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

Status: Submitted
Last Updated: 9/12/11 12:00 AM

Technical Review Coversheet

Applicant: Old Dominion University Research Foundation (U411A110004)
Reader #4: **********

		Points Possible	Points Scored
Questions			
Summary Statement			
Summary Statement			
1. Summary Statement		0	
	Sub Total	0	
Selection Criteria			
Need for Project			
1. Need for Project		30	0
Quality of the Project Design			
1. Project Design		30	0
Quality of the Project Evaluation			
1. Project Evaluation		20	18
Quality of the Management Plan and Personnel			
1. Quality of the Management		20	0
	Sub Total	100	18
Priority Questions			
Competitive Preference Priority			
Competitive Preference Priority 6			
1. Competitive Preference 6		1	
Competitive Preference Priority 7			
1. Competitive Preference 7		1	
	Sub Total	2	
Competitive Preference Priority			
Competitive Preference Priority 8			
1. Competitive Preference 8		1	
	Sub Total	1	
Competitive Preference Priority			
Competitive Preference Priority 9			
1. Competitive Preference 9		1	
Competitive Preference Priority 10			
1. Competitive Preference 10		1	
	Sub Total	2	

Total	105	18

Technical Review Form

Panel #1 - 84.411A Panel - 1: 84.411A

Reader #4: **********

Applicant: Old Dominion University Research Foundation (U411A110004)

Questions

Summary Statement - Summary Statement

1. **Summary Statement (Optional)**

   General:

Reader's Score:

Selection Criteria - Need for Project

1. **The Secretary considers the need for the project. In determining the need for the project, the Secretary considers the following factors:**

   (1) The magnitude of the need for the services to be provided or the activities to be carried out by the proposed project.

   (2) The extent to which the proposed project represents an exceptional approach to the priority or priorities established for the competition.

   (3) The importance and magnitude of the effect expected to be obtained by the proposed project, including the extent to which the project will substantially and measurably improve student achievement or student growth, close achievement gaps, decrease dropout rates, increase high school graduation rates, or increase college enrollment and completion rates. The evidence in support of the importance and magnitude of the effect would be the research-based evidence provided by the eligible applicant to support the proposed project.

   Note Linking Magnitude of Effect to Presented Evidence: The Secretary notes that the extent to which the proposed project is consistent with the research evidence provided by the eligible applicant to support the proposed project is relevant to addressing the third factor of Selection Criterion A and, therefore, will be considered by the Secretary in evaluating the importance and/or magnitude of the impact expected to be obtained by the proposed project.

   Strengths:

   N/A-Scored by another reviewer.

   Weaknesses:

Reader's Score: **0**

Selection Criteria - Quality of the Project Design

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

   (1)The extent to which the proposed project has a clear set of goals and an explicit strategy, with actions that are

   a. Aligned with the priorities the eligible applicant is seeking to meet, and

   b. Expected to result in achieving the goals, objectives, and outcomes of the proposed project.

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

   (3) The extent to which the services to be provided by the proposed project reflect up-to-date knowledge from research and effective practice.

   (4) The eligible applicant's estimate of the cost of the proposed project, which includes the start up and operating costs per student per year (including indirect costs) for reaching the total number of students proposed to be served by the project. The eligible applicant must include an estimate of the costs for the eligible applicant or others (including other partners) to reach 100,000, 500,000, and 1,000,000 students.

   Note: The Secretary considers cost estimates both
   (a) to assess the reasonableness of the costs relative to the objectives, design, and potential significance for the total number of students to be served by the proposed project, which is determined by the eligible applicant, and

   (b) to understand the possible costs for the eligible applicant or others (including other partners) to reach the scaling targets of 100,000, 500,000, and 1,000,000 students for Scale-up grants. An eligible applicant is free to propose how many students it will serve under its project, and is expected to reach that number of students by the end of the grant period. The scaling targets, in contrast, are theoretical and allow peer reviewers to assess the cost-effectiveness generally of proposed projects, particularly in cases where initial investment may be required to support projects that operate at reduced cost in the future, whether implemented by the eligible applicant or any other entity. Grantees are not required to reach these numbers during the grant period.

   (5) The potential and planning for the incorporation of project purposes, activities, or benefits into the ongoing work of the eligible applicant and any other partners at the end of the Scale-up grant.

Strengths:

N/A-Scored by another reviewer.

Weaknesses:

Reader's Score: 0

Selection Criteria - Quality of the Project Evaluation

1. **The Secretary considers the quality of the project evaluation. 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 include a well designed experimental study or, if a well-designed experimental study of the project is not possible, the extent to which the methods of evaluation will include a well-designed quasi-experimental study.

(2) The extent to which the methods of evaluation will provide high-quality implementation data and performance feedback, and permit periodic assessment of progress toward achieving intended outcomes.

(3) The extent to which the evaluation will provide sufficient information about the key elements and approach of the project so as to facilitate replication or testing in other settings.

(4) The extent to which the proposed project plan includes sufficient resources to carry out the project evaluation effectively.

Note: We encourage eligible applicants to review the following technical assistance resources on evaluation:

(1) What Works Clearinghouse Procedures and Standards Handbook and
(2) IES/NCEE Technical Methods papers

Strengths:

The project proposes an experimental evaluation study that includes random assignment of schools to treatment condition (p.29). Because of the ability of this design to control for major threats to internal and external validity, evaluators consider is as the "gold standard" for program evaluations. The third-party evaluator is well qualified to implement this evaluation design. Additionally, the evaluator will operate completely independently of the project partners and will have responsibility for the collection of all measures of student outcomes, for all analyses, and for interpretations of findings. This reduces a potential source of bias in the evaluation results (p. 29, 37).

The project proposes to convert student achievement scores to z-scores (p. 32). This provides a common metric to allow for data to be combined and analyzed across different state assessment systems. The project also proposes to administer the Stanford Diagnostic Mathematics Test (SDMT) or a similar test at the end of grade 8 and possibly at the end of grade 7 (p. 32). This is an important additional measure since due to the forthcoming No Child Left Behind (NCLB) waiver process, the NCLB re-authorization, and the implementation of the Common Core Assessments, there is a strong probability that consistent state assessment scores will not be available over the five-year project period. The SDMT scores will also allow for additional analyses with combined data across all states.

The evaluation study design includes plans to assess treatment fidelity which is an important factor in a solid evaluation study (p. 34). Without such information when the outcomes do not show a positive treatment effect, it is not possible to determine whether or not that lack of expected results is because of an ineffective innovation or due to the innovation not being implemented as it was designed.

To collect information on the implementation experience, researchers from the evaluator will visit schools to conduct interviews of STAD-math staff, administrators and teachers. They will also administer survey and will use data from School Achievement Snapshots. These Snapshots are existing rubrics that project coaches use during regular site visits to rate each school on the extent to which key structures and instructional processes have been implemented. As an additional measure of implementation the evaluator plans to utilize teacher instructional logs that have been shown to differentiate between instruction in treatment schools and in control schools. The reports of this information can be used to periodically examine whether the project implementation is on schedule and, if not, corrective action can be implemented (pp. 34-36).

A proposed restricted use file that will be made available to allow other researchers to conduct further analyses to independently verify the project findings is an important component of the services that the evaluator will provide (p.38). Researchers may also use this file to conduct analyses with the potential to identify individual project components that make the greatest contributions to increased student learning.

At approximately 15 % of the total project costs, the evaluation budget appears adequate to support the comprehensive evaluation study that is proposed for a project serving about 4000 students with another 4000 in the control schools (p. 31).

Weaknesses:

The project proposes to recruit a total of 40 Title I middle schools that have been designated as either in corrective action or restructuring (p.30). Restricting recruitment to schools that have been designated as either in corrective action or restructuring will limit the generalizability of the findings, especially with regard to effects for rural schools. Rural schools more frequently have subgroup sizes that fall below the minimum subgroup size to count for AYP determination and, as a result, will likely be underrepresented or absent in the evaluation study. This may negatively impact the project's plans to disseminate the program to isolated rural schools (p. 17).

The project proposes to administer the Stanford Diagnostic Mathematics Test (SDMT) or a similar test at the end of grade 8 and possibly at the end of grade 7 (p. 32). While this can be an important additional measure, the application provides no information about the minimum technical requirements that will be used if an "other test" is to be selected. Absent this information the quality of any additional analyses that utilize this data is unclear.

