County Schools (U411C130073)

Questions

Summary Statement - Summary Statement

1. Summary Statement (Optional)

General:

Reader's Score:

Selection Criteria - Significance

1. In determining the significance of the project, the Secretary considers the following factors:

(1) The extent to which the proposed project would implement a novel approach as compared with what has been previously attempted nationally.

(2) The potential contribution of the proposed project to the development and advancement of theory, knowledge, and practices in the field of study.

(3) The extent to which the proposed project will substantially improve on the outcomes achieved by other practices, such as through better student outcomes, lower cost, or accelerated results.

Strengths:

The applicant proposes an integrated STEM pipeline as a model for STEM course content and instructional design using problem-based learning as the foundation of the curriculum redesign. The project's need was highlighted through a detailed description of barriers (p. 1-3) with proposed solutions that can potential impede the active participation of the targeted populations (e.g., students, staff). The proposed project demonstrated through evidence of the literature (Appendices C, JJ) and standards (Appendix D) the potential impact of the project to increase student achievement and engagement in STEM related courses.

Weaknesses:

While the applicant provides specific details for the significance of the project; particularly, increasing the academic outcomes of the targeted population, the predicted outcomes should be stated in quantifiable predicted outcomes rather than a non-quantifiable narrative format.

Reader's Score: 33

Selection Criteria - Quality of Project Design

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

(1) The extent to which the proposed project addresses the absolute priority the applicant is seeking to meet.

(2) The clarity and coherence of the project goals, including the extent to which the proposed project articulates an explicit plan or actions to achieve its goals (e.g., a fully developed logic model of the proposed project).

(3) The clarity, completeness, and coherence of the project goals, and whether the application includes a description of project activities that constitute a complete plan for achieving those goals, including the identification of potential risks to project success and strategies to mitigate those risks.

Strengths:

The applicant provides detailed information regarding how the proposed project meets the stated absolute priority by the correlated project goals, objectives, and activities (p. 14-15). Detail information was provided regarding the recruitment of the target population for program continuity and retention of participants. Use of specific action plan/contingency plan with connected goals, objectives, and activities for addressing the varied instructional content and instructional practices of participating teachers.

Weaknesses:

While the applicant provides detailed information regarding the professional development of teachers and the materials (lessons) teachers are expected to utilize. The lessons teachers will use/teach should be varied to meet the academic skill levels of the participating students with special attention paid to the level (e.g., middle school) of material, because teachers will not be teaching at the same level and/or the same content at the same time—how will this be accounted for?

Reader's Score: 23

Selection Criteria - Quality of the Management Plan

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

(1) The extent to which the management plan articulates key responsibilities and well-defined objectives, including the timelines and milestones for completion of major project activities, the metrics that will be used to assess progress on an ongoing basis, and annual performance targets the applicant will use to monitor whether the project is achieving its goals.

(2) The extent of the demonstrated commitment of any key partners or evidence of broad support from stakeholders whose participation is critical to the project s long-term success.

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

Strengths:

The applicant describes in detail the components of a management plan aligned to project goals and objectives, including the projected milestones and timelines connected to the personnel responsible for the project activities and associated outcomes (Table 6, p. 16-18). Identification of partners and their roles are clearly articulated and shows evidence of support through the partner's commitment and support (Table 11, p. 18-19), as well as how the partners will be utilized and relationships expanded for long term success achieving the targeted level of success and program quality.

Weaknesses:

No weaknesses noted.

Reader's Score: 15

Selection Criteria - Quality of Project Personnel

1. In determining the quality and personnel for the proposed project, the Secretary considers the following factor:

(1) The adequacy of the project's staffing plan, particularly for the first year of the project, including the identification of the project director and, in the case of projects with unfilled key personnel positions at the beginning of the project, that the staffing plan identifies how critical work will proceed.

Strengths:

The applicant provides a staffing plan with detail job descriptions for key personnel with previous and direct experiences with STEM initiatives, which demonstrates staff's potential ability to implement the proposed project (Table 8, p. 20-21), as well as job descriptions for unfilled positions (Appendix F, p. e71-e96).

Weaknesses:

While the applicant provided a detailed staffing plan, there were no indication of a technology director position (filled or unfilled)—if the relevance and authenticity of student work is based on a “leaner-centered approach driven by technology” (p. 10), then the staffing plan needs to address the staffing plan needs to address how the technology needs of participating students, teachers, and staff will be met.

