## Technical Review Coversheet

**Applicant:** The Ohio State University (U411B190019)

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

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**Sub Total** 100 68

**Total** 100 68
Technical Review Form

Panel #2 - EIR Mid Phase - 2: 84.411B

Reader #1: **********
Applicant: The Ohio State University (U411B190019)

Questions

Selection Criteria - Significance

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

   (1) The potential contribution of the proposed project to increased knowledge or understanding of educational problems, issues, or effective strategies.

   (2) The extent to which the applicant demonstrates there is unmet demand for the process, product, strategy, or practice that will enable the applicant to reach the level of scale that is proposed in the application.

Strengths:

The applicant proposes to develop their project (HEROES), a literacy intervention for young students with IEP’s in grades k-4th which the lead agency states is already substantially more effective than current practices which typically result where students remain on IEP’s for literacy instruction. It is here where large gaps become noticeable between the special education population and the general education population. The applicant has selected a research topic that has the potential to increase knowledge and effective strategies as they relate to reading instruction for learning disabled elementary students. Research citations are provided that illustrate the staggering numbers of school age children who are diagnosed with specific learning disabilities. Additional facts cited show that 91% of students classified remain special education classified throughout their school years. The applicant makes a strong case that students receiving special education services for learning disabilities do not get the targeted specialized literacy instruction and they represent the school age population that has the greatest need. E19

The applicant does provide evidence that there is an unmet demand for the strategy that will enable the applicant to reach the level of scale that is proposed in the application. There is an unmet demand for interventions in reading that work for those whose primary disability is in the area of basic reading skills and reading comprehension. Many of the current programs geared to remediate this problem do not meet research standards as illustrated in Table 1 – WWC Interventions for Students with Specific Learning Disabilities. The early-phase HEROES development project provided convincing evidence, according to the lead agency, that this project can address the daunting challenge of developing an effective instructional format for students with disabilities classified as learning disabled with reading deficiencies. A significant aspect of the project is the professional development component to train teachers in this initiative that provides an intensive reading program based on one teacher and one student model for at least 3 times a week for 40 minutes. E22

Weaknesses:

2. The applicant does not provide specific information on the scope/concept/ideology of what is different about their project, and what sets them apart (their strategy) regarding their reading instruction initiative for children classified as Learning Disabled in the area of reading. The applicant does not describe what specific benefits in achieving reading skills have been discovered as a result of their early phase project. The applicant does not describe the key differentiating elements of their project. The applicant has not provide evidence that shows that their project demonstrates there is an unmet demand for their practice that will enable the applicant to reach the level of scale that is proposed in their application. The demand for the applicant’s project is not supported because they have not provided what is unique about
Selection Criteria - Quality of Project Design

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

   (1) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable.

   (2) The extent to which there is a conceptual framework underlying the proposed research or demonstration activities and the quality of that framework.

**Strengths:**

The applicant provides goals, objectives and outcomes to be achieved by the proposed project provided in multiple formats on different pages within the narrative for this category. The applicant provides two major goals: Expanding HEROES and Refining HEROES-field based activities. Their Table 3-Expansion Goals, Objectives, and Outcomes for HEROES are detail specific and measurable. For example, Objective 1 under this category – Increase the number of students served by HEROES teachers, has an outcome that: At least 1,820 high need students will be served: 192 in Year 1, 380 in Year 2, 576 in Year 3 and 672 in Year 4. These criteria requirements are also clearly specified for Goal two as found on Table 5 – Refinement Goals, Objectives, and Outcomes for HEROES. The applicant appears sensitive to issues that would increase their ability to scale and expand their project. For example, they recognize that large concentrations of potential teachers are not situated close to training hubs which they see requiring the implementation of distant training models for at least half instruction time on web-based platforms.

The applicant provides for a conceptual framework underlying the proposed research and for the quality of that framework. In support of the conceptual framework, the applicant includes HEROES’ Intervention Logic Model which provides for Inputs, Outputs and Short and Long-Term Outcomes. This includes the important component that special education teachers develop expertise in formative assessments and instruction and that the outcome is that students read at grade level. The framework emphasizes the use of evidence-based reading instruction where each lesson includes instruction in fluent reading to increase automatically and support comprehension. The conceptual framework is supported by research for the intended population. This is supported with the use of lessons that include instruction in fluent reading to increase automatically the support comprehension and teacher-scaffolded support to recognize and decode unfamiliar words while reading connected text. The applicant also provides citations to support their efforts in this conceptual model.