The proposal does not address how the estimate of 200 students per grade (p.31) in each of the middle schools in the evaluation sample was determined. It seems unlikely that the rural schools as defined in the Small Rural School Achievement program or the Rural and Low-Income School program will reach this size. Thus, the size of the projected evaluation study sample size and the resulting calculations of power and Minimum Detectable Effect Size (MDES) are questionable.

Reader's Score: 18

Selection Criteria - Quality of the Management Plan and Personnel

1. **The Secretary considers the quality of the management plan and personnel for the proposed project. In determining the quality of the management plan and personnel 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, as well as tasks related to the sustainability and scalability of the proposed project.

   (2) The qualifications, including relevant training and experience, of the project director and key project personnel, especially in managing large, complex, and rapidly growing projects.

   (3) The eligible 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, regional, or State level working directly, or through partners, either during or following the end of the grant period.

   Strengths:

   N/A-Scored by another reviewer.

   Weaknesses:

Reader's Score: 0

Priority Questions

Competitive Preference Priority - Competitive Preference Priority 6

1. **Competitive Preference Priority 6 - Innovations for Improving Early Learning Outcomes (zero or one point)**

We give competitive preference to applications for projects that would implement innovative practices, strategies, or programs that are designed to improve educational outcomes for high-need students who are young children (birth through 3rd grade) by enhancing the quality of early learning programs. To meet this priority, applications must focus on

(a) improving young children's school readiness (including social, emotional, and cognitive readiness) so that children are prepared for success in core academic subjects (as defined in section 9101(11) of the ESEA);

(b) improving developmental milestones and standards and aligning them with appropriate outcome measures; and

(c) improving alignment, collaboration, and transitions between early learning programs that serve children from birth to age three, in preschools, and in kindergarten through third grade.

Strengths:

Weaknesses:

Reader's Score:

Competitive Preference Priority - Competitive Preference Priority 7

1. **Competitive Preference Priority 7 - Innovations that Support College Access and Success (zero or one point)**

   We give competitive preference to applications for projects that would implement innovative practices, strategies, or programs that are designed to enable kindergarten through grade 12 (K-12)students, particularly high school students, to successfully prepare for, enter, and graduate from a two- or four-year college. To meet this priority, applications must include practices, strategies, or programs for K-12 students that

   (a) address student's preparedness and expectations related to college;

   (b) help students understand issues of college affordability and the financial aid and college application processes; and

   (c) provide support to students from peers and knowledgeable adults.

Strengths:

Weaknesses:

Reader's Score:

Competitive Preference Priority - Competitive Preference Priority 8

1. **Competitive Preference Priority 8 - Innovations to Address the Unique Learning Needs of Students with Disabilities and Limited English Proficient Students (zero or one point)**

   We give competitive preference to applications for projects that would implement innovative practices, strategies, or programs that are designed to address the unique learning needs of students with disabilities, including those who are assessed based on alternate academic achievement standards, or the linguistic and academic needs of limited English proficient students. To meet this priority, applications must provide for the implementation of particular practices, strategies, or programs that are designed to improve academic outcomes, close achievement gaps, and increase college- and career-readiness, including increasing high school graduation rates (as defined in this notice), for students with disabilities or limited English proficient students.

   Strengths:

   Weaknesses:

Reader's Score:

Competitive Preference Priority - Competitive Preference Priority 9

1. **Competitive Preference Priority 9 - Improving Productivity (zero or one point)**

   We give competitive preference to applications for projects that are designed to significantly increase efficiency in the use of time, staff, money, or other resources while improving student learning or other educational outcomes (i.e., outcome per unit of resource). Such projects may include innovative and sustainable uses of technology, modification of school schedules and teacher compensation systems, use of open educational resources (as defined in this notice), or other strategies.

   Strengths:

   Weaknesses:

Reader's Score:

Competitive Preference Priority - Competitive Preference Priority 10

1. **Competitive Preference Priority 10 - Technology (zero or one point)**

   We give competitive preference to applications for projects that are designed to improve student achievement or teacher effectiveness through the use of high-quality digital tools or materials, which may include preparing teachers to use the technology to improve instruction, as well as developing, implementing, or evaluating digital tools or materials.

   Strengths:

Weaknesses:

Reader's Score:

Status: Submitted
Last Updated: 9/12/11 12:00 AM

Status: Submitted
Last Updated: 9/9/11 12:00 AM

Technical Review Coversheet

Applicant: Old Dominion University Research Foundation (U411A110004)
Reader #5: **********

		Points Possible	Points Scored
Questions			
Summary Statement			
Summary Statement			
1. Summary Statement		0	
	Sub Total	0	
Selection Criteria			
Need for Project			
1. Need for Project		30	0
Quality of the Project Design			
1. Project Design		30	0
Quality of the Project Evaluation			
1. Project Evaluation		20	18
Quality of the Management Plan and Personnel			
1. Quality of the Management		20	0
	Sub Total	100	18
Priority Questions			
Competitive Preference Priority			
Competitive Preference Priority 6			
1. Competitive Preference 6		1	
Competitive Preference Priority 7			
1. Competitive Preference 7		1	
	Sub Total	2	
Competitive Preference Priority			
Competitive Preference Priority 8			
1. Competitive Preference 8		1	
	Sub Total	1	
Competitive Preference Priority			
Competitive Preference Priority 9			
1. Competitive Preference 9		1	
Competitive Preference Priority 10			
1. Competitive Preference 10		1	
	Sub Total	2	

Total	105	18

Technical Review Form

Panel #1 - 84.411A Panel - 1: 84.411A

Reader #5: **********

Applicant: Old Dominion University Research Foundation (U411A110004)

Questions

Summary Statement - Summary Statement

1. **Summary Statement (Optional)**

   General:

Reader's Score:

Selection Criteria - Need for Project

1. **The Secretary considers the need for the project. In determining the need for the project, the Secretary considers the following factors:**

   (1) The magnitude of the need for the services to be provided or the activities to be carried out by the proposed project.

   (2) The extent to which the proposed project represents an exceptional approach to the priority or priorities established for the competition.

   (3) The importance and magnitude of the effect expected to be obtained by the proposed project, including the extent to which the project will substantially and measurably improve student achievement or student growth, close achievement gaps, decrease dropout rates, increase high school graduation rates, or increase college enrollment and completion rates. The evidence in support of the importance and magnitude of the effect would be the research-based evidence provided by the eligible applicant to support the proposed project.

   Note Linking Magnitude of Effect to Presented Evidence: The Secretary notes that the extent to which the proposed project is consistent with the research evidence provided by the eligible applicant to support the proposed project is relevant to addressing the third factor of Selection Criterion A and, therefore, will be considered by the Secretary in evaluating the importance and/or magnitude of the impact expected to be obtained by the proposed project.

   Strengths:

   N/A-Scored by another reviewer.

   Weaknesses:

   N/A-Scored by another reviewer.

Reader's Score: **0**

Selection Criteria - Quality of the Project Design

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

   (1)The extent to which the proposed project has a clear set of goals and an explicit strategy, with actions that are

   a. Aligned with the priorities the eligible applicant is seeking to meet, and

   b. Expected to result in achieving the goals, objectives, and outcomes of the proposed project.

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

   (3) The extent to which the services to be provided by the proposed project reflect up-to-date knowledge from research and effective practice.

   (4) The eligible applicant's estimate of the cost of the proposed project, which includes the start up and operating costs per student per year (including indirect costs) for reaching the total number of students proposed to be served by the project. The eligible applicant must include an estimate of the costs for the eligible applicant or others (including other partners) to reach 100,000, 500,000, and 1,000,000 students.

   Note: The Secretary considers cost estimates both
   (a) to assess the reasonableness of the costs relative to the objectives, design, and potential significance for the total number of students to be served by the proposed project, which is determined by the eligible applicant, and

   (b) to understand the possible costs for the eligible applicant or others (including other partners) to reach the scaling targets of 100,000, 500,000, and 1,000,000 students for Scale-up grants. An eligible applicant is free to propose how many students it will serve under its project, and is expected to reach that number of students by the end of the grant period. The scaling targets, in contrast, are theoretical and allow peer reviewers to assess the cost-effectiveness generally of proposed projects, particularly in cases where initial investment may be required to support projects that operate at reduced cost in the future, whether implemented by the eligible applicant or any other entity. Grantees are not required to reach these numbers during the grant period.

   (5) The potential and planning for the incorporation of project purposes, activities, or benefits into the ongoing work of the eligible applicant and any other partners at the end of the Scale-up grant.

Strengths:

N/A-Scored by another reviewer.

Weaknesses:

N/A-Scored by another reviewer.