Reader's Score: 8

Selection Criteria - Quality of the Project Evaluation

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

(1) The clarity and importance of the key questions to be addressed by the project evaluation, and the appropriateness of the methods for how each question will be addressed.

(2) The extent to which the evaluation plan includes a clear and credible analysis plan, including a proposed sample size and minimum detectable effect size that aligns with the expected project impact, and an analytic approach for addressing the research questions.

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

Strengths:

N/A-scored by another reviewer

Weaknesses:

N/A-scored by another reviewer

Reader's Score: 0

Status: Submitted
Last Updated: 09/22/2013 07:36 PM

Status: Submitted

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Technical Review Coversheet

Applicant: Cabarrus County Schools (U411C130073)

Reader #2: *****

	Points Possible	Points Scored
Questions		
Summary Statement		
Summary Statement		
1. Summary Statement	0	
Selection Criteria		
Significance		
1. Significance	35	33
Quality of Project Design		
1. Project Design	25	23
Quality of the Management Plan		
1. Management Plan	15	15
Quality of Project Personnel		
1. Personnel	10	7
Quality of the Project Evaluation		
1. Project Evaluation	15	0
Total	100	78

Technical Review Form

Panel #8 - i3 Development - 8: 84.411C

Reader #2: *****

Applicant: Cabarrus County Schools (U411C130073)

Questions

Summary Statement - Summary Statement

1. Summary Statement (Optional)

General:

Reader's Score:

Selection Criteria - Significance

1. In determining the significance of the project, the Secretary considers the following factors:

(1) The extent to which the proposed project would implement a novel approach as compared with what has been previously attempted nationally.

(2) The potential contribution of the proposed project to the development and advancement of theory, knowledge, and practices in the field of study.

(3) The extent to which the proposed project will substantially improve on the outcomes achieved by other practices, such as through better student outcomes, lower cost, or accelerated results.

Strengths:

- The proposal's K-12 pipeline plan targeting at-risk students is a novel idea, and the research cited in this proposal supports its potential for success. It is rare to see such well-aligned curricular and conceptual threads across the K-12 continuum.
- The proposal's multiple cited studies of prior success on which this project is based show a lot of promise for the project's potential to substantially increase student achievement and engagement. Successful strategies, in turn, would be applicable to other districts that are experiencing the same challenges.
- By proposing new evaluative metrics, this project has the potential to significantly add to the body of existing research around STEM education.
- The extensive research-based strategies described on pages 3-5 that this project employs, as well as its thoughtful improvements to these strategies, make a strong case for substantial improvements in student outcomes.

Weaknesses:

- The proposal would have benefitted from including data associated with the past student achievement as a result of Problem-Based Learning mentioned on page 4.

Selection Criteria - Quality of Project Design

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

(1) The extent to which the proposed project addresses the absolute priority the applicant is seeking to meet.

(2) The clarity and coherence of the project goals, including the extent to which the proposed project articulates an explicit plan or actions to achieve its goals (e.g., a fully developed logic model of the proposed project).

(3) The clarity, completeness, and coherence of the project goals, and whether the application includes a description of project activities that constitute a complete plan for achieving those goals, including the identification of potential risks to project success and strategies to mitigate those risks.

Strengths:

- The proposal not only addresses the absolute priority through its redesign of STEM curriculum and practices, but improves significantly on what has already been attempted.
- The proposal's four integrated goals are clear, research-based, and supported by the project's activities. Because they relate to curriculum, teacher support, and real-world tethers for students, they cover all the facets of the proposal.
- The proposal's inputs, outputs, and outcomes on page 13 are logical and clearly aligned.

Weaknesses:

- A risk associated with this project is that students may not be interested in STEM, and may wish to withdraw from the pipeline rather than continue through senior year of high school. It would have strengthened the proposal to have discussed how to mitigate this risk.

Selection Criteria - Quality of the Management Plan

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

(1) The extent to which the management plan articulates key responsibilities and well-defined objectives, including the timelines and milestones for completion of major project activities, the metrics that will be used to assess progress on an ongoing basis, and annual performance targets the applicant will use to monitor whether the project is achieving its goals.

(2) The extent of the demonstrated commitment of any key partners or evidence of broad support from stakeholders whose participation is critical to the project's long-term success.