**Weaknesses:**

The applicant presents their goals, objectives and outcomes in an unclear manner (pages e25-e22) using some diagrams/charts and narrative requiring the reader to move back and forth to analyze what they actually want to accomplish with their quality of design section. The applicant does not align their goals, objectives and outcomes in a format that clearly demonstrates the desired project outcomes. The applicant illustrates this in their Goal 3: Refining HEROES (Helping Early Readers Obtain Excellence in Special Education): Lab-Based Refinement Activities; Goal 1: Expanding Heroes; Objective 1; Table 5-Refinement Goals, Objectives, and Outcomes for HEROES; Goal 2: Refining HEROES: Field-Based Refinement Activities; Table 3. Expansion Goals, Objectives, and Outcomes for Heroes; Figure 2. HEROES Lesson Format Development: Early-phase to Ready for Mid-phase as well as a Table 2 Mid-phase Lesson
Selection Criteria - Strategy to Scale

1. The Secretary considers the applicant’s strategy to scale the proposed project. In determining the applicant’s capacity to scale the proposed project, the Secretary considers the following factors:

   (1) The extent to which the applicant identifies a specific strategy or strategies that address a particular barrier or barriers that prevented the applicant, in the past, from reaching the level of scale that is proposed in the application.

   (2) The extent to which the proposed project will increase efficiency in the use of time, staff, money, or other resources in order to improve results and increase productivity.

Strengths:
The applicant is clear in identifying specific strategies that address barriers that have prevented the applicant in the past from reaching the level of scale that is proposed in the application. The applicant enumerates them below in sufficient detail. The applicant identifies specific strategies that address multiple barriers that prevented the applicant in the past from reaching the level of scale that is proposed in the application. This includes the barrier of being able to scale with efficacy. The applicant plans on increasing the university based hub training model which encompasses careful expansion with IHE’s that are near large concentrations of eligible students such as St. Mary’s which allows the lead agency entrée to districts with a more varied population. Each of the hubs chosen have committed to recruiting two new districts each year to reach the project goal. A second barrier that is discussed is Teacher Attrition Impedes Scales and that is being remedied by requesting that a school or school district sign a MOU in the spring before the teacher’s training year agreeing to allow the teacher to participate in the grant for the entire four years of the project. The applicant provides other barriers with potential solutions. Other barriers include: Practical Constraints make it Challenging to Refine Educational Innovations; Scaling and Increasing Size Makes Continuous Improvement Challenging; and Ineligible Students May be Selected for the Intervention. These barriers enumerated by the applicant are based on their experience in the content of their project. These applicant presents a strong narrative in detailing and responding to this sub criteria regarding barriers that have prevented past initiatives from succeeding. E34

The applicant provides for a comprehensive plan to increase efficiency in the use of time, staff, money and other resources in order to improve results and increase productivity. The applicant will use three key activities: field-based tweaks to the intervention; lab based studies designed to increase the effect; and conduct yearly cost-effectiveness analyses to examine costs related to benefits over-time. Included in their plan to increase efficiency is their use of a model form from the business sector which tests ideas in-house as well as in the field. For this project much of the consumption is found in professional development and the applicant plans to refine this with a distance training module as part of our field-based efforts. They go on suggest other avenues to increase efficiently such as reducing the time spend with each student or using a two student one teacher model. E37

Weaknesses:
None noted.
Selection Criteria - Adequacy of Resources/Quality of Management Plan

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

(1) The adequacy of the management plan to achieve the objectives of the proposed project on time and within budget, including clearly defined responsibilities, timelines, and milestones for accomplishing project tasks.

(2) The applicant’s capacity (e.g., in terms of qualified personnel, financial resources, or management capacity) to bring the proposed project to scale on a national or regional level (as defined in 34 CFR 77.1(c)) working directly, or through partners, during the grant period.

(3) The potential for continued support of the project after Federal funding ends, including, as appropriate, the demonstrated commitment of appropriate entities to such support.

(4) The extent to which the costs are reasonable in relation to the objectives, design, and potential significance of the proposed project.