Reader's Score: 0

Selection Criteria - Quality of the Project Evaluation

1. **The Secretary considers the quality of the project evaluation. 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 include a well designed experimental study or, if a well-designed experimental study of the project is not possible, the extent to which the methods of evaluation will include a well-designed quasi-experimental study.

(2) The extent to which the methods of evaluation will provide high-quality implementation data and performance feedback, and permit periodic assessment of progress toward achieving intended outcomes.

(3) The extent to which the evaluation will provide sufficient information about the key elements and approach of the project so as to facilitate replication or testing in other settings.

(4) The extent to which the proposed project plan includes sufficient resources to carry out the project evaluation effectively.

Note: We encourage eligible applicants to review the following technical assistance resources on evaluation:

(1) What Works Clearinghouse Procedures and Standards Handbook and
(2) IES/NCEE Technical Methods papers

Strengths:

The applicant proposes an external evaluation that uses a well designed cluster randomized control trial (RCT) experimental study, with random assignment of schools to treatment and control conditions conducted by MDRC, the independent evaluator (p. 29). MDRC ensures the objectivity of the evaluation by collecting, analyzing, and interpreting all data independently of the program staff (p. 29). The evaluation design is strengthened by MDRC's intention to follow students for three-years; this provides valuable information on the longitudinal effects of the intervention (p. 30). The design wisely anticipates and accommodates student mobility issues (p. 31).

The confirmatory and exploratory research questions are well-stated, and addressing these questions is likely to provide important information on overall program impact, subgroup impact, non-cognitive outcomes, dosage, and program implementation (p. 30-31). The applicant carefully identifies research questions to explore project impact and implementation (p. 31). The procedures for site recruitment are feasible and likely to be successful in obtaining adequate samples for the RCT (p. 31).

The evaluation includes both student and school-wide state math assessments as baseline and end of first and second year measures. The evaluation may include the Stanford Diagnostic Math Test (SDMT) as a third year measure. The SDMT has strong psychometrics and should offer an accurate assessment of longitudinal math achievement (p. 32). The applicant recognizes that state assessments are not comparable across states and accommodates this via the use of z scores (p. 32).

The evaluation includes a strong plan for collecting high-quality implementation data, performance feedback that will allow for periodic assessment of progress toward achieving intended outcomes; the five key implementation topics explicitly describe how implementation will be studied (p. 34). Researchers will visit both program and control schools to conduct structured interviews and gather teacher survey data (pp. 34-36). Evaluators will analyze rubrics from program schools to assess fidelity of implementation (e20). Differences between control and intervention schools on improvement efforts will be assessed via school administrator interviews (p. 36). The teacher instructional log will gather intervention and control school data on types of instruction implemented; the quantitative instrument has been used successfully in previous studies (p. 36).

The study will provide sufficient information to facilitate replication or testing in other settings because it is being conducted in diverse contents under conditions similar to the scale-up efforts (p. 36). The evaluator provides updates on program implementation progress yearly (p. 36). The evaluator collects data on users' perceptions of the feasibility, usability, effectiveness, and efficiency of the technology-facilitated scale up supports (e21).

The proposed evaluator has extensive experience in conducting effective project evaluations of this magnitude (p. 37) and the budget of $3.9 million provides sufficient resources to carry out the evaluation as designed (p. 37).

Weaknesses:

The applicant does not commit to administering the SDMT, and mentions "a similar test" (p. 32). There is no assurance that the similar test would have equal or better psychometrics as the SDMT; it would have been a stronger design if the applicant committed to administering the SDMT or identified the possible alternative assessment(s). The applicant refers to the possibility of additional special evaluation testing (p. 32), but does not specify what this would be or for what purpose.

The scale up numbers proposed in the application (p. 16) do not add up to the total of 185 schools claimed. The power analysis is based on 200 students per grade per school (p. 33), but the rural schools may not have this many students per grade, so the power analysis calculations may not be accurate or the effectiveness of the intervention for rural schools may be underestimated.

Reader's Score: 18

Selection Criteria - Quality of the Management Plan and Personnel

1. **The Secretary considers the quality of the management plan and personnel for the proposed project. In determining the quality of the management plan and personnel 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, as well as tasks related to the sustainability and scalability of the proposed project.

   (2) The qualifications, including relevant training and experience, of the project director and key project personnel, especially in managing large, complex, and rapidly growing projects.

   (3) The eligible 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, regional, or State level working directly, or through partners, either during or following the end of the grant period.

   Strengths:

   N/A-Scored by another reviewer.

   Weaknesses:

   N/A-Scored by another reviewer.

Reader's Score: 0

Priority Questions

Competitive Preference Priority - Competitive Preference Priority 6

1. **Competitive Preference Priority 6 - Innovations for Improving Early Learning Outcomes (zero or one point)**

   We give competitive preference to applications for projects that would implement innovative practices, strategies, or programs that are designed to improve educational outcomes for high-need students who are young children (birth through 3rd grade) by enhancing the quality of early learning programs. To meet this priority, applications must focus on

   (a) improving young children's school readiness (including social, emotional, and cognitive readiness) so that children are prepared for success in core academic subjects (as defined in section 9101(11) of the ESEA);

(b) improving developmental milestones and standards and aligning them with appropriate outcome measures; and

(c) improving alignment, collaboration, and transitions between early learning programs that serve children from birth to age three, in preschools, and in kindergarten through third grade.

Strengths:

Weaknesses:

Reader's Score:

Competitive Preference Priority - Competitive Preference Priority 7

1. **Competitive Preference Priority 7 - Innovations that Support College Access and Success (zero or one point)**

   We give competitive preference to applications for projects that would implement innovative practices, strategies, or programs that are designed to enable kindergarten through grade 12 (K-12)students, particularly high school students, to successfully prepare for, enter, and graduate from a two- or four-year college. To meet this priority, applications must include practices, strategies, or programs for K-12 students that

   (a) address student's preparedness and expectations related to college;

   (b) help students understand issues of college affordability and the financial aid and college application processes; and

   (c) provide support to students from peers and knowledgeable adults.

Strengths:

Weaknesses:

Reader's Score:

Competitive Preference Priority - Competitive Preference Priority 8

1. **Competitive Preference Priority 8 - Innovations to Address the Unique Learning Needs of Students with Disabilities and Limited English Proficient Students (zero or one point)**

   We give competitive preference to applications for projects that would implement innovative practices, strategies, or programs that are designed to address the unique learning needs of students with disabilities, including those who are assessed based on alternate academic achievement standards, or the linguistic and academic needs of limited English proficient students. To meet this priority, applications must provide for the implementation of particular practices, strategies, or programs that are designed to improve academic outcomes, close achievement gaps, and increase college- and career-readiness, including increasing high school graduation rates (as defined in this notice), for students

with disabilities or limited English proficient students.

Strengths:

Weaknesses:

Reader's Score:

Competitive Preference Priority - Competitive Preference Priority 9

1. **Competitive Preference Priority 9 - Improving Productivity (zero or one point)**

   We give competitive preference to applications for projects that are designed to significantly increase efficiency in the use of time, staff, money, or other resources while improving student learning or other educational outcomes (i.e., outcome per unit of resource). Such projects may include innovative and sustainable uses of technology, modification of school schedules and teacher compensation systems, use of open educational resources (as defined in this notice), or other strategies.

   Strengths:

   Weaknesses:

Reader's Score:

Competitive Preference Priority - Competitive Preference Priority 10

1. **Competitive Preference Priority 10 - Technology (zero or one point)**

   We give competitive preference to applications for projects that are designed to improve student achievement or teacher effectiveness through the use of high-quality digital tools or materials, which may include preparing teachers to use the technology to improve instruction, as well as developing, implementing, or evaluating digital tools or materials.