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

Strengths:

- A strength of the proposal is its rigorous, and continuously increasing performance targets, which are clearly aligned to the project's goals. Each goal will be assessed using several performance targets for maximum insight into how implementation is going.
- The proposal suggests using a wide array of metrics that are logically aligned to the performance goals they will measure. These metrics include surveys, rubrics, and administrative records.
- The management plan on pages 16-18 includes a comprehensive list of milestones, timelines, and responsible parties.
- The proposal provides evidence of strong existing and future partner support, including with teachers, schools, and community members, which will help achieve the project's goals.
- A strength of the proposal is its short- and long-term evaluative and feedback mechanisms at several levels throughout the project's activities.

Weaknesses:

No weaknesses noted.

Reader's Score: 15

Selection Criteria - Quality of Project Personnel

1. **In determining the quality and personnel for the proposed project, the Secretary considers the following factor:**

(1) The adequacy of the project's staffing plan, particularly for the first year of the project, including the identification of the project director and, in the case of projects with unfilled key personnel positions at the beginning of the project, that the staffing plan identifies how critical work will proceed.

Strengths:

- Although the position of project director is unfilled, a detailed job description already exists, ample time has been allotted to allow for hiring for that position and the position of STEM coaches, and the proposal outlines how work will proceed while the remaining staff is hired.

Weaknesses:

- The proposal would have benefited from including a description of the Technology Director, whose work is supposed to start in January, but who is not listed in the table of key personnel, or mentioned as someone who needs to be hired.

Reader's Score: 7

Selection Criteria - Quality of the Project Evaluation

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

(1) The clarity and importance of the key questions to be addressed by the project evaluation, and the appropriateness of the methods for how each question will be addressed.

(2) The extent to which the evaluation plan includes a clear and credible analysis plan, including a proposed sample size and minimum detectable effect size that aligns with the expected project impact, and an analytic approach for addressing the research questions.

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

Strengths:

Scored by another reviewer

Weaknesses:

Scored by another reviewer

Reader's Score: 0

Status: Submitted

Last Updated: 09/23/2013 01:49 PM

Status: Submitted

Last Updated: 09/23/2013 09:52 AM

Technical Review Coversheet

Applicant: Cabarrus County Schools (U411C130073)

Reader #3: *****

	Points Possible	Points Scored
Questions		
Summary Statement		
Summary Statement		
1. Summary Statement	0	
Selection Criteria		
Significance		
1. Significance	35	0
Quality of Project Design		
1. Project Design	25	0
Quality of the Management Plan		
1. Management Plan	15	0
Quality of Project Personnel		
1. Personnel	10	0
Quality of the Project Evaluation		
1. Project Evaluation	15	11
Total	100	11

Technical Review Form

Panel #8 - i3 Development - 8: 84.411C

Reader #3: *****

Applicant: Cabarrus County Schools (U411C130073)

Questions

Summary Statement - Summary Statement

1. Summary Statement (Optional)

General:

Reader's Score:

Selection Criteria - Significance

1. In determining the significance of the project, the Secretary considers the following factors:

(1) The extent to which the proposed project would implement a novel approach as compared with what has been previously attempted nationally.

(2) The potential contribution of the proposed project to the development and advancement of theory, knowledge, and practices in the field of study.

(3) The extent to which the proposed project will substantially improve on the outcomes achieved by other practices, such as through better student outcomes, lower cost, or accelerated results.

Strengths:

Section scored by another reviewer

Weaknesses:

Section scored by another reviewer

Reader's Score: 0

Selection Criteria - Quality of Project Design

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

(1) The extent to which the proposed project addresses the absolute priority the applicant is seeking to meet.

(2) The clarity and coherence of the project goals, including the extent to which the proposed project articulates an explicit plan or actions to achieve its goals (e.g., a fully developed logic model of the proposed project).

(3) The clarity, completeness, and coherence of the project goals, and whether the application includes a description of project activities that constitute a complete plan for achieving those goals, including the identification of potential risks to project success and strategies to mitigate those risks.

Strengths:

Section scored by another reviewer

Weaknesses:

Section scored by another reviewer

Reader's Score: 0

Selection Criteria - Quality of the Management Plan

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

(1) The extent to which the management plan articulates key responsibilities and well-defined objectives, including the timelines and milestones for completion of major project activities, the metrics that will be used to assess progress on an ongoing basis, and annual performance targets the applicant will use to monitor whether the project is achieving its goals.

