

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

Status: Submitted

Last Updated: 08/09/2018 10:39 PM

## Technical Review Coversheet

**Applicant:** The Curators of the University of Missouri Special Trust (U411C180114)

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

	Points Possible	Points Scored
<b>Questions</b>		
<b>Selection Criteria</b>		
<b>Significance</b>		
1. Significance	30	30
<b>Quality of the Project Design and Management Plan</b>		
1. Project Design/Management	50	47
<b>Total</b>	80	77

# Technical Review Form

Panel #4 - EIR Early Phase Tier 1 (Content) - 4: 84.411C

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

Applicant: The Curators of the University of Missouri Special Trust (U411C180114)

## Questions

### Selection Criteria - Significance

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

- (1) The national significance of the proposed project.
- (2) The extent to which the proposed project involves the development or demonstration of promising new strategies that build on, or are alternatives to, existing strategies.
- (3) The extent to which the proposed project demonstrates a rationale (as defined in the NIA).
- (4) The extent to which the proposed project represents an exceptional approach to the priority or priorities established for the competition.

### Strengths:

1. The quality of evidence supporting the efficacy of the Prosocial and Active Learning (PAL) Classroom is compelling and demonstrates positive potential to impact high needs students using scientifically valid approaches of technology to solve problems, professional development that builds teacher competency, higher order thinking skills, and active learning climates using prosocial behavior infused teaching strategies. This project has substantial national significance.
2. Chart 1 PAL Classroom Logic Model clearly and strongly proposes the development of an existing strategy of teaching and learning. The culmination of hands on and site based technology professional development for teachers to ensure project efficacy by eMINTS National Center staff enhances the traditional adult learner professional development training model and services as a model for other proposals to replicate. This project models the extent to where quality and prescriptive professional development emphasis ought to be placed- on the staff of high needs students to meet the academic intended outcomes of a high needs students.
3. The project demonstrates a strong rationale in that PAL Classroom aligns substantially to Absolute priorities 1 and 2. This is demonstrated in the PAL Classroom's adoption of a Prosocial Behavior and Active Learning component in the form of Problem-Based Learning (PBL).
4. The focus on 5th graders because of their ability to think abstractly, problem solve and argue logically and the project's focus on changing the classroom rather than just individual "misbehaving" students demonstrates that this as an exceptional approach to meeting the project's priorities.

### Weaknesses:

There are no weaknesses.

Reader's Score: 30

### Selection Criteria - Quality of the Project Design and Management Plan

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

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

**(2) The 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.**

**(3) The extent to which performance feedback and continuous improvement are integral to the design of the proposed project.**

**(4) The mechanisms the applicant will use to broadly disseminate information on its project so as to support further development or replication.**

**Strengths:**

1. The PAL Classroom goals objectives and outcomes to be achieved are demonstrated and provide a nice overview of this approach to high needs students learning environment changes as shown in Table 1 page 11.
2. The adequate management plan coordinates activities between University of Missouri Faculty, eMINTS, American Institute of Research (AIR), PAL and schools to achieve the objectives that are proposed. The 5 year 10% match that Kansas City Audio Visual has provided, supports the adequacy of the project, and substantiates that others who are vested in successfully accomplishing the project's tasks, back the PAL Classroom project.
3. On page 19 of the application, the applicant demonstrates a thorough description of the Feedback and Continuous Improvement plan. The proposal to collaborate with Local Education Agencies LEAs, and teachers to design PD experiences and materials, collect data to inform project revisions, the monthly meetings with the management team for the first two years of the project before the external evaluators conduct a randomized controlled trial demonstrates that feedback and continuous improvement is an integral component of this project.
4. Broad dissemination to support further development and or replication is highly achievable using the proposed approach on pages 19 and 20. The website featuring the project's achievements, classroom video and PBL units are all easily accessible for external users to reference. The extensive network spans of eMINTS National Center site, Educator Effectiveness and the social media outreach connections are also adequate means of broadly disseminating project information. Those interested in replicating this project would have access to a number of credible resources that are easily attainable and user friendly.