   Strengths:

   Weaknesses:

Reader's Score:

Status: Submitted
Last Updated: 9/9/11 12:00 AM

Status: Submitted
Last Updated: 9/14/11 12:00 AM

Technical Review Coversheet

Applicant: Old Dominion University Research Foundation (U411A110004)
Reader #1: **********

		Points Possible	Points Scored
Questions			
Summary Statement			
Summary Statement			
1. Summary Statement		0	0
	Sub Total	0	0
Selection Criteria			
Need for Project			
1. Need for Project		30	27
Quality of the Project Design			
1. Project Design		30	25
Quality of the Project Evaluation			
1. Project Evaluation		20	0
Quality of the Management Plan and Personnel			
1. Quality of the Management		20	17
	Sub Total	100	69
Priority Questions			
Competitive Preference Priority			
Competitive Preference Priority 6			
1. Competitive Preference 6		1	0
Competitive Preference Priority 7			
1. Competitive Preference 7		1	0
	Sub Total	2	0
Competitive Preference Priority			
Competitive Preference Priority 8			
1. Competitive Preference 8		1	1
	Sub Total	1	1
Competitive Preference Priority			
Competitive Preference Priority 9			
1. Competitive Preference 9		1	0
Competitive Preference Priority 10			
1. Competitive Preference 10		1	1
	Sub Total	2	1

Total	105	71

Technical Review Form

Panel #1 - 84.411A Panel - 1: 84.411A

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

Applicant: Old Dominion University Research Foundation (U411A110004)

Questions

Summary Statement - Summary Statement

1. **Summary Statement (Optional)**

   General:

Reader's Score: **0**

Selection Criteria - Need for Project

1. **The Secretary considers the need for the project. In determining the need for the project, the Secretary considers the following factors:**

   (1) The magnitude of the need for the services to be provided or the activities to be carried out by the proposed project.

   (2) The extent to which the proposed project represents an exceptional approach to the priority or priorities established for the competition.

   (3) The importance and magnitude of the effect expected to be obtained by the proposed project, including the extent to which the project will substantially and measurably improve student achievement or student growth, close achievement gaps, decrease dropout rates, increase high school graduation rates, or increase college enrollment and completion rates. The evidence in support of the importance and magnitude of the effect would be the research-based evidence provided by the eligible applicant to support the proposed project.

   Note Linking Magnitude of Effect to Presented Evidence: The Secretary notes that the extent to which the proposed project is consistent with the research evidence provided by the eligible applicant to support the proposed project is relevant to addressing the third factor of Selection Criterion A and, therefore, will be considered by the Secretary in evaluating the importance and/or magnitude of the impact expected to be obtained by the proposed project.

   Strengths:

   This application includes proven cooperative learning and English as a Second Language (ESL) strategies that are designed to help students with disabilities succeed in math courses in regular secondary classes. this student population does not generally succeed in math courses in secondary school. There is a proven need for services for students who do not traditionally succeed in math courses and these strategies have proven to be successful for this student population.

   The project proposes to work in partnership with high need schools who serve students who live in poverty, students with limited English proficiency, and students with disabilities. This shows a great magnitude of need for this project since the population of these sub groups is high in the proposed school districts. The application also demonstrates a need for a project that serves middle school students. Mathematical understandings and attitudes obtained in middle school are prerequisite for success in Science, Technology,

Engineering and Math (STEM) courses in high school and college as stated on page 3. Further, the application includes statistics that prove that the fastest growing occupations in the next decade are projected to be in the STEM fields, pg. 4. This application thoroughly covers many aspects of need not only for high school achievement but also for further career opportunities since in order to be successful in many STEM career fields, math achievement is mandatory.

#2 This application represents an exceptional approach to STEM education by taking into account the working relationships that are necessary to succeed in the workplace. This includes working collaboratively to solve problems, generate ideas and innovate. Students need practice on these skills, and this application provides such opportunities. pg. 5 In addition, on page 5, this application states that there is a need for a unique approach to STEM training that is not "business as usual" because the components of STAD-Math offers an exceptional approach that not only address the math needs of middle school students, but also under-served populations.

#3 This application presents evidence that women, minorities, and people with disabilities represent 2/3 or the American workforce, yet they are only a small fraction of those working in STEM occupations. pg. 4. Therefore this application seeks to provide teachers with professional development opportunities to instruct teachers on how to create lessons that will engage all learners, even those from groups that suffer from an achievement gap in STEM related courses. The proposed math program, STAD Math is grounded in research on cooperative learning which has been researched extensively and proven to be highly successful, especially with middle school students pg.5.

The effect sizes on page E91 are impressive because they are very large and this body of research adds evidence that the stated goals would be attainable because of past results.

Weaknesses:

The entire magnitude of need may not be met with some students who have a learning style that is not conducive to group work and they would not respond positively to the cooperative learning stategies that are part of STAD math and are outlined in this proposal. This success of this proposal is highly dependent upon cooperative learning strategies. There are no provisions in the model that is provided to accommodate for learning styles that do not respond to cooperative learning methods.

Reader's Score: 27

Selection Criteria - Quality of the Project Design

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

   (1)The extent to which the proposed project has a clear set of goals and an explicit strategy, with actions that are

   a. Aligned with the priorities the eligible applicant is seeking to meet, and

   b. Expected to result in achieving the goals, objectives, and outcomes of the proposed project.

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

(3) The extent to which the services to be provided by the proposed project reflect up-to-date knowledge from research and effective practice.

(4) The eligible applicant's estimate of the cost of the proposed project, which includes the start up and operating costs per student per year (including indirect costs) for reaching the total number of students proposed to be served by the project. The eligible applicant must include an estimate of the costs for the eligible applicant or others (including other partners) to reach 100,000, 500,000, and 1,000,000 students.

Note: The Secretary considers cost estimates both
(a) to assess the reasonableness of the costs relative to the objectives, design, and potential significance for the total number of students to be served by the proposed project, which is determined by the eligible applicant, and

(b) to understand the possible costs for the eligible applicant or others (including other partners) to reach the scaling targets of 100,000, 500,000, and 1,000,000 students for Scale-up grants. An eligible applicant is free to propose how many students it will serve under its project, and is expected to reach that number of students by the end of the grant period. The scaling targets, in contrast, are theoretical and allow peer reviewers to assess the cost-effectiveness generally of proposed projects, particularly in cases where initial investment may be required to support projects that operate at reduced cost in the future, whether implemented by the eligible applicant or any other entity. Grantees are not required to reach these numbers during the grant period.

(5) The potential and planning for the incorporation of project purposes, activities, or benefits into the ongoing work of the eligible applicant and any other partners at the end of the Scale-up grant.

Strengths:

The project is likely to achieve its intended goals because the Professional Learning Communities (PLC) will be established in each school, and online. Teachers will also record videos of their own teaching to be analyzed by the trained school coach and others participating in the online PLC which will provide immediate feed back on the strategies being used and will increase the likelihood that student achievement will be increased. Since the school coaches will periodically video tape their sessions of facilitation of the PLC meetings, these can be used by all others involved in the program and ensure that coaches are standardized in their coaching techniques. Pg. 20

This application seeks to scale up to 185 middle schools, reaching 135,000 students within five years.
This is a cost effective number of students to reach for the amount of money of $196.30 per student. This is combined with a 35% long-term reduction in scale up costs and makes it an even better value in light of that stated objective to improve student math achievement. Pg. 24.

The application presents research that is up-to-date, including studies from 2009 and 2010, that support the idea of school-based PLC's and online PLC's. PLC's are proved to increase teachers opportunities to participate in professional development both in and out of their school pg. 25. Peer based networking is also research based through the use of online PLC's and is validated by research from 2011. Several other studies mentioned on pages 26 and 27 are very current taking place from 2009-2010.

Current research in how children learn math proves that math misconceptions must be dealt with before correct understandings for the students can be achieved. The proposed project achieves this by ensuring that the STAD-Math experts will make presentations regarding common student misconceptions and other common teacher concerns.

The deployment of an online PLC will increase the likelihood of this project continuing once the grant period is complete because participants that are long distances away will still be able to work together and learn from one another. On Pg. 25, the application states that there will be sustained professional development that will allow teachers to direct their own levels and pathways of engagement. When teachers are allowed to identify areas for growth, they have the opportunity to fill these gaps with professional training and there is a strong likelihood that this training will have positive effects on student achievement results.

On Pg. 41, the application describes how STAD-Math can be continued after the grant funding expires as long as there is a local coach who can provide cost effective high-quality coaching. The coaches will already be

trained using grant funding and can be continued after project funding ends. If a local coach is not available once the grant funding has ended, the Success for All Foundation will help to locate one which will ensure that the coaching model will continue after the grant funding is completed.

Weaknesses:

The proposed project will require many hours of participating teachers' time. It will be difficult for teachers to manage the extra time requirement without taking time off from their classroom obligations.

The application did not provide sufficient detail on the costs to scale to 100,000 students etc., therefore the application provided limited information to support the claim that the cost per student is reasonable.

It is unclear how teachers will become involved and recruited. The application would be strong it if included a plan for gaining teacher support of the project and how this plan would be implemented at the school level. For instance, principals might be asked to recruit prospective teachers, or someone from the project management team might address the faculty and then ask for volunteers.