(2) The extent of the demonstrated commitment of any key partners or evidence of broad support from stakeholders whose participation is critical to the project's long-term success.

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

Strengths:

Section scored by another reviewer

Weaknesses:

Section scored by another reviewer

Reader's Score: 0

Selection Criteria - Quality of Project Personnel

1. In determining the quality and personnel for the proposed project, the Secretary considers the following factor:

(1) The adequacy of the project's staffing plan, particularly for the first year of the project, including the identification of the project director and, in the case of projects with unfilled key personnel positions at the beginning of the project, that the staffing plan identifies how critical work will proceed.

Strengths:

Section scored by another reviewer

Weaknesses:

Section scored by another reviewer

Reader's Score: 0

Selection Criteria - Quality of the Project Evaluation

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

(1) The clarity and importance of the key questions to be addressed by the project evaluation, and the appropriateness of the methods for how each question will be addressed.

(2) The extent to which the evaluation plan includes a clear and credible analysis plan, including a proposed sample size and minimum detectable effect size that aligns with the expected project impact, and an analytic approach for addressing the research questions.

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

Strengths:

- The proposed independent evaluators are qualified to carry out this proposed evaluation.
- The evaluation clearly focuses on summative evaluation, with clear research questions.
- Given the research questions, the proposed three studies (quasi-experimental study using propensity-score matching and RCT) are appropriate.
- It has a well-developed design for the summative evaluation, including thoughtful research questions, appropriate design, and adequate data analysis plan.

Weaknesses:

- According to the proposal, Appendix J includes information about the monitoring and implementation of key project components. Appendix J only includes the "target," rather than formative evaluation. Thus, the evaluation plan does not include a fully developed formative evaluation plan.
- The evaluation lacks of research questions related to the formative component.
- The proposed analysis does not provide sufficient information to account for the nested nature of the data.
- The applicant stated that "individual and contextual covariates" would be used, but in this proposal, individual and contextual covariates are not identified.

Reader's Score: 11

Status: Submitted
Last Updated: 09/23/2013 09:52 AM

Status: Submitted

Last Updated: 09/18/2013 02:26 PM

Technical Review Coversheet

Applicant: Cabarrus County Schools (U411C130073)

Reader #4: *****

	Points Possible	Points Scored
Questions		
Summary Statement		
Summary Statement		
1. Summary Statement	0	
Selection Criteria		
Significance		
1. Significance	35	0
Quality of Project Design		
1. Project Design	25	0
Quality of the Management Plan		
1. Management Plan	15	0
Quality of Project Personnel		
1. Personnel	10	0
Quality of the Project Evaluation		
1. Project Evaluation	15	12
Total	100	12

Technical Review Form

Panel #8 - i3 Development - 8: 84.411C

Reader #4: *****

Applicant: Cabarrus County Schools (U411C130073)

Questions

Summary Statement - Summary Statement

1. Summary Statement (Optional)

General:

Reader's Score:

Selection Criteria - Significance

1. In determining the significance of the project, the Secretary considers the following factors:

(1) The extent to which the proposed project would implement a novel approach as compared with what has been previously attempted nationally.

(2) The potential contribution of the proposed project to the development and advancement of theory, knowledge, and practices in the field of study.

(3) The extent to which the proposed project will substantially improve on the outcomes achieved by other practices, such as through better student outcomes, lower cost, or accelerated results.

Strengths:

NA

Weaknesses:

NA

Reader's Score: 0

Selection Criteria - Quality of Project Design

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

(1) The extent to which the proposed project addresses the absolute priority the applicant is seeking to meet.

(2) The clarity and coherence of the project goals, including the extent to which the proposed project articulates an explicit plan or actions to achieve its goals (e.g., a fully developed logic model of the proposed project).

(3) The clarity, completeness, and coherence of the project goals, and whether the application includes a description of project activities that constitute a complete plan for achieving those goals, including the identification of potential risks to project success and strategies to mitigate those risks.

Strengths:

NA

Weaknesses:

NA

Reader's Score: 0

Selection Criteria - Quality of the Management Plan

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

(1) The extent to which the management plan articulates key responsibilities and well-defined objectives, including the timelines and milestones for completion of major project activities, the metrics that will be used to assess progress on an ongoing basis, and annual performance targets the applicant will use to monitor whether the project is achieving its goals.