**Weaknesses:**

1. The PAL Classroom goals objectives and outcomes to be achieved are demonstrated but fail provide numerical measures. Listing goals statements and objectives using quantifiable measures would strengthen this application.
2. The adequate management plan coordinates activities between University of Missouri Faculty, eMINTS, AIR, PAL and schools to achieve the objectives that are proposed. The milestones are not quantifiable thus causing it to lack in clarity around whether the milestones are clearly measurable. Quantifying the milestones would strengthen this application.

**Reader's Score: 47**

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## Technical Review Coversheet

**Applicant:** The Curators of the University of Missouri Special Trust (U411C180114)

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

	<b>Points Possible</b>	<b>Points Scored</b>
<b>Questions</b>		
<b>Selection Criteria</b>		
<b>Significance</b>		
1. Significance	30	28
<b>Quality of the Project Design and Management Plan</b>		
1. Project Design/Management	50	48
<b>Total</b>	80	76

# Technical Review Form

Panel #4 - EIR Early Phase Tier 1 (Content) - 4: 84.411C

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

Applicant: The Curators of the University of Missouri Special Trust (U411C180114)

## Questions

### Selection Criteria - Significance

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

- (1) The national significance of the proposed project.
- (2) The extent to which the proposed project involves the development or demonstration of promising new strategies that build on, or are alternatives to, existing strategies.
- (3) The extent to which the proposed project demonstrates a rationale (as defined in the NIA).
- (4) The extent to which the proposed project represents an exceptional approach to the priority or priorities established for the competition.

### Strengths:

(1) The applicant provides relevant research to support the national significance of the proposed Prosocial and Active Learning (PAL) Classrooms project. Researchers agree that technology-rich, problem-based learning promotes achievement; therefore, the applicant will incorporate each of these components into PAL classrooms in targeted high-needs schools (pp. 1- 4). Despite the advantages of technology-enhanced, problem-based lessons, teachers often resist using such lessons because too many students (2/3 of elementary students) lack the social skills (cooperation) that such lessons require (p. 2). Research shows that high-poverty, male, and ethnic minority students disproportionately experience harsh discipline. One root cause of this discipline gap is that often students want to behave well, but don't know how, and teachers don't know how to help them replace antisocial behavior with prosocial behavior (pp. 3-4). PAL Classrooms will help teachers learn strategies to promote prosocial behavior among high-need, rural students in a learning format that challenges students' social skills. Another disturbing fact is that students in impoverished rural districts are at-risk for low achievement; and students in free and reduced lunch programs consistently score lower across time in mathematics as evidenced by the most recent NAEP assessment, where only 40% and 38% of 4th graders were proficient in mathematics and science respectively (p. 4). PAL classrooms will promote students' mathematics and science achievement through improved instruction and positive learning climates.

(2) The applicant thoroughly describes how the proposed Prosocial and Active Learning (PAL) Classrooms project involves the demonstration of promising new strategies that build on to existing strategies. The goal of the PAL Classroom project is to increase student prosocial behavior in a technology-enhanced, problem-based learning (PBL) environment and support teachers through professional development (PD) to embrace rather than resist using PBL. The applicant plans to create a replicable model of PD to help teachers establish PAL Classrooms; improve teacher practices that increase student prosocial behavior as they implement PBL; increase student prosocial behavior; and increase student engagement and achievement. To achieve these goals, the applicant will build on eMINTs history of successful PD to promote PBL by providing teachers with 60+ hours of PD and 6 in-class coaching visits to create PAL Classrooms; and by adding research-based strategies for increasing students' prosocial behavior. The project targets 5th grade mathematics and science, serving about 120 teachers and 2,520 students with over 50% from high-poverty, rural Title I-eligible schools (pp. 4 -8).

(3) The applicant provides a basic logic model (p. 4) which demonstrates a rationale (as defined in the NIA) for the proposed Prosocial and Active Learning (PAL) Classrooms project. The logic model has key components including inputs (resources); outputs (classroom environment); activities (iterative design); short-term outputs (teacher and student); and

long-term outputs (student). In the narrative the applicant provides a detailed description of relevant research describing the strong correlation between prosocial students and higher achievement and engagement; how impoverished students who are prosocial have higher grades and test scores compared to their less-prosocial impoverished peers; and how teacher training to become more prosocial (use of praise and induction; form positive teacher-student relationships) can increase students' ability to work harmoniously with others which increases their sense of belonging at school (pp. 5 – 9).

