Technical Review

Applicant: DuPage Regional Office Of Education #19 (U411C170142)
Reader #1: **********

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<tr>
<th>Questions</th>
<th>Points Possible</th>
<th>Points Scored</th>
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<td>Selection Criteria</td>
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<td>Quality of the Project Evaluation</td>
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<td>1. Project Evaluation</td>
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Sub Total 20 15

Total 20 15
Technical Review Form

Panel #8 - EIR - Early Phase - Evaluation - 8: 84.411C

Reader #1: *******

Applicant: DuPage Regional Office Of Education #19 (U411C170142)

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 evaluation plan starts on page (e53). The applicant proposes an evaluation design that, if well-implemented, could demonstrate evidence via a comparative interrupted quasi-experimental design (QED) that would meet What Works Clearinghouse (WWC) standards with reservation. The CITS-QED is one of the more robust QEDs. The applicant will utilize an experienced external evaluation firm with extensive experience in conducting QEDs, page (e54), will utilize some reliable and valid measures (Table 5), and addressed key components and outcomes (Table 5). The applicant included the expected sample sizes (Table 6), and did determine (a-priori) based on these sample sizes, the acceptable power to detect the expected minimal detectable effect size (MDES) related to the outcomes being measured. The project design will be powered at .80, which is standard for peer-reviewed scholarly research. Also to address the impact questions, most importantly measure changes in student learning, the applicant did propose the analytical methods that may be appropriate, such as hierarchical linear model (HLM), given the nature of the collected data (nested), students and teachers embedded in classrooms, classrooms in schools, and schools in districts.

Weaknesses:

There were a few issues with the evaluation section of the grant. First, the applicant will be utilizing a survey for measuring a key outcome. There was no reliability/validity information provided for this instrument. Without this information, there is no way to determine if this survey is measuring the appropriate construct (outcome) of interest, and more importantly whether or not this survey instrument is reliable and valid, hence, the confidence in what it purports to have measured. Second, the applicant did not provide details as related to how matching the experimental group will be accomplished, such as the type of propensity score matching. In addition, what type of propensity score matching will be used based on the different techniques in the literature. As related to establishing baseline equivalence, the applicant provided no discussion. Establishing baseline equivalence is a requirement for meeting What Works Clearinghouse with reservations (WWC). The applicant only included a cursory statement related to ensuring a matched group, page (e57). The applicant did not discuss mediators or measurable threshold for acceptable implementation. Finally, the applicant’s discussion on a plan for providing guidance about effective strategies suitable for replication or testing in other settings was limited. Therefore, this sub-criterion D.2 could not be fully assessed.

Reader's Score: 15
Technical Review

Applicant: DuPage Regional Office Of Education #19 (U411C170142)
Reader #2: **********

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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:

1) The applicant describes methods of evaluation that will, if well-implemented, produce evidence about the project's effectiveness that would meet the What Works Clearinghouse Evidence Standards with reservations. For example, the applicant provides details regarding conducting a quasi-experimental study that uses a comparative interrupted time series with both a treatment and comparison group. Details are provided regarding power analysis that includes estimated attrition rates and minimal detectable effect sizes for student and school level outcomes (Table 1 in the Appendix B). The applicant provides details regarding formulas for conducting a three-level hierarchical linear model that includes random effects to estimate the effect of the program on student outcomes, and includes a plan to conduct separate analyses for an elementary and middle school group, a high school group, a rural school group (Appendix M, pg. e245). A similar model is described to address instructional leadership and school culture (pg. e246). A plan to examine data in the years prior to the program implementation is also described (pg. e245).

2) The applicant describes effective strategies suitable for replication, such as methods of analyses for a comparative interrupted time series study, the use of reliable measures and the implementation of a results-oriented cycle of inquiry to create a routinized process for the use of data through goal setting (pg. e50). Details are provided regarding artifacts (e.g., explicit project goals, objectives, measures, activities, targets and a logic model) that will allow for project replication (e52). The applicant provides a plan to disseminate evaluation findings, evidence based practices and shared lessons learned through white papers and articles for researchers (pg. e51). A similar model is described to address instructional leadership and school culture (pg. e246)

3) The applicant describes methods that will provide valid and reliable performance data, such as the use of a validated survey (5 Essentials Survey, pg. e55) that will be analyzed using Rasch modeling to determine scale scores. Student performance data includes the use of standardized test scores (PARCC and SAT, pg. e56).

4) A logic model is provided that describes key components of the project regarding a research-based change process aimed at increasing principal effectiveness and improving student outcomes. Short term, mid-term and long-term outcomes are described, as well as objectives, with targets and clearly specified thresholds (pgs. e40-e43).
Weaknesses:

1) No weaknesses noted.
2) No weaknesses noted.
3) It is unclear how the applicant will ensure reliability with regard to measuring fidelity of implementation. For example, details are limited regarding how this will be scored/rated and if training or calibration of raters will be included in this process to ensure inter-rater reliability and consistency in ratings.
4) Details are lacking regarding a measurable threshold for determining fidelity. It is unclear how the applicant will address mediators in the analyses and findings.

Reader's Score: 17

Status: Submitted
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