Strengths:

1. The management plan is adequately presented to achieve the objectives of the proposed project on time and within budget including clearly defined responsibilities, timelines and milestones for accomplishing project tasks. Their Table 6-Project Timeline with Activities and Accompanying Objectives and Goals with the key staff member is listed under the Responsible heading. Figure 3-Organizational Chart illustrates the chain of command for key project implementation. The timelines and milestone categories are detail specific. For example: Timeline January to June 2020-Goal- Expand and the milestone is Recruit teachers; establish training class sites in CA, GE, OH and SC. E40

2. The applicant provides information that supports the capacity to bring the proposed project to scale on a national level working through partners during the grant period. Their director and co-director have managed and directed a five-year i3 expansion program and a four-year i3 early phase project. This includes one of the largest educational randomized control trails in history. There is specific experience of key staff working with districts and coaching teachers. Each of the partner IHE have direct experience and have experts on reading processes in place and the IHE’s have committed the necessary commitment and resources to the project. (OSU, Clemson, Georgia State and St. Mary’s). e39

3. The applicant provides sufficient detail for the potential for continued support of the project after federal funding ends with a demonstrated commitment of appropriate entities to such support. They plan for a royalty free license and trademark will be created at Ohio State. Licenses will be issued annually to universities in the hub provided standards are maintained. New universities will complete a free application process to join the hub and agree to follow the implementation standards. In support of this criteria university deans have included in their letters of support a stated commitment to sustaining HEROES after the grant and there are built-in incentives to do so. Coaches come from the school districts and they have expended training and funds for these personnel and would want to continue with these respected school staff. A ten-year partnership has been created with five book publishers to promote the work of the project. The applicant has provided evidence to meet this criteria. E43

4. The applicant makes a strong case that the costs are reasonable in relation to the objectives, design and potential significance of the proposed project. In support, the applicant provides that mover 70% of the budget goes directly to schools and teachers in the form of professional books, non-consumable teaching supplies, tuition for graduate credit, and a small fee per teacher for ongoing professional development which are one-time startup costs. There are no costs for PD for teachers who are in the coach’s school district. e44
Weaknesses:

2. The applicant did not embellish enough on the issue of financial resources and management capacity of their organization to carry through the project as well as their specific grant management experiences as defined in this sub-criteria.

3. The applicant does not provide sufficient details for the potential for continued support of the project after federal funding ends; including the demonstrated commitment of appropriate entities named within the project. The applicant is not clear after grant funding ends if the college partners will elect to cover the cost of release time for college faculty involved in the project. The applicant does not provide details of how their designated partners will make up and contribute the same funding amount levels that they are currently receiving for their commitment during this federal project duration. These issues mentioned illustrate that there is not enough information provided that describes what resources will be there for continued support after the funding ends.

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 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:

- 

Weaknesses:

- 

Reader's Score: 16

Reader's Score: 0
## Technical Review Coversheet

### Applicant:
The Ohio State University (U411B190019)

### Reader #2:
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Panel #2 - EIR Mid Phase - 2: 84.411B

Reader #2: ***********
Applicant: The Ohio State University (U411B190019)

Questions

Selection Criteria - Significance

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

   (1) The potential contribution of the proposed project to increased knowledge or understanding of educational problems, issues, or effective strategies.

   (2) The extent to which the applicant demonstrates there is unmet demand for the process, product, strategy, or practice that will enable the applicant to reach the level of scale that is proposed in the application.

Strengths:

(1) The applicant well describes the potential contributions of the proposed HEROES project to increasing knowledge and understanding of k-4 literacy interventions for high needs students. The applicant cites relevant research (pp. e 19-20) which describes challenges practitioners have in understanding how to teach reading to early learners who have the most severe difficulty learning to read. HEROES (Helping Early Readers Obtain Excellence in Special Education) is an early literacy intervention designed to better address the needs of students with diagnosed reading disabilities. The applicant describes the positive outcomes (statistically significant effects) of the HEROES four-year early-phase project which was expanded from 15 special education teachers in three states and 117 special education teachers in four states. This early scaling for HEROES is significant because typically educational innovations are localized to a few schools or districts and rarely expand beyond them even if they are effective (pp. e 19 -20). The successful completion of the early-phase HEROES project is a clear indication of the likelihood that the proposed project will be further refined and scaled to increase understanding of early literacy interventions for high needs students because the project strategies are a customizable, student focused approach to addressing their unique early literacy needs.