(4) The applicant explains that PAL Classrooms represents an exceptional approach because unlike most social skills interventions which emphasize eliminating negative behavior rather than promoting prosocial behavior, PAL promotes prosocial behavior that tends to reduce negative behavior and increase student achievement. Secondly, PAL Classrooms are easily integrated into existing programs because there is no curriculum add-on; and PAL Classrooms help teachers use strategies during daily interactions with students within the regular academic curriculum. Thirdly, PAL focuses on math and science lessons rather than communication arts or social studies classes which are the focus of many social skills interventions (pp. 9 – 11). The PAL Classrooms approach is ambitious and its components have a strong research foundation.

**Weaknesses:**

(1) None noted

(2) None noted

(3) None noted

(4) The use of Problem-based learning and building students' prosocial behavior are common reform initiatives. More information is needed to describe how and why utilizing these strategies would be exceptional approaches for the specific target population. More specific information is needed to describe the connection between planned teacher professional development and student outcomes for the targeted population. It is unclear why utilizing math and science classrooms for PAL rather than language arts is an exceptional strategy.

**Reader's Score: 28**

**Selection Criteria - Quality of the Project Design and Management Plan**

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

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

**(2) The 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.**

**(3) The extent to which performance feedback and continuous improvement are integral to the design of the proposed project.**

**(4) The mechanisms the applicant will use to broadly disseminate information on its project so as to support further development or replication.**

**Strengths:**

(1) The applicant presents clearly specified goals and objectives to be achieved by the proposed Prosocial and Active Learning (PAL) Classrooms project. Some of the objectives include performance measures. The applicant identifies instruments such as surveys and coach's logs, that will be utilized as measures.

(2) The applicant provides an adequate management plan to achieve the objectives of the proposed Prosocial and Active Learning (PAL) Classrooms project. A management team of representatives from Gainesville R-V School District, eMINTS, the University of Missouri faculty, and the American Institutes of Research (AIR), will oversee project implementation, the iterative design process, and data collection (p. 16). The applicant provides resumes (Appendix B) which further describe the qualifications and experiences of key project personnel. The applicant provides a month-to-month timeline, organized by project phases (p. 17), as well as milestones (activities and responsible party) which provide a realistic framework for accomplishing project tasks (pp. 18 -19).

(3) The applicant describes how performance feedback and continuous improvement are integral to the design of the proposed Prosocial and Active Learning (PAL) Classrooms project. The management team will guide continuous feedback and improvement using an iterative design process. In the first half-year, the applicant will collaborate with teachers in partner LEAs to design professional development (PD) experiences and materials; followed by field testing the PD with Cohorts 1 and 2. Formative data including project records, teacher surveys, teacher and coach interviews, and classroom observations will be collected to inform project revision. The management team and all key personnel will meet monthly to evaluate data collected and determine needed revisions. In the final two years of the grant, external evaluators will conduct a randomized controlled trial of full implementation with 108 teachers from 36 schools. The treatment group (Cohort 3) will receive PAL Classrooms, whereas the wait-list control group (Cohort 4) will not receive PAL Classrooms until data collection is complete. The same formative data will be collected from Cohort 3 as from Cohorts 1 and 2 and will be reviewed monthly (p. 19).

(4) The applicant describes viable mechanisms to broadly disseminate information on its Prosocial and Active Learning (PAL) Classrooms project. To facilitate replication in other districts nationally, a project website will feature project achievements, classroom videos and problem-based learning (PBL) units. The website will be available to the public and will be linked to the eMINTS National Center site and the Network for Educator Effectiveness. Additional electronic dissemination mechanisms will include social media such as Twitter chats, Facebook posts, LinkedIn and eMINTS Google+. The College of Education communications office will disseminate project results through news releases and development of a promotional video, as well as direct contacts to state education agencies. Project data will be submitted to national professional and practitioner journals; regional and statewide publications; presentation to regional and national conferences (pp. 19 – 20).

**Weaknesses:**

(1) Some of the goals do not meet the required measurable criterion. For example, goal 1 states, “Develop a replicable PD model for teachers to create PAL classrooms” (p. 11). This goal does not include a quantitative or qualitative performance measures; therefore, the attainability cannot be determined. The narrative does not include clearly specified and measurable outcomes.

