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

Technical Review Coversheet

Applicant: Rhode Island Department of Education (U411C190263)
Reader #1:   **********

		Points Possible	**Points Scored**
Questions			
Selection Criteria			
Quality of the Project Evaluation			
1. Project Evaluation		20	15
	Sub Total	20	15
	Total	20	15

Technical Review Form

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

Applicant: Rhode Island Department of Education (U411C190263)

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:**

   (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).

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

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

   (4) 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 is likely to produce evidence that meets the What Works Clearinghouse standards with reservations. The propensity score matching of schools and individuals within schools is appropriate and will yield comparison schools with similar demographic and student achievement characteristics (p. 21-22).

   The project focus on Work Based Learning (WBL) is well addressed in the evaluation design. The evaluators propose to use a variety of methods (surveys, student persistence, absenteeism, and computer science credits) to ascertain whether WBL has an effect on student engagement (p. 23). This is also likely to help potential adopters determine if the proposed focus is worthy of replication.

   A key question raised by the proposed project approach is whether the addition of WBL to regular computer science programming affects student learning of computer science concepts and practices. The evaluation addresses this well by comparing student outcomes of treatment and comparison groups while also accounting for moderating variables (p. 23).

   Weaknesses:

   The plan for assessing implementation is flawed in that it does not include specific measures of implementation and refers only to developing surveys in collaboration with program staff as well as interviews and focus groups (p. 21). The lack of specificity even about the broad issues that might be addressed in the surveys, interviews, and focus groups makes it difficult to determine whether the implementation study will either help program staff with continuous improvement or others, who consider adopting the program, to understand the meaning of student outcomes.

   The power analysis requires pooling data across all cohorts in the project (p. 22). This approach may yield an appropriate effect size, but it does not account for differences in program approaches across the years based on the continuous improvement model. For example, if first year findings show the need to strengthen an aspect of the program and the staff does so, the treatment for those students is different from the treatment for later cohorts. Pooling data masks such differences. Furthermore, the analysis doesn't account for dropouts or new entries.

Reader's Score: **15**

Status: Submitted
Last Updated: 07/17/2019 08:02 PM

Technical Review Coversheet

Applicant: Rhode Island Department of Education (U411C190263)
Reader #2: **********

		Points Possible	**Points Scored**
Questions			
Selection Criteria			
Quality of the Project Evaluation			
1. Project Evaluation		20	14
	Sub Total	20	14
	Total	20	14

Technical Review Form

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

Applicant: Rhode Island Department of Education (U411C190263)

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:**

   (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).

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

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

   (4) 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:

   1) The applicant describes methods of evaluation that could, if well implemented, produce evidence about the project's effectiveness that would meet the What Works Clearinghouse standards with reservations. Details are provided regarding a well-designed impact study that includes a power analysis (pg. 22), the use of a two-stage multilevel propensity match scoring procedure to match students in treatment and control groups (pg. 21), and the use of multilevel regression model with relevant covariates. A clearly described moderator analysis is provided on page 23. The applicant provides a strong plan for how it will account for teacher attrition on page 11.

   2) The applicant provides an equation of the proposed model that could be used for testing in other settings, and describes an implementation study designed to produce results that will support contextualized understanding of the factors that mediate the program's ability to affect its specific outcomes (pg. 21).

   3) The applicant describes a well-designed plan to use multiple objective performance measures of relevant outcomes that are likely to provide reliable data. Examples include frequencies for the number of training certificates issued for PD, the number of students who complete/take the APCSP exam, and the number of students from underrepresented groups who complete the Worked Based Learning program followed by the APCSP (e84).

   4) Key project components are described in a table on pg. e84 and on the Form for Project Objectives and Performance Measures Information. A strength is the student will have outcome data for three cohorts of students (pg.22).

   Weaknesses:

   1) A plan to account for contamination and student attrition is not specified.

   2) Details are limited regarding guidance about effective strategies suitable for replication or testing in other settings. It is unclear how the applicant plans to provide this guidance. While the applicant states that it will conduct an implementation

study (pg. 21), it is unclear how it will use results from this study to provide guidance of effective strategies that can be used in other settings.

3) Details are limited regarding evidence of valid and reliable performance data on relevant outcomes. It is unclear if the instruments used as part of this research (surveys to be developed in partnership with another grant funded project called RITES +C RPP (pg. 21) and existing APCSP assessments) will provide evidence of validity and reliability (pg. 20). Interview protocols or rubrics to measure fidelity of implementation are not described. It is unclear if the evaluation team that is already part of the existing RPP project (pg. 18) is considered to be an external evaluation team in regard to this project, specifically in their role of working with project team members on plan-do-study-act cycles.

4) Details are limited regarding mediators and thresholds for acceptable implementation. The applicant states on page 24 that mediators are described in the logic model, however, it is unclear what these are as they are not identified. While targets are described in a table on page e84, measurable thresholds for implementation are not specified.

Reader's Score: **14**

Status: Submitted
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