(2) The applicant demonstrates that the unmet demand for HEROES is evident in the growing number of students identified with reading disabilities and the scarcity of successful interventions. The applicant describes how the available evidence from WWC reports on interventions targeted for students with specific learning disabilities, reveals an unmet demand for interventions that work. A significant issue is the size of the problem and the severity of the consequences, which impacts early learners who fall behind in reading, widening the achievement gap between them and their higher achieving peers (pp. e 20-21). HEROES’ contribution to understanding and scaling effective reading instructional strategies for students with diagnosed reading disabilities can assure that the knowledge to design and deliver this effective intervention can be disseminated regionally and nationally to meet the demand for educators struggling with providing early literacy instruction to high needs students.

Weaknesses:

(1) None noted
(2) None noted
Selection Criteria - Quality of Project Design

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

   (1) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable.

   (2) The extent to which there is a conceptual framework underlying the proposed research or demonstration activities and the quality of that framework.

Strengths:

   (1) The applicant presents clearly specified and measurable goals, objectives, and outcomes to be achieved by the proposed project (pp. e 25-30). The applicant utilizes baselines which show the starting point from which performance is measured. For example, each student’s text reading and word identification fluency scores on a weekly basis are entered into the online data system and from those scores, each student’s growth trajectories are developed (p. e 26). In addition, the applicant uses performance measures including quantitative indicators to gauge program or project performance. For example, the applicant found that 91% accuracy was a dividing line between children who made substantial progress and those who did not, suggesting that many children would have benefited more if their teachers increased the pace of introducing more challenging books (p. e 29). To further show clearly specified and measurable goals, objectives, and outcomes to be achieved by the proposed project, the applicant provides the evaluation technical approach to include the key program components and their Indicators (Appendix M, pp. e 189-192) which shows performance measures by objectives. The evaluation team will collect fidelity data related to key components of HEROES, including teacher surveys, records of attendance at training workshops, logs of coaching interactions with teachers, and reviews of student lesson plans. Implementation data will be collected during years 2 and 3 on all implementing treatment schools to provide feedback on implementation success and challenges. This fidelity measure was developed and tested as part of the prior impact study of HEROES. (p. e 189). The results are significant because they show that the strategies, support and resources provided will support participant success. The goals, objectives and outcomes provide a solid foundation for the overall project design and provide a road map for the successful implementation of project components.

   (2) The applicant presents a solid logic model (Appendix H) which provides a clear conceptual framework underlying the proposed HEROES project. The conceptual framework is based on key inputs, including interventions with a mechanism for scaling; professional development; evidence-based reading instruction; ongoing data collection for formative assessment; and refinement of educational innovations (p. e 30). The applicant describes how the proposed HEROES project will provide special education teachers with advanced training in reading assessment and evidence-based instruction; provide students with individualized instruction using a scaffolding approach; and provide ongoing progress monitoring of student and teacher progress (pp. e 30-31). These research-based strategies support a viable conceptual framework which will enhance the successful implementation of proposed project goals and objectives.

Weaknesses:

   (1) None noted
   (2) None noted

This criterion was thoroughly discussed, and my scores reflects my professional assessment of this section.
Selection Criteria - Strategy to Scale

1. The Secretary considers the applicant’s strategy to scale the proposed project. In determining the applicant’s capacity to scale the proposed project, the Secretary considers the following factors:

(1) The extent to which the applicant identifies a specific strategy or strategies that address a particular barrier or barriers that prevented the applicant, in the past, from reaching the level of scale that is proposed in the application.

(2) The extent to which the proposed project will increase efficiency in the use of time, staff, money, or other resources in order to improve results and increase productivity.

Strengths:

(1) The applicant clearly identifies specific strategies that address barriers which prevented the applicant, in the past, from reaching the level of scale that is proposed in the application. The applicant provides a detailed description of six barriers and provides research-based strategies to address them (pp. e 32 – 36). For example, a significant barrier impacting the capacity to scale the proposed HEROES project is the challenge of expanding the reach beyond the few school districts where the program was initially developed. Viable strategies to address this barrier will include establishing hubs with six to eight district partnerships; establishing a royalty-free license to use HEROES; establishing HEROES’s learning centers; and delivering professional development using hybrid-training models to reach more districts. In addition, the applicant also describes the barrier of teachers with impairments recruited for the project. The solution is that grant money budgeted in the teacher instructional fee will pay for supplies for any needed transportation services and/or materials that will allow the teacher to learn the intervention strategies. Another barrier is that there may be some students with impairments recruited for the project. The solution is that grant money budgeted in the teacher instructional fee will pay for certain instructional materials to facilitate the learning of students with any visual or physical disabilities. Finally, there is a transportation barrier for some teachers in remote, rural areas who may have difficulty participating in the training because the teacher training site is too far away. The solution is that grant money will be budgeted to develop a distance training model that will be delivered via technology (p. e 12). The applicant provides a detailed scale-up logic model that depicts strategies for expanding the number of states, districts, schools, teachers, and students reached by the HEROES; identifying and monitoring student and teacher progress; and continually improving the intervention (Appendix I). The HEROES project will be fine-tuning interventions to increase efficiency and productivity, which will enhance expansion and sustainability because participants will have direct access to resources and focused support needed to overcome barriers. The proposed solutions to the barriers will support the project in reaching the level of scale presented because the applicant will implement a hybrid delivery system which will expand service delivery, increase the number of participants; and offer more flexibility in program and resource accessibility.