(2) The extent of the demonstrated commitment of any key partners or evidence of broad support from stakeholders whose participation is critical to the project's long-term success.

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

Strengths:

NA

Weaknesses:

NA

Reader's Score: 0

Selection Criteria - Quality of Project Personnel

1. In determining the quality and personnel for the proposed project, the Secretary considers the following factor:

(1) The adequacy of the project's staffing plan, particularly for the first year of the project, including the identification of the project director and, in the case of projects with unfilled key personnel positions at the beginning of the project, that the staffing plan identifies how critical work will proceed.

Strengths:

NA

Weaknesses:

NA

Reader's Score: 0

Selection Criteria - Quality of the Project Evaluation

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

(1) The clarity and importance of the key questions to be addressed by the project evaluation, and the appropriateness of the methods for how each question will be addressed.

(2) The extent to which the evaluation plan includes a clear and credible analysis plan, including a proposed sample size and minimum detectable effect size that aligns with the expected project impact, and an analytic approach for addressing the research questions.

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

Strengths:

- The applicant has developed an evaluation plan that focuses on the impact or outcome of the program in relation to student achievement in math and science at the 2nd, 7th, and 10th grade levels. The plan is guided by three questions related to those outcomes (p. 22), and is tied to the logic model (p. 13).
- The evaluation firm selected to conduct the evaluation appears to be experienced and qualified to conduct the evaluation (p. 21 and Appendix F). The budgeted amount appears to be within the normal range in terms of cost, and also appears to be sufficient in terms of resources to successfully complete the plan.
- The three impact or outcome questions are to be answered by utilizing separate research-based designs with each grade level examined (pp. 23-25). The data sources and analyses for each phase are detailed very clearly. Various math assessment instruments that are used by the school system will be compared between groups of students who participate in the program and those that do not. The applicant will use quasi-experimental designs using matched comparison grouping for the 2nd grade group, and a randomized control trial (RCT) design for the other two grade levels. These designs appear to meet the WWC evidence standards for research-based studies.
- The applicant is very clear in describing the methods used to arrive at sample size and estimated effect size for each grade level (pp. 23-25). Specific methodology for arriving at these estimates is provided in Appendix J, which would seem to meet WWC standards as well.

Weaknesses:

- While the plan mentions the collection of data for the purpose of evaluating implementation of the program, to the point of developing an Annual Fidelity Index, it is presented in a way that would lead to the idea that this part of the evaluation is an after thought. The focus of the plan is on the research-based designs and the findings of student outcomes. It would have strengthened an already very strong plan to include the implementation goals and questions as part of the evaluation plan to help bolster whatever student impact the program may have (p. 25).

Reader's Score: 12

Status: Submitted

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Status: Submitted

Last Updated: 09/23/2013 10:35 AM

Technical Review Coversheet

Applicant: Cabarrus County Schools (U411C130073)

Reader #5: *****

	Points Possible	Points Scored
Questions		
Summary Statement		
Summary Statement		
1. Summary Statement	0	0
Selection Criteria		
Significance		
1. Significance	35	30
Quality of Project Design		
1. Project Design	25	23
Quality of the Management Plan		
1. Management Plan	15	15
Quality of Project Personnel		
1. Personnel	10	8
Quality of the Project Evaluation		
1. Project Evaluation	15	0
Total	100	76

Technical Review Form

Panel #8 - i3 Development - 8: 84.411C

Reader #5: *****

Applicant: Cabarrus County Schools (U411C130073)

Questions

Summary Statement - Summary Statement

1. Summary Statement (Optional)

General:

Reader's Score: 0

Selection Criteria - Significance

1. In determining the significance of the project, the Secretary considers the following factors:

(1) The extent to which the proposed project would implement a novel approach as compared with what has been previously attempted nationally.

(2) The potential contribution of the proposed project to the development and advancement of theory, knowledge, and practices in the field of study.

(3) The extent to which the proposed project will substantially improve on the outcomes achieved by other practices, such as through better student outcomes, lower cost, or accelerated results.

