

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

Status: Submitted

Last Updated: 07/19/2019 11:07 AM

## Technical Review Coversheet

Applicant: Code.org (U411C190093)

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

	Points Possible	Points Scored
<b>Questions</b>		
<b>Selection Criteria</b>		
<b>Quality of the Project Evaluation</b>		
1. Project Evaluation	20	18
<b>Sub Total</b>	20	18
<b>Total</b>	20	18

# Technical Review Form

Panel #6 - EIR Early Phase Tier 2 - 12: 84.411C

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

Applicant: Code.org (U411C190093)

## 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 application is very good in that it addresses each of the evaluation criteria and demonstrates the evaluation methods are integrated into and align with the project implementation plan.

The applicant clearly states each of the research questions and how the questions align with each of the project implementation goals. Figure 9. P. 19 also provides the data sources that will be used to address each of the evaluation questions making verification of the evaluation methods and processes easy. The evaluation methods include both process and impact components employing a mixed methods approach to the project. The evaluation plan includes focus groups with parents and students that will address the projects implementation and utility and can be used as mediators for evaluation impact. The baseline practices survey can also be used to control for differences between teacher skills that may impact the evaluation results. The evaluation plan includes a discussion of power and effect size expected with the groups/samples for each grade level included in the project. Details of the methodology employed for the outcome and impact components of the evaluation plan are provided in Appendix I. The matching of the participants across schools and regions will help with replication and validation of impact in other settings. The activities and milestones table (pp. 15-16) clearly demonstrates the integration of evaluation into the project implementation processes and will assist in guiding program implementation improvements.

### Weaknesses:

More information on project implementation fidelity and how the differences in implementation fidelity will be considered in program improvement and evaluation impact would improve the application. The application would also be improved by adding more details about the measurable threshold for acceptable implementation as part of implementation fidelity (process evaluation) and the continuous quality improvement feedback loop.

Reader's Score: 18

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Status: Submitted

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## Technical Review Coversheet

Applicant: Code.org (U411C190093)

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

	Points Possible	Points Scored
<b>Questions</b>		
<b>Selection Criteria</b>		
<b>Quality of the Project Evaluation</b>		
1. Project Evaluation	20	18
<b>Sub Total</b>	20	18
<b>Total</b>	20	18

# Technical Review Form

Panel #6 - EIR Early Phase Tier 2 - 12: 84.411C

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

Applicant: Code.org (U411C190093)

## 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 analysis of data described in the "analysis details" appendix (e149-e154) provides for the research conditions required for a quasi-experimental design (matched samples, standards for assessing differences between groups, and power estimates) meeting the WWC standards with reservations.
- The "Theory of Action" (Figure 1, p. 4) provides an explanation of the causal path related to treatment effects for this project. This model supports the development of the evaluation model and can assist the implementer in interpreting research findings.
- The table (p. 25) provides for a meeting between program implementers and evaluators as an initial project activity. This procedure highlights the importance of the project evaluation, provides for a review of objectives and, emphasizes the importance of ongoing process feedback to program managers. These activities will help provide for effective evaluative activity.
- The geographical distribution described on pp. 17-18 represents a large and diverse implementation setting that assists this project's findings in being generalizable across multiple settings.
- The evaluative observations described on page 22 will serve to validate the documentary collection as well as provide evaluators firsthand insight into program implementation. This procedure will help in providing accurate assessment of program effects.
- The applicant's proposed research questions addressed by the project (p. 19) provide a guide to the implementation and outcome issues to be studied. The research questions also are clearly connected to applicant's logic model (e120).
- The evaluation timeline (e144) and data sources, e146-e148) provide support for the applicant's planning for effective evaluation procedures and contribute to the likelihood of achieving success in determining the project's impact.

**Weaknesses:**

- The students selected for participation in the project are self-selected (enrolled in AP CSP classes). While the matching design controls for some student level variables the self-selection confound is not controlled. This may confound findings of differences between groups (p. 23).
- Details of the data sharing agreement, a critical component of the evaluation, with the College Board (p. 24) and how student confidentiality will be protected are not described by the applicant. Failure to secure this information will jeopardize effective evaluation of outcomes.
- The description of the fidelity measure (p. 21) does not provide information regarding the validity/reliability of the proposed survey measure to be used or how these data will be operationalized to create a variable that assesses the level of fidelity within a school.

**Reader's Score:** 18

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