(2) The applicant well describes the extent to which the proposed HEROES project will improve efficiency and maximize the intervention’s impact through field-based interventions; lab-based studies designed to increase the effect; and conducting yearly cost-effectiveness analyses to examine costs related to benefits over time. The applicant explains the rational for each of these strategies (p. e 36). To improve resource efficiency, the applicant will implement the field-and lab-based work strategy, which is modeled after successful business ventures that concurrently test ideas in-house as well as in the field. For example, a field- and lab-based work strategy will require replacing weekly travel to a central location for meetings, which amounts to additional travel and staffing time, with a hybrid training module (pp. e 36-37). This training model will improve accessibility and increase participant numbers. The applicant’s sound approach to improving efficiency is the strategic reallocation of resources based on an evidence- based cost analysis process that will increase efficiency in the use of time, staff, and money in order to improve results and increase productivity.
Weakenes:

(1) None noted
(2) None noted

Reader’s Score: 20

Selection Criteria - Adequacy of Resources/Quality of Management Plan

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

(1) The adequacy of the management plan to achieve the objectives of the proposed project on time and within budget, including clearly defined responsibilities, timelines, and milestones for accomplishing project tasks.

(2) The applicant’s capacity (e.g., in terms of qualified personnel, financial resources, or management capacity) to bring the proposed project to scale on a national or regional level (as defined in 34 CFR 77.1(c)) working directly, or through partners, during the grant period.

(3) The potential for continued support of the project after Federal funding ends, including, as appropriate, the demonstrated commitment of appropriate entities to such support.

(4) The extent to which the costs are reasonable in relation to the objectives, design, and potential significance of the proposed project.

Strengths:

(1) The applicant’s management plan, designed so that key activities are linked to specific project goals and objectives, is adequate for achieving the objectives of the proposed project on time and within budget. Individuals are assigned to tasks based on clearly-defined roles to fulfill the project aims. Tasks and personnel responsible; a year to year timeline; and a description of milestones are linked to project goals and are clearly specified (pp. e 40 -41). The applicant provides an organizational chart (p. e 41) which shows the project structure and primary lines of communication. Also included are resumes (pp. e 53-149) for key project personnel which further details their qualifications and experiences.

(2) The applicant well describes their capacity to bring the proposed project to scale on a national or regional level working directly, or through partners, during the grant period. The applicant highlights the leadership capacity of the director, co-director and other key staff who have managed and directed previous projects; are nationally and internationally known experts on the reading process and teacher professional development; have extensive experience recruiting and working with school districts; and have experience preparing reading coaches. The university partners will provide a reading training center to prepare coaches for the project, and each training center has ongoing collaborative arrangements with school districts to recruit special education teachers. Recruited districts will also provide resources, including training space and supplies, as well as time for teacher training. These resources will enhance participant success and increase the likelihood that the program will be maintained. Through well qualified and experienced leaders; an expanded cadre of trained coaches; the availability of online and center-based resources, and supportive partners, the applicant will increase their capacity to bring the proposed project to scale.