(2) None noted

(3) None noted

(4) None noted

**Reader's Score:** 48

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**Last Updated:** 08/13/2018 01:25 PM



Status: Submitted

Last Updated: 08/10/2018 12:30 AM

## Technical Review Coversheet

**Applicant:** The Curators of the University of Missouri Special Trust (U411C180114)

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

	Points Possible	Points Scored
<b>Questions</b>		
<b>Selection Criteria</b>		
<b>Significance</b>		
1. Significance	30	30
<b>Quality of the Project Design and Management Plan</b>		
1. Project Design/Management	50	50
<b>Total</b>	80	80

# Technical Review Form

Panel #4 - EIR Early Phase Tier 1 (Content) - 4: 84.411C

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

Applicant: The Curators of the University of Missouri Special Trust (U411C180114)

## Questions

### Selection Criteria - Significance

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

- (1) The national significance of the proposed project.
- (2) The extent to which the proposed project involves the development or demonstration of promising new strategies that build on, or are alternatives to, existing strategies.
- (3) The extent to which the proposed project demonstrates a rationale (as defined in the NIA).
- (4) The extent to which the proposed project represents an exceptional approach to the priority or priorities established for the competition.

### Strengths:

1. The proposed project generalized multiple subjects and grades but will target 5th grade mathematics and science to serve 120 teachers and 2,520 students over 50% from high poverty, rural Title I-eligible schools. Prosocial and Active Learning (PAL) classrooms are intended to focus on the need identified through the NAEP assessment that only 40% and 38% of 4th graders are proficient in mathematics and science and that the research shows a national emphasis on the STEM pipeline.
2. The proposed project involves the demonstration of three promising new strategies on page 7 that build on researched data to support that prosocial behavior has a documented significant increase in achievement among high need students.
3. The proposed project demonstrated a strong rationale for the information presented. The logic model on page 5 was supported by research that described building relationships that helped students to become "prosocial" and cited sources that provided examples of studies that raised student achievement.
4. The proposed project presented clear evidence to five exceptional approaches on pages 9 – 11 to the priority that would seek to change teacher behavior and the classroom context. The approach is unique and unstudied, however supported by strong research.

### Weaknesses:

No weakness found.

Reader's Score: 30

### Selection Criteria - Quality of the Project Design and Management Plan

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

- (1) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable.**
- (2) The 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.**
- (3) The extent to which performance feedback and continuous improvement are integral to the design of the proposed project.**
- (4) The mechanisms the applicant will use to broadly disseminate information on its project so as to support further development or replication.**

**Strengths:**

1. The applicant provides clearly specified goals, objectives, and outcomes for the proposed project. For example, the applicant provides a Table on page 11 that describes the Development and Iteration Phases that expand on the goals and objectives, and measurable outcomes. The applicant has four primary goals: to develop a replicable Professional Development (PD) Model for teachers to create PAL classrooms, to improve teacher practices that increase student prosocial behavior in the context of technology rich and problem-based learning, to increase student prosocial behavior, and to increase student academic achievement.
2. The applicant provides a comprehensive management plan to meet the proposed objectives, and includes defined responsibilities that demonstrate the project can accomplish the project tasks. For example, the applicant provides a description of roles and responsibilities for the key institution. The management team has experience leading and participating in large and small, quantitative and qualitative research-design projects that served over 15,000 students that led to a What Works Clearinghouse endorsement of "Strong Evidence of Effectiveness." In addition, the applicant provides job descriptions and resumes for key staff in Appendix B.
3. The applicant provides a plan for ensuring feedback and continuous improvement in the operation of the proposed project. For example, the applicant proposes to continuously improve the model through an iterative design process on page 19 that describes collaboration between teachers and Local Education Agencies (LEAs) to design, field test and collect data.
4. The applicant documents a diverse list of mechanisms to disseminate information for the further development or replication of proposed project. For example, the applicant indicates that a media hub and a link to Enhancing Missouri's Instructional Networked Teaching Strategies (eMINTS) National Center Site will assist in diverse communications efforts. In addition, news releases and promotional videos as well as submissions to journals will be published.

**Weaknesses:**

No weakness found.

**Reader's Score: 50**

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