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

Status: Submitted
Last Updated: 08/17/2017 07:28 PM

# Technical Review

**Applicant:** United Way of Massachusetts Bay Inc (U411C170195)
**Reader #2:** **********

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

# Technical Review Form

**Panel #5 - EIR - Early Phase - Evaluation - 5: 84.411C**

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

**Applicant:** United Way of Massachusetts Bay Inc (U411C170195)

**Questions**

**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 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 Evidence Standards with reservations.**

   **(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 components, mediators, and outcomes of the grant-supported intervention, as well as a measurable threshold for acceptable implementation.**

   **Strengths:**

   The three guiding questions for the evaluation are well-structured, clearly encompass each of the central objectives, and allow for an appropriate exploration of the outcomes of the BoSTEM project (p.22). The use of a quasi-experimental design is an appropriate means to determine impacts and aligns directly with What Works Clearinghouse evidence standards with reservations (p. 22-23). Propensity Score Matching (PSM) to establish a 1:2 nearest neighbor match in regard to background and demographic variables, including academic achievement, is an effective and rigorous approach to obtaining baseline equivalence of the intervention and comparison groups (p. 23).
   The evaluation is based on a very strong program design, which is itself based on models proven to be successful (p. 6, p. 9, p.13). The proposed evaluation includes a longitudinal process evaluation that aligns with recognized elements related to adherence, exposure, quality, and responsiveness (p. 24). A further strength of this aspect of the evaluation is the embedding of the fidelity evaluation with the project-specific BoSTEM Fidelity Index that is aligned with the eight primary activities included in the project logic model (Appendix B). The inclusion of a replication fidelity study beginning in Year 2 of the project, in addition to a quarterly continuous improvement process, further strengthens the extent to which the evaluation is able to provide evidence about effective strategies and opportunities for replication in other settings (p. 24).
   The use of quantitative data from sources such as the Massachusetts Comprehensive Assessment System, Science, Technology and Engineering data, and Partnership for Readiness for College and Careers data math data, among other sources, is an appropriately rigorous approach and will likely yield valid, reliable and relevant outcomes. Qualitative data is discussed in an appropriate way in the context of implementation fidelity (p. 24-25).
   The BoSTEM logic model (Appendix B, p. 2) provides a clear and detailed map of the outputs associated with the evaluation, as well as relevant outcomes and overall impact that will be assessed. Minimal Detectable Effect Size is addressed and reference is made to published research supporting the approach to determining MDES (Appendix G, p. 7).

   **Weaknesses:**

   No weaknesses noted

**Reader's Score:** **20**

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# Technical Review

**Applicant:** United Way of Massachusetts Bay Inc (U411C170195)
**Reader #1:** **********

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

# Technical Review Form

**Panel #5 - EIR - Early Phase - Evaluation - 5: 84.411C**

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

**Applicant:** United Way of Massachusetts Bay Inc (U411C170195)

**Questions**

**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 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 Evidence Standards with reservations.**

**(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 components, mediators, and outcomes of the grant-supported intervention, as well as a measurable threshold for acceptable implementation.**

**Strengths:**

The design proposed for the evaluation will include propensity score matching, baseline equivalence, and include sufficient numbers of students to satisfy the requirements for the What Works Clearinghouse Evidence Standards with reservations (p. 23 & Appendix B). The evaluation includes a discussion of the process to be used to measure implementation of the program and the thresholds that will be used to guide program staff (p. 24). The proposal includes measureable elements that should produce valid and reliable performance measures (p. 15). For example, the state standardized test data, student and staff surveys, observations, and interviews (p. 25). The data to be collected is aligned with the goals and objectives of the program (p. 15) and can be used to provide useful feedback for future replication as well as to guide programmatic decisions.

**Weaknesses:**

None noted

**Reader's Score:** **20**

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**Status:** Submitted

**Last Updated:** 08/09/2017 12:33 PM