(3) The applicant describes the potential for continued support of the project after Federal funding ends, including, the demonstrated commitment of appropriate entities. The applicant includes letters of support (pp. e 164-180) as well as an evidence of matching funds or in-kind contributions optional summary sheet (p. e 163) showing partner commitments to support the sustainability of the project. For example, in the memorandum of understanding, the Ohio State University EIR Mid-Phase Project agrees to provide the following training and materials for each special education teacher in an EIR-
eligible school that has been accepted into the grant training program as a treatment teacher: tuition up to $5,000 per teacher; books and materials up to a value of $3,500 per teacher; and instructional expenses up to $3,000 per teacher for providing ongoing professional development to already trained teachers. This funding is intended to compensate for the teacher leader’s time, to purchase additional books or materials as appropriate to the grant activities. The costs to the international data evaluation center’s web-based data entry will be paid to the partnering university which will disburse the funds as appropriate. The school district and participating school administrators agree to provide at least one special education teacher who will be able to provide one-to-one instruction to targeted students (p. e 183). These strategies support program sustainability systemically through the commitment of fiscal and physical resources; teacher incentives and the investment in ongoing professional development of teachers; and the development of resources to be integrated into classroom instruction. (pp. 42-44). To support sustainability, the applicant provides evidence of developing long-term support with private donors who have expressed interest in continued funding beyond the grant period, and faculty at their respective universities have interested donors. The applicant provides an evidence of matching funds or in-kind contributions optional summary sheet (p. e163) which shows the value of in-kind commitments of partners to refining and expanding HEROES.

(4) The applicant’s budget of $8,856,893.00 appears reasonable in relation to the objectives, design, and potential significance of the proposed project. The costs for schools and teachers in the form of professional books, non-consumable teaching supplies, tuition for graduate credit, and a small fee per teacher for ongoing professional development ($2,599 per year per teacher) are included in 70% of the budget. The administrative overhead is minimal; the cost per pupil decreases after the training year; and there is no PD cost for teachers who are in their coach’s school district (pp. e 43-44).

Weaknesses:

(1) None noted
(2) None noted
(3) None noted
(4) None noted

Reader’s Score: 20

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 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: N/A

Weaknesses: N/A

Reader's Score: 0

Status: Submitted
Last Updated: 05/28/2019 02:39 PM
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Technical Review Form

Panel #2 - EIR Mid Phase - 2: 84.411B

Reader #3: **********
Applicant: The Ohio State Universtiy (U411B190019)

Questions

Selection Criteria - Significance

1. The Secretary considers the significance of the proposed project. In determining the significance of the proposed project, the Secretary considers the following factors:
   
   (1) The potential contribution of the proposed project to increased knowledge or understanding of educational problems, issues, or effective strategies.

   (2) The extent to which the applicant demonstrates there is unmet demand for the process, product, strategy, or practice that will enable the applicant to reach the level of scale that is proposed in the application.

Strengths:

• The applicant presents strong data-based evidence that demonstrates the need for a project that focuses on a literacy intervention to better address the needs of students with diagnosed reading disabilities (e19-e20). This evidence is supported by the project’s expansion from 15 special education teachers in Year 1 to 117 special education teachers in Year 4.

• Based on data within WWC, there is a scarcity of effective interventions backed with evidence to meet the needs of students with learning disabilities. The applicant proposes that HEROES will be an effective instructional format for struggling readers (e21-e22).

Weaknesses:

None noted

Reader's Score: 15

Selection Criteria - Quality of Project Design

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

   (1) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable.

   (2) The extent to which there is a conceptual framework underlying the proposed research or demonstration activities and the quality of that framework.

Strengths:

• HEROES features a train-the-trainer model that will be utilized to expand those impacted by a coach in Year One from 12 to 36; this is significant scaling of the project (e23).

• The applicant demonstrates that it has reflected upon the work done within the early-phase of testing and made adjustments for the proposed activities within this phase. This includes the abandonment of writing messages and
reduction of time spent on word work in isolation(e23).

Weaknesses:

- The applicant does not clearly articulate the goals, objectives, and outcomes to be achieved by the proposed project. Furthermore, the plan for measurability is vague. (e25-e30).
- The conceptual framework included to support the proposed project is unclear and does not adequately strengthen the applicant’s project.

This criterion was thoroughly discussed, and my score reflects my professional assessment of this section.

Reader’s Score: 20

Selection Criteria - Strategy to Scale

1. The Secretary considers the applicant’s strategy to scale the proposed project. In determining the applicant’s capacity to scale the proposed project, the Secretary considers the following factors:

   (1) The extent to which the applicant identifies a specific strategy or strategies that address a particular barrier or barriers that prevented the applicant, in the past, from reaching the level of scale that is proposed in the application.

   (2) The extent to which the proposed project will increase efficiency in the use of time, staff, money, or other resources in order to improve results and increase productivity.