Reader's Score: 25

Selection Criteria - Quality of the Project Evaluation

1. **The Secretary considers the quality of the project evaluation. 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 include a well designed experimental study or, if a well-designed experimental study of the project is not possible, the extent to which the methods of evaluation will include a well-designed quasi-experimental study.

   (2) The extent to which the methods of evaluation will provide high-quality implementation data and performance feedback, and permit periodic assessment of progress toward achieving intended outcomes.

   (3) The extent to which the evaluation will provide sufficient information about the key elements and approach of the project so as to facilitate replication or testing in other settings.

   (4) The extent to which the proposed project plan includes sufficient resources to carry out the project evaluation effectively.

   Note: We encourage eligible applicants to review the following technical assistance resources on evaluation:

   (1) What Works Clearinghouse Procedures and Standards Handbook and
   (2) IES/NCEE Technical Methods papers

Strengths:

Scored by another reviewer

Weaknesses:

Reader's Score: 0

Selection Criteria - Quality of the Management Plan and Personnel

1. **The Secretary considers the quality of the management plan and personnel for the proposed project. In determining the quality of the management plan and personnel 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, as well as tasks related to the sustainability and scalability of the proposed project.

   (2) The qualifications, including relevant training and experience, of the project director and key project personnel, especially in managing large, complex, and rapidly growing projects.

   (3) The eligible 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, regional, or State level working directly, or through partners, either during or following the end of the grant period.

Strengths:

The application states that regularly scheduled, technology-facilitated meetings of the school based coaches and their Success for All Foundation trainers will be held approximately 6 times per year. This is an adequate number of meetings to provide guidance in a timely manner so that difficulties are not allowed to continue without being addressed. Extensive training is available to the school-based coaches and each will be assigned a regional STAD-Math facilitator to serve as a mentor. Each aspect of the training program has been thoroughly considered and includes a plan for implementation at the school and district levels and combines experts at Old Dominion University and Success For All Foundation. pg. 39. The proposed project is strong in that all stakeholders have a plan for implementation that it will ensure that all groups involved will be included in a purposeful manner.

This program will be managed jointly by Old Dominion University, Johns Hopkins University, and the Success for All Foundation. All three have demonstrated abilities in managing projects of this magnitude.
The leadership staff has experience managing large-scale grants and the school partners also have expertise in educational innovation, management, and reform. The Project Director has demonstrated experience in research and budgeting of multi-million dollar structures. In addition, he has won awards for strategic planning, school improvement and organizational efficiency in working with high-poverty schools. This demonstrates a depth of experience that will ensure the success of the management plan. The rest of the management team has impressive grant management, research, and school improvement credentials.

The capacity of the partners to bring the project to scale has been proven by the Old Dominion University Research Foundation which has a permanent staff that includes four PhD research scientists, Executive Director and adequate support staff. Over $60 million in research and development expenditures have been managed by this foundation. Old Dominion University has also been ranked among the top educational research and development institutions by the National Science Foundation and much of their research has focused around STEM education.

This proposed project has the capacity to bring to scale at the national, regional, and state level based on the qualifications of the project leadership team and the partnership that will be established between Old Dominion University and the Success for All Foundation. Both partner organizations have plans in place to continue the project once the funding period ends.

Weaknesses:

Roles and responsibilities for the position of manager as listed on Pgs. 42-47 are not fully developed and it is unclear what the roles and responsibilities of the managers will be given the lack of detail provided in the application. For instance, on Pg. 12, there is a detailed list of roles that will be operating at the school level, but the school administrative tasks are not clearly explained. This is a weakness because the school administration needs to be considered in the implementation of a project at the school level. Project personnel and their roles could be better developed by providing detail as to what the expectations of their roles in the grant will be.

Reader's Score: **17**

Priority Questions

Competitive Preference Priority - Competitive Preference Priority 6

1. **Competitive Preference Priority 6 - Innovations for Improving Early Learning Outcomes (zero or one point)**

   We give competitive preference to applications for projects that would implement innovative practices, strategies, or programs that are designed to improve educational outcomes for high-need students who are young children (birth through 3rd grade) by enhancing the quality of early learning programs. To meet this priority, applications must focus on

   (a) improving young children's school readiness (including social, emotional, and cognitive readiness) so that children are prepared for success in core academic subjects (as defined in section 9101(11) of the ESEA);

   (b) improving developmental milestones and standards and aligning them with appropriate outcome measures; and

   (c) improving alignment, collaboration, and transitions between early learning programs that serve children from birth to age three, in preschools, and in kindergarten through third grade.

   Strengths:

   Weaknesses:

   The applicant did not identify this competitive preference priority for the purposes of earning competitive preference points.

Reader's Score: **0**

Competitive Preference Priority - Competitive Preference Priority 7

1. **Competitive Preference Priority 7 - Innovations that Support College Access and Success (zero or one point)**

   We give competitive preference to applications for projects that would implement innovative practices, strategies, or programs that are designed to enable kindergarten through grade 12 (K-12)students, particularly high school students, to successfully prepare for, enter, and graduate from a two- or four-year college. To meet this priority, applications must include practices, strategies, or programs for K-12 students that

   (a) address student's preparedness and expectations related to college;

   (b) help students understand issues of college affordability and the financial aid and college application processes; and

   (c) provide support to students from peers and knowledgeable adults.

Strengths:

Weaknesses:

The applicant did not identify this competitive preference priority for the purposes of earning competitive preference points.

Reader's Score: 0

Competitive Preference Priority - Competitive Preference Priority 8

1. **Competitive Preference Priority 8 - Innovations to Address the Unique Learning Needs of Students with Disabilities and Limited English Proficient Students (zero or one point)**

   We give competitive preference to applications for projects that would implement innovative practices, strategies, or programs that are designed to address the unique learning needs of students with disabilities, including those who are assessed based on alternate academic achievement standards, or the linguistic and academic needs of limited English proficient students. To meet this priority, applications must provide for the implementation of particular practices, strategies, or programs that are designed to improve academic outcomes, close achievement gaps, and increase college- and career-readiness, including increasing high school graduation rates (as defined in this notice), for students with disabilities or limited English proficient students.

Strengths:

Using an online format, combined with school based coaching is an innovative approach to professional development for teachers working with students with disabilities and Individual Educational Plans. The application presented evidence that documents strategies to improve academic outcomes and close achievement gaps by using STAD-Math which is grounded in cooperative learning and research based strategies. School districts are targeted with high need students who have, in addition, shown positive results is using innovative practices with these high need student populations.

The proposed project will, as stated on Pg. 30, conduct sub group impact studies with students with disabilities.

Specifically, on page 33, English Language Learners (ELL) and Special Education Students will be subgroups constituting approximately half the sample of 100 students per grade, per school.

The proposed project will use proven strategies within in STAD math program to close the achievement gap that exists between students who have had high achievement in math and those who have struggled to understand even basic mathematics concepts leading to low achievement.

Weaknesses:

the application does not fully address actual procedures to focus on ELL and Special Education sub groups. Pg. 33.

Reader's Score: 1

Competitive Preference Priority - Competitive Preference Priority 9

1. **Competitive Preference Priority 9 - Improving Productivity (zero or one point)**

   We give competitive preference to applications for projects that are designed to significantly increase

efficiency in the use of time, staff, money, or other resources while improving student learning or other educational outcomes (i.e., outcome per unit of resource). Such projects may include innovative and sustainable uses of technology, modification of school schedules and teacher compensation systems, use of open educational resources (as defined in this notice), or other strategies.

Strengths:

Weaknesses:

The applicant did not identify this competitive preference priority for the purposes of earning competitive preference points.

Reader's Score: **0**

Competitive Preference Priority - Competitive Preference Priority 10

1. **Competitive Preference Priority 10 - Technology (zero or one point)**

We give competitive preference to applications for projects that are designed to improve student achievement or teacher effectiveness through the use of high-quality digital tools or materials, which may include preparing teachers to use the technology to improve instruction, as well as developing, implementing, or evaluating digital tools or materials.

Strengths:

The proposed project is highly reliant upon technology and uses these digital tools in a novel way to provide professional development to increase teacher effectiveness. Teachers will tape themselves teaching, reflect upon their own teaching, edit the videos, and then submit them to school-based coaches and regional coordinators to receive further input. These videos will also be available online once they are established to be good representations of "what works" in using STAD-Math.