Strengths:

The project provides early, problem-based engagement starting in Kindergarten and channels students into integrated STEM magnet programs at both middle and high school levels and reduces selection bias and student interest factors by automatically placing low-income, minority students in elementary STEM magnet schools located in their neighborhood. The potential contributions of the proposed project to the advancement of theory, knowledge, and practices are to provide data on the effectiveness of this strategy. The proposed project if successful will substantially improve on the outcomes achieved by other practices with respect to better student outcomes and lower cost by providing a scalable model for the use of problem-based learning to improve at-risk student STEM education.

Weaknesses:

The proposal does not make a compelling case that it is novel. It consists of components that have already been clearly demonstrated to be effective in the education literature.

Reader's Score: 30

Selection Criteria - Quality of Project Design

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

- (1) The extent to which the proposed project addresses the absolute priority the applicant is seeking to meet.**
- (2) The clarity and coherence of the project goals, including the extent to which the proposed project articulates an explicit plan or actions to achieve its goals (e.g., a fully developed logic model of the proposed project).**
- (3) The clarity, completeness, and coherence of the project goals, and whether the application includes a description of project activities that constitute a complete plan for achieving those goals, including the identification of potential risks to project success and strategies to mitigate those risks.**

Strengths:

The proposed project addresses the absolute priority 3 (Improving STEM Education: Redesigning course content & Instructional Practices). The project goals are clearly and coherently presented. Using problem-based learning (PBL) as the core of the curriculum redesign, objectives are focused on: 1) Developing rigorous PBL curriculum units to support STEM course content connected across all subjects, 2) Designing STEM instructional practices that connect PBL course content to tech-enabled personalized learning strategies, 3) Creating a teacher development and support process to sustain innovative STEM course content and instructional practices, and 4) Amalgamating real-world student tethers with STEM course content and instructional practices. The proposed project articulates an explicit plan to achieve its goals using a fully developed logic model of the proposed project (Appendix D). The potential risks to project success have been identified and strategies to mitigate those risks are provided.

Weaknesses:

The proposed project could be strengthened by including more measures of quality of project activities as just increasing the number of teachers and students involved in activities does not necessarily correlate with improved student learning. Most measures provided are the number of participants.

Reader's Score: 23

Selection Criteria - Quality of the Management Plan

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

- (1) The extent to which the management plan articulates key responsibilities and well-defined objectives, including the timelines and milestones for completion of major project activities, the metrics that will be used to assess progress on an ongoing basis, and annual performance targets the applicant will use to monitor whether the project is achieving its goals.**
- (2) The extent of the demonstrated commitment of any key partners or evidence of broad support from stakeholders whose participation is critical to the project's long-term success.**
- (3) The adequacy of procedures for ensuring feedback and continuous improvement in the operation of the proposed project.**

Strengths:

The management plan articulates key responsibilities and has well-defined objectives. The proposal includes timelines and milestones for completion of major project activities, the metrics that will be used to assess progress on an ongoing basis, and annual performance targets the applicant will use to monitor whether the project is achieving its goals. Evidence is provided through support letters that key partners critical to the project's long-term success are committed to involvement in the project. Procedures for ensuring feedback and continuous improvement in the operation of the proposed project are provided.

Weaknesses:

None

Reader's Score: 15

Selection Criteria - Quality of Project Personnel

1. In determining the quality and personnel for the proposed project, the Secretary considers the following factor:

(1) The adequacy of the project's staffing plan, particularly for the first year of the project, including the identification of the project director and, in the case of projects with unfilled key personnel positions at the beginning of the project, that the staffing plan identifies how critical work will proceed.

Strengths:

The project's staffing plan is adequate including the identification of the project director. The personnel are well qualified to successfully accomplish the project goals.

Weaknesses:

The job description and plan for hiring the Technology Manager are not included. The proposal would be strengthened by including a clearer plan as to how critical work will proceed during the startup phase of the project.

Reader's Score: 8

Selection Criteria - Quality of the Project Evaluation

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

(1) The clarity and importance of the key questions to be addressed by the project evaluation, and the appropriateness of the methods for how each question will be addressed.

(2) The extent to which the evaluation plan includes a clear and credible analysis plan, including a proposed sample size and minimum detectable effect size that aligns with the expected project impact, and an analytic approach for addressing the research questions.

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

Strengths:

Scored by another reviewer

Weaknesses:

Scored by another reviewer

Reader's Score: 0

Status: Submitted

Last Updated: 09/23/2013 10:35 AM