Strengths:

- For each barrier, the applicant includes a specific strategy that will be used to counter the barrier (e32-e36) and the removal of these barriers will likely increase the level of scale that is reached.
- The project includes testing in-house and in the field; this is vital because some aspects need to be tested within the school context and others need to remain in a controlled lab setting.

Weaknesses:

- The applicant minimally includes details related to how the project will increase efficiency in the use of time, staff, money, and other resources in order to improve results and increase productivity.

Reader’s Score: 20

Selection Criteria - Adequacy of Resources/Quality of Management Plan

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

   (1) The adequacy of the management plan to achieve the objectives of the proposed project on time and within budget, including clearly defined responsibilities, timelines, and milestones for accomplishing project tasks.
(2) The applicant’s capacity (e.g., in terms of qualified personnel, financial resources, or management capacity) to bring the proposed project to scale on a national or regional level (as defined in 34 CFR 77.1(c)) working directly, or through partners, during the grant period.

(3) The potential for continued support of the project after Federal funding ends, including, as appropriate, the demonstrated commitment of appropriate entities to such support.

(4) The extent to which the costs are reasonable in relation to the objectives, design, and potential significance of the proposed project.

Strengths:

• The management plan clearly details the timeline, goal, milestones, and responsible party(ies) (e40-e41)
• An asset of this project is that it does not require grant funding to be sustained (e42). Furthermore, possession of royalty-free licenses, letters from university deans committing to sustainability after funding, inclusion of district personnel in administrative tasks associated with the university, and access to private donors demonstrate a high probability of continued support of the project after funding ends (e42-e43)

Weaknesses:

• The applicant has not provided sufficient detail to ensure that proposed staff will have the expertise and time necessary to fulfil the project (e39).
• The applicant does not note the full extent of expenses associated with furthering the project’s objectives and design. There is a need for a detailed budget narrative (e43).

This criterion was thoroughly discussed, and my score reflects my professional assessment of this section.

Reader’s Score: 16

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 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:  
n/a

Weaknesses:  
n/a

Reader’s Score:  0

Status:  Submitted  
Last Updated:  05/29/2019 03:45 PM
Technical Review Coversheet

**Applicant:** The Ohio State University (U411B190019)

**Points Possible** | **Points Scored**
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### Questions

**Selection Criteria**

**Significance**

1. Significance | 15 | 0

**Quality of Project Design**

1. Project Design | 25 | 0

**Strategy to Scale**

1. Strategy to Scale | 20 | 0

**Adequacy of Resources/Quality of Management Plan**

1. Resources/Management Plan | 20 | 0

**Quality of the Project Evaluation**

1. Project Evaluation | 20 | 15

**Sub Total** | 100 | 15

**Total** | 100 | 15
Selection Criteria - Significance

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Strengths:

na

Weaknesses:

na

Reader's Score: 0

Selection Criteria - Quality of Project Design

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   (2) The extent to which there is a conceptual framework underlying the proposed research or demonstration activities and the quality of that framework.

Strengths:

na

Weaknesses:

na

Reader's Score: 0
Selection Criteria - Strategy to Scale

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   (2) The extent to which the proposed project will increase efficiency in the use of time, staff, money, or other resources in order to improve results and increase productivity.

   Strengths:
   na

   Weaknesses:
   na

   Reader’s Score: 0

Selection Criteria - Adequacy of Resources/Quality of Management Plan

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   (3) The potential for continued support of the project after Federal funding ends, including, as appropriate, the demonstrated commitment of appropriate entities to such support.

   (4) The extent to which the costs are reasonable in relation to the objectives, design, and potential significance of the proposed project.

   Strengths:
   na

   Weaknesses:
   na

   Reader’s Score: 0

Selection Criteria - Quality of the Project Evaluation
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(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 applicant presented a comprehensive evaluation design for the proposed intervention to help elementary-level students with disabilities. If well implemented, the evaluation method is likely to produce evidence that meet the What Works Clearinghouse standards for the following reasons:

1. The evaluation randomly assigns schools within districts to compare program outcomes in treatment schools and that of schools in the business-as-usual condition.
2. The power calculation suggests the sample has a good chance of detecting the target size of effect.
3. The applicant will use data from multiple sources to measure implementation fidelity and program outcomes, including lesson records, test, survey and observations. The applicant articulated the relevance of these data and all these data seem to have face validity.
4. The modeling of data is appropriate given the nested structure of students and schools and the level of random assignment and blocking. The precision-weighting is a thoughtful approach to address uneven distribution of schools across districts.