Weaknesses:

Reader's Score: **1**

Status: Submitted

Last Updated: 9/14/11 12:00 AM

Status: Submitted
Last Updated: 9/19/11 12:00 AM

Technical Review Coversheet

Applicant: Old Dominion University Research Foundation (U411A110004)
Reader #2: **********

		Points Possible	Points Scored
Questions			
Summary Statement			
Summary Statement			
1. Summary Statement		0	
	Sub Total	0	
Selection Criteria			
Need for Project			
1. Need for Project		30	23
Quality of the Project Design			
1. Project Design		30	24
Quality of the Project Evaluation			
1. Project Evaluation		20	0
Quality of the Management Plan and Personnel			
1. Quality of the Management		20	19
	Sub Total	100	66
Priority Questions			
Competitive Preference Priority			
Competitive Preference Priority 6			
1. Competitive Preference 6		1	0
Competitive Preference Priority 7			
1. Competitive Preference 7		1	0
	Sub Total	2	0
Competitive Preference Priority			
Competitive Preference Priority 8			
1. Competitive Preference 8		1	0
	Sub Total	1	0
Competitive Preference Priority			
Competitive Preference Priority 9			
1. Competitive Preference 9		1	0
Competitive Preference Priority 10			
1. Competitive Preference 10		1	1
	Sub Total	2	1

Total	105	67

Technical Review Form

Panel #1 - 84.411A Panel - 1: 84.411A

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

Applicant: Old Dominion University Research Foundation (U411A110004)

Questions

Summary Statement - Summary Statement

1. **Summary Statement (Optional)**

   General:

Reader's Score:

Selection Criteria - Need for Project

1. **The Secretary considers the need for the project. In determining the need for the project, the Secretary considers the following factors:**

   (1) The magnitude of the need for the services to be provided or the activities to be carried out by the proposed project.

   (2) The extent to which the proposed project represents an exceptional approach to the priority or priorities established for the competition.

   (3) The importance and magnitude of the effect expected to be obtained by the proposed project, including the extent to which the project will substantially and measurably improve student achievement or student growth, close achievement gaps, decrease dropout rates, increase high school graduation rates, or increase college enrollment and completion rates. The evidence in support of the importance and magnitude of the effect would be the research-based evidence provided by the eligible applicant to support the proposed project.

   Note Linking Magnitude of Effect to Presented Evidence: The Secretary notes that the extent to which the proposed project is consistent with the research evidence provided by the eligible applicant to support the proposed project is relevant to addressing the third factor of Selection Criterion A and, therefore, will be considered by the Secretary in evaluating the importance and/or magnitude of the impact expected to be obtained by the proposed project.

   Strengths:

   The application includes plans to implement a cooperative learning model in mathematics instruction in eight high needs middle schools affecting 135,000 Title I students. Student demographic data is included that demonstrates the magnitude of the need of these students. The application also includes plans to implement professional learning communities and professional development needed to support the project.
   Research based evidence from four studies that meet the What Works Clearinghouse and best evidence standards are presented on pages e40 to e42 demonstrating the successful impact on student achievement of the Student Teams-Achievement Divisions-Math (STAD-Math) Program.
   The STAD-Math Program is grounded in research establishing an exceptional approach to the STEM priority as the program addresses the specific math learning needs and social skills development of middle school students with provisions for strong teacher support via professional learning communities and School Based Math Coaches.

Weaknesses:

The magnitude of the effect of how the STAD-Math Program will specifically improve student achievement for participating students is weakened as neither baseline student achievement data of the targeted at risk students nor baseline data on instructional strategies of the targeted teachers is provided in the application.

Reader's Score: 23

Selection Criteria - Quality of the Project Design

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

   (1)The extent to which the proposed project has a clear set of goals and an explicit strategy, with actions that are

   a. Aligned with the priorities the eligible applicant is seeking to meet, and

   b. Expected to result in achieving the goals, objectives, and outcomes of the proposed project.

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

   (3) The extent to which the services to be provided by the proposed project reflect up-to-date knowledge from research and effective practice.

   (4) The eligible applicant's estimate of the cost of the proposed project, which includes the start up and operating costs per student per year (including indirect costs) for reaching the total number of students proposed to be served by the project. The eligible applicant must include an estimate of the costs for the eligible applicant or others (including other partners) to reach 100,000, 500,000, and 1,000,000 students.

   Note: The Secretary considers cost estimates both
   (a) to assess the reasonableness of the costs relative to the objectives, design, and potential significance for the total number of students to be served by the proposed project, which is determined by the eligible applicant, and

   (b) to understand the possible costs for the eligible applicant or others (including other partners) to reach the scaling targets of 100,000, 500,000, and 1,000,000 students for Scale-up grants. An eligible applicant is free to propose how many students it will serve under its project, and is expected to reach that number of students by the end of the grant period. The scaling targets, in contrast, are theoretical and allow peer reviewers to assess the cost-effectiveness generally of proposed projects, particularly in cases where initial investment may be required to support projects that operate at reduced cost in the future, whether implemented by the eligible applicant or any other entity. Grantees are not required to reach these numbers during the grant period.

   (5) The potential and planning for the incorporation of project purposes, activities, or benefits into the ongoing work of the eligible applicant and any other partners at the end of the Scale-up grant.

Strengths:

The application includes a clear set of goals and activities to implement cooperative learning and professional learning communities which meet the STEM priority guidelines to improve student achievement in math. According to studies presented on pages e31 to e37, the project services are supported with research demonstrating up-to-date knowledge and effective practices for example, studies found cooperative learning to be an effective instructional delivery method for middle grade students and the STAD-Math Program was found to have stronger effects on mathematics achievement than either computer assisted instruction or curricular programs. Considering the estimate of the effect of the proposed project, the application provides a reasonable annual per pupil cost of $20.55 for 9 pilot middle schools in the first year and totaling $48.60 per pupil in 185 middle schools by the fifth year of the grant program.

Project activities are in place in the application for the potential and planning of ongoing incorporation of the STAD Math Program at the end of the Scale Up Grant, especially through the ongoing support of the in house professional learning communities for the teachers.

Weaknesses:

Individual school participation depends upon 75% of teacher support which may impede expected participation goals and results of the grant program. Provisions for teacher incentives and planning for recruiting teachers was not apparent.

Reader's Score: 24

Selection Criteria - Quality of the Project Evaluation

1. **The Secretary considers the quality of the project evaluation. 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 include a well designed experimental study or, if a well-designed experimental study of the project is not possible, the extent to which the methods of evaluation will include a well-designed quasi-experimental study.

   (2) The extent to which the methods of evaluation will provide high-quality implementation data and performance feedback, and permit periodic assessment of progress toward achieving intended outcomes.

   (3) The extent to which the evaluation will provide sufficient information about the key elements and approach of the project so as to facilitate replication or testing in other settings.

   (4) The extent to which the proposed project plan includes sufficient resources to carry out the project evaluation effectively.

   Note: We encourage eligible applicants to review the following technical assistance resources on evaluation:

   (1) What Works Clearinghouse Procedures and Standards Handbook and
   (2) IES/NCEE Technical Methods papers

Strengths:

N/A - Scored by another reviewer.

Weaknesses:

N/A - Scored by another reviewer.

Reader's Score: 0

Selection Criteria - Quality of the Management Plan and Personnel

1. **The Secretary considers the quality of the management plan and personnel for the proposed project. In determining the quality of the management plan and personnel 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, as well as tasks related to the sustainability and scalability of the proposed project.

(2) The qualifications, including relevant training and experience, of the project director and key project personnel, especially in managing large, complex, and rapidly growing projects.

(3) The eligible 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, regional, or State level working directly, or through partners, either during or following the end of the grant period.

Strengths:

The conceptual overview of the Technology-facilitated Professional Development Model, Figure 1, page e39, clearly delineates the roles of the in-house Professional Learning Community Team and also assists in specifying plans to scale up the program. The applicant's resumes demonstrate capacity to bring the STAD-Math Program and technology supported professional learning communities to scale. The Management Team members from Old Dominion University Research Foundation and from John Hopkins University are well qualified personnel with prior successful experience managing large, complex projects to scale, such as with Roots and Wings Middle School Program and Success for All. The application includes planning for how the project partners will assist key personnel in scaling up the proposed project on a national, regional, or State level.

Weaknesses:

The timelines listed on pages e211 to e221 do not list which members of the Management Team are responsible for the activities. A conceptual overview of the roles of the Management Team similar in format to the Technology-facilitated Professional Development Model on page e39 would be helpful to clearly define responsibilities of key project personnel.

Reader's Score: 19

Priority Questions

Competitive Preference Priority - Competitive Preference Priority 6

1. **Competitive Preference Priority 6 - Innovations for Improving Early Learning Outcomes (zero or one point)**

We give competitive preference to applications for projects that would implement innovative practices, strategies, or programs that are designed to improve educational outcomes for high-need students who are young children (birth through 3rd grade) by enhancing the quality of early learning programs. To meet this priority, applications must focus on

(a) improving young children's school readiness (including social, emotional, and cognitive readiness) so that children are prepared for success in core academic subjects (as defined in section 9101(11) of the ESEA);

(b) improving developmental milestones and standards and aligning them with appropriate outcome measures; and

(c) improving alignment, collaboration, and transitions between early learning programs that serve children from birth to age three, in preschools, and in kindergarten through third grade.

Strengths:

This applicant did not identify this competitive preference priority for the purposes of earning competitive preference points.

Weaknesses:

This applicant did not identify this competitive preference priority for the purposes of earning competitive preference points.

Reader's Score: **0**

Competitive Preference Priority - Competitive Preference Priority 7

1. **Competitive Preference Priority 7 - Innovations that Support College Access and Success (zero or one point)**

   We give competitive preference to applications for projects that would implement innovative practices, strategies, or programs that are designed to enable kindergarten through grade 12 (K-12)students, particularly high school students, to successfully prepare for, enter, and graduate from a two- or four-year college. To meet this priority, applications must include practices, strategies, or programs for K-12 students that

   (a) address student's preparedness and expectations related to college;

   (b) help students understand issues of college affordability and the financial aid and college application processes; and

   (c) provide support to students from peers and knowledgeable adults.

   Strengths:

   This applicant did not identify this competitive preference priority for the purposes of earning competitive preference points.

   Weaknesses:

   This applicant did not identify this competitive preference priority for the purposes of earning competitive preference points.

Reader's Score: **0**

Competitive Preference Priority - Competitive Preference Priority 8

1. **Competitive Preference Priority 8 - Innovations to Address the Unique Learning Needs of Students with Disabilities and Limited English Proficient Students (zero or one point)**

   We give competitive preference to applications for projects that would implement innovative practices, strategies, or programs that are designed to address the unique learning needs of students with disabilities, including those who are assessed based on alternate academic achievement standards, or the linguistic and academic needs of limited English proficient students. To meet this priority, applications must provide for the implementation of particular practices, strategies, or programs that are designed to improve academic outcomes, close achievement gaps, and increase college- and career-readiness, including increasing high school graduation rates (as defined in this notice), for students with disabilities or limited English proficient students.

   Strengths:

   Weaknesses:

   The STAD-Math Program does not include activities that specifically address the unique learning needs of students with disabilities or limited English proficient students.

Reader's Score: **0**

Competitive Preference Priority - Competitive Preference Priority 9

1. **Competitive Preference Priority 9 - Improving Productivity (zero or one point)**

   We give competitive preference to applications for projects that are designed to significantly increase efficiency in the use of time, staff, money, or other resources while improving student learning or other educational outcomes (i.e., outcome per unit of resource). Such projects may include innovative and sustainable uses of technology, modification of school schedules and teacher compensation systems, use of open educational resources (as defined in this notice), or other strategies.

   Strengths:

   This applicant did not identify this competitive preference priority for the purposes of earning competitive preference points.

   Weaknesses:

   This applicant did not identify this competitive preference priority for the purposes of earning competitive preference points.

Reader's Score: **0**

Competitive Preference Priority - Competitive Preference Priority 10

1. **Competitive Preference Priority 10 - Technology (zero or one point)**

   We give competitive preference to applications for projects that are designed to improve student achievement or teacher effectiveness through the use of high-quality digital tools or materials, which may include preparing teachers to use the technology to improve instruction, as well as developing, implementing, or evaluating digital tools or materials.

   Strengths:

   The application demonstrates the strong use of technology to improve teacher effectiveness through the use of high quality digital tools, utilizing video and on line communication to support Professional Learning Communities.

   Weaknesses:

   No weaknesses identified.

Reader's Score: **1**

Status: Submitted

Last Updated: 9/19/11 12:00 AM

Status: Submitted
Last Updated: 9/13/11 12:00 AM

Technical Review Coversheet

Applicant: Old Dominion University Research Foundation (U411A110004)
Reader #3: **********

		Points Possible	Points Scored
Questions			
Summary Statement			
Summary Statement			
1. Summary Statement		0	
	Sub Total	0	
Selection Criteria			
Need for Project			
1. Need for Project		30	24
Quality of the Project Design			
1. Project Design		30	24
Quality of the Project Evaluation			
1. Project Evaluation		20	0
Quality of the Management Plan and Personnel			
1. Quality of the Management		20	18
	Sub Total	100	66
Priority Questions			
Competitive Preference Priority			
Competitive Preference Priority 6			
1. Competitive Preference 6		1	0
Competitive Preference Priority 7			
1. Competitive Preference 7		1	0
	Sub Total	2	0
Competitive Preference Priority			
Competitive Preference Priority 8			
1. Competitive Preference 8		1	0
	Sub Total	1	0
Competitive Preference Priority			
Competitive Preference Priority 9			
1. Competitive Preference 9		1	0
Competitive Preference Priority 10			
1. Competitive Preference 10		1	1
	Sub Total	2	1

Total	105	67

Technical Review Form

Panel #1 - 84.411A Panel - 1: 84.411A

Reader #3: **********

Applicant: Old Dominion University Research Foundation (U411A110004)

Questions

Summary Statement - Summary Statement

1. **Summary Statement (Optional)**

   General:

Reader's Score:

Selection Criteria - Need for Project

1. **The Secretary considers the need for the project. In determining the need for the project, the Secretary considers the following factors:**

   (1) The magnitude of the need for the services to be provided or the activities to be carried out by the proposed project.

   (2) The extent to which the proposed project represents an exceptional approach to the priority or priorities established for the competition.

   (3) The importance and magnitude of the effect expected to be obtained by the proposed project, including the extent to which the project will substantially and measurably improve student achievement or student growth, close achievement gaps, decrease dropout rates, increase high school graduation rates, or increase college enrollment and completion rates. The evidence in support of the importance and magnitude of the effect would be the research-based evidence provided by the eligible applicant to support the proposed project.

   Note Linking Magnitude of Effect to Presented Evidence: The Secretary notes that the extent to which the proposed project is consistent with the research evidence provided by the eligible applicant to support the proposed project is relevant to addressing the third factor of Selection Criterion A and, therefore, will be considered by the Secretary in evaluating the importance and/or magnitude of the impact expected to be obtained by the proposed project.

   Strengths:

   The approach of the proposed project to meet Absolute Priority #2 is supported with numerous examples of improving student achievement in math with the evidence supplied on page e91. The cooperative learning model used by STAD-Math, that incorporates technology based professional development with help students and teachers improve needed skills.

   The proposed project is an exceptional approach to increasing math achievement of students as documented on page 5 with specifics of the STAD-Math program including student cooperative learning and individual accountability of students. This extensively researched teaching method and approaches to math will strengthen student math skills over a short period of time, allowing students to be better prepared for the next math level.

   The need of the proposed project is strongly addressed in the low math performance of students, particularly

at the middle school level, across the nation. (page e29)

Weaknesses:

Although the application included general statements about increasing student math achievement and the future association with the STEM workforce (starting on page e29), the application needs to better address how increased math achievement from the proposed project will play an integral part of the future of STEM workforce needs better addressed.

Reader's Score: 24

Selection Criteria - Quality of the Project Design

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

   (1)The extent to which the proposed project has a clear set of goals and an explicit strategy, with actions that are

   a. Aligned with the priorities the eligible applicant is seeking to meet, and

   b. Expected to result in achieving the goals, objectives, and outcomes of the proposed project.

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

   (3) The extent to which the services to be provided by the proposed project reflect up-to-date knowledge from research and effective practice.

   (4) The eligible applicant's estimate of the cost of the proposed project, which includes the start up and operating costs per student per year (including indirect costs) for reaching the total number of students proposed to be served by the project. The eligible applicant must include an estimate of the costs for the eligible applicant or others (including other partners) to reach 100,000, 500,000, and 1,000,000 students.