Weaknesses:

1. The applicant needs to strengthen the connection between research questions and program goals/objectives. For example, the data and measures of implementing the distance training objective under program goal 2 is not mentioned in the evaluation plan, along with several other objectives.
2. It is not clear what data will be used to answer which research question and how. This is particularly lacking for the impact analysis. For example, there is no explanation of the student and school-level covariates and their source. The use of fidelity data is also lacking though there are four research questions about implementation fidelity (RQ 6-9). The program logic model (p. e181) listed short-term outcomes but the evaluation of achieving these outcomes is not missing from the narrative.
3. The applicant needs to articulate how lesson records will be collected and analyzed. The Appendix M include information of the collection of these records and the score level, but does not list if these scores will be used in answering research questions and how.

Reader’s Score: 15

Status: Submitted
Last Updated: 05/24/2019 01:26 PM
Technical Review Coversheet

Applicant: The Ohio State University (U411B190019)
Reader #: ********

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Strengths: NA

Weaknesses: NA

Reader's Score: 0

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Strengths: NA

Weaknesses: NA

Reader's Score: 0
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Strengths:
NA

Weaknesses:
NA

Reader’s Score: 0

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Strengths:
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Weaknesses:
NA

Reader’s Score: 0

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(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 evidence of effectiveness produced by this evaluation is likely to meet the What Works Clearinghouse standards without reservations. The design is a cluster randomized controlled trial or RCT (see page e45). The sample size (90 schools) is adequate and statistical power is estimated to identify significant differences. The risk of non-response from individuals is minimized due to a study design that gathers assessments/measurements from administrative units of the participating LEAs. This project evaluation is likely to produce defensible answers to key research questions (see page e44) based on all key outcome metrics being reliably measured and analyzed with an appropriate two-level HLM model (fully specified on page e187).

The evaluation plan outlines a broadly described 4-component strategy for generating and sharing key information regarding implementation and useful in supporting replication efforts (see page e46). Authors indicate that they will provide information on barriers to implementation (fidelity), a cost analysis to establish the cost-effectiveness of this endeavor, infrastructure needed, and lessons learned in scaling up. The statistical model (page e187) indicates moderators at the student and school levels will be included in the analysis and hence information will be available regarding who and where this program has the largest impact.

All outcome data elements are succinctly, but completely described in Table 8 on page e48. All measures are appropriate for their purpose. The core outcome data include both assessment scores and IEP status. IEP status should each be an error-free measure. Reliability estimates are provided for the two academic measures and both are acceptably high and appropriate for their purpose.

The measures used in this evaluation design are appropriate for their purpose and unlikely to be diminished by non-response, missing data, or attrition. The measures are embedded in a well thought out evaluation design. The two-level HLM being used in this study will yield results that support valid inferences regarding program impact. The use of an RCT with random assignment at the cluster/group-level to generate evaluation data where DVs and IVs are reliable and valid for their purposes, sets the stage for a successful analysis of outcome data. The HLM is the most appropriate statistical model to use in this scenario due to the explicit modeling of the nested data structures inherent in this setting and its ability to separate error sources across the different levels of the hierarchy; thereby improving the accuracy of standard error estimates used to tests hypotheses regarding the student, school, and programmatic impacts/outcomes.

On page e189-e192 of the application, authors succinctly share key project components in Appendix M. On page e46-e47 of the application, authors provide a description of outcomes and how outcomes will be measured. The strategies are logically linked to anticipated outcomes and proposed measures are appropriate for their purpose. On page e190-192 of the application, authors clearly describe the measurable thresholds for acceptable implementation. Thresholds set are rigorous but attainable.
Weaknesses:

It is challenging to estimate likely cluster-level attrition, and there is no mention of actively managing attrition in this application. The application makes no mention of whether individuals that join a cluster after random assignment of the cluster will be included in the analytic sample.

This evaluation plan does not have a well-developed implementation classification rubric that yields a fidelity score such as low, moderate, or high fidelity. This type of information would assist others in gauging the extent to which a program is implemented with fidelity and guide replication efforts.

All key moderators being gathered for both the treatment and control groups, such as prior academic performance, gender, race/ethnicity, and social-economic status; are not specifically listed in this application.

Authors do not clearly describe the relationship between program actions as mediators of short-term and mid-term outcomes which then in turn mediate the student outcomes.

Reader's Score: 16

Status: Submitted
Last Updated: 05/21/2019 03:21 PM