   Note: The Secretary considers cost estimates both
   (a) to assess the reasonableness of the costs relative to the objectives, design, and potential significance for the total number of students to be served by the proposed project, which is determined by the eligible applicant, and

   (b) to understand the possible costs for the eligible applicant or others (including other partners) to reach the scaling targets of 100,000, 500,000, and 1,000,000 students for Scale-up grants. An eligible applicant is free to propose how many students it will serve under its project, and is expected to reach that number of students by the end of the grant period. The scaling targets, in contrast, are theoretical and allow peer reviewers to assess the cost-effectiveness generally of proposed projects, particularly in cases where initial investment may be required to support projects that operate at reduced cost in the future, whether implemented by the eligible applicant or any other entity. Grantees are not required to reach these numbers during the grant period.

   (5) The potential and planning for the incorporation of project purposes, activities, or benefits into the ongoing work of the eligible applicant and any other partners at the end of the Scale-up grant.

Strengths:

The application's goals are well designed to support the needs of increasing student math achievement in middle school, especially with the use of the Professional Learning Communities (PLCs) and coaches for increasing teacher quality. Teachers and coaches will be able to work together to focus on improving teaching and student learning through multiple activities including but not limited to video-conferencing and on-line platforms. The five goals, as stated on pages 16 through 24 align with Absolute Priority 2 in multiple areas of

focus, especially (a) providing students with increased access to rigorous and engaging coursework in STEM though the STAD-Math program and (c) increasing the opportunities for high quality preparation of, or professional development, for teachers or other educators, of STEM subjects through PLC's and on-line platforms.

Cost per student at $196.30 (Page 24) is reasonable for the expected level of student achievement and closing the achievement gaps in all groups, including those that traditionally lag behind.

The proposed project reflects up-to-date knowledge because it will provide sustained professional development over time as opposed to one time PD (pg 25) and utilizes student centered cooperative learning to promote achievement for all students.

The potential to carry on what is learned throughout this grant can be used by teachers, coaches and partners for on-going work at the end of the grant as addressed on page 41. The expected achievement gains and continued growth of the network are addressed with further funding support from current schools, Title 1 and the Success for All Foundation after the proposed i3 funding.

Weaknesses:

[redacted]

The application provides theoretical cost per student for larger populations, but does not explain the cited reduction in costs by 65% on page 28.

The increase in expected teacher workload will need to be further addressed to ensure successful implementation of the project.

Reader's Score: 24

Selection Criteria - Quality of the Project Evaluation

1. **The Secretary considers the quality of the project evaluation. 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 include a well designed experimental study or, if a well-designed experimental study of the project is not possible, the extent to which the methods of evaluation will include a well-designed quasi-experimental study.

   (2) The extent to which the methods of evaluation will provide high-quality implementation data and performance feedback, and permit periodic assessment of progress toward achieving intended outcomes.

   (3) The extent to which the evaluation will provide sufficient information about the key elements and approach of the project so as to facilitate replication or testing in other settings.

   (4) The extent to which the proposed project plan includes sufficient resources to carry out the project evaluation effectively.

   Note: We encourage eligible applicants to review the following technical assistance resources on evaluation:

   (1) What Works Clearinghouse Procedures and Standards Handbook and
   (2) IES/NCEE Technical Methods papers

Strengths:

n/a - Scored by another reviewer.

Weaknesses:

Reader's Score: 0

Selection Criteria - Quality of the Management Plan and Personnel

1. **The Secretary considers the quality of the management plan and personnel for the proposed project. In determining the quality of the management plan and personnel 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, as well as tasks related to the sustainability and scalability of the proposed project.

   (2) The qualifications, including relevant training and experience, of the project director and key project personnel, especially in managing large, complex, and rapidly growing projects.

   (3) The eligible 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, regional, or State level working directly, or through partners, either during or following the end of the grant period.

Strengths:

The timeline and milestones for the proposed project are complete, with adequate descriptions, and seem reasonable to bring the project to scale.(Page 211) For each year of the proposed project, objectives are stated with activities listed to complete milestones during that time period. This detail, will help the partners to accomplish stated goals at specified times and within budget.

Overall qualifications, varied experiences and backgrounds of key personnel and partners are well suited for successful completion of this project. The proposed Project Director has previously managed large budgets and implemented large student and teacher improvement projects. The Success for All Foundation and The Center for Technology in Education partnership will also support this project to ensure valuable professional development and support for teachers and administrators in scaling up the proposed project.

The partners of this project, specifically the Success for All Foundation and The Center for Technology in Education have the capacity in personnel and resources to continue to scale up on a larger level. They will support this project with valuable professional development and support for teachers and administrators in scaling up the proposed project.

Weaknesses:

The responsibilities of key personnel may need better developed on pages 42 - 47. The proposed staff descriptions are detailed concerning past experience, but the descriptions of what they will be doing and how they will specifically support the grant are weak.

The long-term maintenance of online forums and other technical issues are not addressed but are both crucial to success of project.

Reader's Score: **18**

Priority Questions

Competitive Preference Priority - Competitive Preference Priority 6

1. **Competitive Preference Priority 6 - Innovations for Improving Early Learning Outcomes (zero or one point)**

   We give competitive preference to applications for projects that would implement innovative practices, strategies, or programs that are designed to improve educational outcomes for high-need students who are young children (birth through 3rd grade) by enhancing the quality of early learning programs. To meet this priority, applications must focus on

   (a) improving young children's school readiness (including social, emotional, and cognitive readiness) so that children are prepared for success in core academic subjects (as defined in section 9101(11) of the ESEA);

   (b) improving developmental milestones and standards and aligning them with appropriate outcome measures; and

   (c) improving alignment, collaboration, and transitions between early learning programs that serve children from birth to age three, in preschools, and in kindergarten through third grade.

   Strengths:

   The applicant did not identify this competitive preference priority for the purposes of earning competitive preference points.

   Weaknesses:

Reader's Score: **0**

Competitive Preference Priority - Competitive Preference Priority 7

1. **Competitive Preference Priority 7 - Innovations that Support College Access and Success (zero or one point)**

   We give competitive preference to applications for projects that would implement innovative practices, strategies, or programs that are designed to enable kindergarten through grade 12 (K-12)students, particularly high school students, to successfully prepare for, enter, and graduate from a two- or four-year college. To meet this priority, applications must include practices, strategies, or programs for K-12 students that

   (a) address student's preparedness and expectations related to college;

   (b) help students understand issues of college affordability and the financial aid and college application processes; and

   (c) provide support to students from peers and knowledgeable adults.

   Strengths:

   The applicant did not identify this competitive preference priority for the purposes of earning competitive preference points.

Weaknesses:

Reader's Score: 0

Competitive Preference Priority - Competitive Preference Priority 8

1. **Competitive Preference Priority 8 - Innovations to Address the Unique Learning Needs of Students with Disabilities and Limited English Proficient Students (zero or one point)**

   We give competitive preference to applications for projects that would implement innovative practices, strategies, or programs that are designed to address the unique learning needs of students with disabilities, including those who are assessed based on alternate academic achievement standards, or the linguistic and academic needs of limited English proficient students. To meet this priority, applications must provide for the implementation of particular practices, strategies, or programs that are designed to improve academic outcomes, close achievement gaps, and increase college- and career-readiness, including increasing high school graduation rates (as defined in this notice), for students with disabilities or limited English proficient students.

Strengths:

Weaknesses:

The unique needs and increased achievements of students with disabilities and limited English proficient students are not clearly addressed or evaluated in the application.

Reader's Score: 0

Competitive Preference Priority - Competitive Preference Priority 9

1. **Competitive Preference Priority 9 - Improving Productivity (zero or one point)**

   We give competitive preference to applications for projects that are designed to significantly increase efficiency in the use of time, staff, money, or other resources while improving student learning or other educational outcomes (i.e., outcome per unit of resource). Such projects may include innovative and sustainable uses of technology, modification of school schedules and teacher compensation systems, use of open educational resources (as defined in this notice), or other strategies.

Strengths:

The applicant did not identify this competitive preference priority for the purposes of earning competitive preference points.

Weaknesses:

Reader's Score: 0

Competitive Preference Priority - Competitive Preference Priority 10

1. **Competitive Preference Priority 10 - Technology (zero or one point)**

We give competitive preference to applications for projects that are designed to improve student achievement or teacher effectiveness through the use of high-quality digital tools or materials, which may include preparing teachers to use the technology to improve instruction, as well as developing, implementing, or evaluating digital tools or materials.

Strengths:

Technology is being used to increase the math achievement of students through use of high quality materials. Students will utilize the STAD-Math program and teachers will collaborate through the use of video-conferencing and online forums.

Weaknesses:

Reader's Score: **1**

Status: Submitted

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