

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

Status: Submitted

Last Updated: 09/22/2014 10:37 PM

## Technical Review Coversheet

Applicant: The University Corporation (U411C140007)

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

	Points Possible	Points Scored
<b>Questions</b>		
<b>Summary Statement</b>		
<b>Summary Statement</b>		
1. Summary Statement	0	
<b>Selection Criteria</b>		
<b>Significance</b>		
1. Significance	35	31
<b>Quality of Project Design</b>		
1. Project Design	30	27
<b>Quality of the Management Plan</b>		
1. Management Plan/Personnel	20	18
<b>Quality of the Project Evaluation</b>		
1. Project Evaluation	15	0
<b>Total</b>	100	76

# Technical Review Form

Panel #12 - 2014 Development Full Panels - 12: 84.411C

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

Applicant: The University Corporation (U411C140007)

## Questions

### Summary Statement - Summary Statement

#### 1. Summary Statement (Optional)

##### General:

Reader's Score:

### Selection Criteria - Significance

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

(1) The extent to which the proposed project addresses the absolute priority the applicant is seeking to meet.

(2) The extent to which the proposed project would implement a novel approach as compared with what has been previously attempted nationally.

(3) The potential contribution of the proposed project to the development and advancement of theory, knowledge, and practices in the field of study.

**Note:** In responding to this criterion, the Secretary encourages applicants to explain how the applicant's proposed project addresses the absolute priority and the subpart that it seeks to meet. Additionally, the Secretary asks that applicants explain how the proposed project is unique. Applicants should explain how their proposed projects fit into existing theory, knowledge, or practice, and how their proposed projects will serve as exemplars for new practices in the field.

##### Strengths:

The application proposes the Collaboration Resulting in Education Applying Technology Effectively (CREATE) project to develop a tablet-based app to support professional development of teachers in implementing Common Core State Standards in Mathematics (CCSSM). The applicant highlights an emphasis on pre-service and in-service learning opportunities for teachers. (p 1-2)

The applicant highlights the Responsive Teaching Cycle (RTC) that supports learning of student teachers and teacher mentors. The approach addresses the challenge of implementing CCSSM with the current teaching practices of pre-service and in-service teachers and the implementation of research based practices. RTC is collaborative and emphasizes teachers learn just like students do. (p 4-6)

The proposed tablet-based application supports teachers in designing and implementing lesson activities for CCSSM. The discovery-learning app is teacher controlled through the creation of lesson activities that convert paper-and-pencil to tablet-based app that focuses on relationships between mathematical concepts and real-world problems.

The applicant proposes that to align teacher practices with CCSSM use of guided discovery is required and is an established practice. The lesson activities and RTC process have been shown to create positive results in algebra

achievement gap for Hispanic pupils. Three outcomes are highlighted and the potential for scale is highly possible due to the applicant being one of the largest teacher preparation universities in California. (p 3-4, 7-8)

**Weaknesses:**

The applicant proposes creation of a tablet-based app but does not include information on other platforms in which the app may be developed for or applied to. With different operating systems for tablets, apps today are being design for multiple platforms with consistent functionality. Additional information on the platforms the app will be available for, or clearly state which specific platform the app would be designed for, would enhance this section of the application.

The application does not include information that distinguishes the proposed project as new or innovative. Apps for professional development are in existence and use. Additional information on how the app is distinguishable from others in use would enhance this section of the application.

**Reader's Score: 31**

**Selection Criteria - Quality of Project Design**

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

**(1) The clarity and coherence of the project goals, including the extent to which the proposed project articulates an explicit plan or actions to achieve its goals (e.g., a fully developed logic model of the proposed project).**

**(2) The clarity, completeness, and coherence of the project goals, and whether the application includes a description of project activities that constitute a complete plan for achieving those goals, including the identification of potential risks to project success and strategies to mitigate those risks.**

**Note: In responding to this criterion, the Secretary encourages applicants to address what activities the applicant will undertake in its proposed project, and how the applicant will ensure its project implementation is successful in achieving the project goals.**

**Strengths:**

The application includes the proposed project's major goal of improving student achievement in math through pre-service and in-service professional development that shifts teaching to align with CCSM using a tablet based app. (p 9) Measurable outcomes include improvement math performance on standardized tests, alignment of pedagogical practices, and RTC and app use beyond program. (p 10) A logic model is included in the application that shares inputs, activities, outputs, and outcomes for a three-phase project. (p 10)

The proposed project shares four (4) key project activities that will be implemented over the period of the grant. Programming the app, professional development on CCSSM and guided discovery, mentor teacher training, and on-going RTC and professional development. ( p 11-13)

The applicant shares risks such as inadequate support for mentor teachers and time to develop the app. Approaches to address the risks are included to help fidelity in implementation. The evaluation plan's indicators will be used throughout the project to support fidelity of proposed implementation. (p 13 - 14)

**Weaknesses:**

The application does not include information on technology risk, such as current development of similar technology, platform challenges, and maintenance/upgrades to the proposed project. There are apps in development that may address this need that may arrive before this app is developed. App use on different platforms and the need to maintain and support the app during and beyond development. Additional information on how the applicant will address the

technology risk will enhance this section of the applications.

The application does not include information on training on the use of app on different devices. Instruction for App use on different devices would enhance the professional development and provide greater support for teachers to have technology flexibility. Also, information on maintenance and support of the App would enhance this section as well.

**Reader's Score: 27**

### **Selection Criteria - Quality of the Management Plan**

**1. In determining the quality of the management plan and personnel for the proposed project, the Secretary considers the following factors:**

**(1) The extent to which the management plan articulates key responsibilities and well-defined objectives, including the timelines and milestones for completion of major project activities, the metrics that will be used to assess progress on an ongoing basis, and annual performance targets the applicant will use to monitor whether the project is achieving its goals.**

**(2) The extent of the demonstrated commitment of any key partners or evidence of broad support from stakeholders whose participation is critical to the project 's long-term success.**

**(3) The adequacy of procedures for ensuring feedback and continuous improvement in the operation of the proposed project.**

**(4) The extent to which the project director has experience managing projects of similar size and scope as the proposed project.**

**Note: In responding to this criterion, the Secretary encourages applicants to address how the project team will evaluate the success or challenges of the project and use that feedback to make improvements to the project, and the role of key partners and their impact on the long-term success of the project, and how the project director 's prior experiences have prepared them for implementing the proposed project of this size and scope successfully.**

#### **Strengths:**

The application includes defined timelines and milestones (P 14-16). It highlights operational aspects will be established in Year 1, treatment group in Year 2, control group in Year 3, and data analysis/reporting in Year 4. The timeline (Table 1) shares person responsible and deliverables as well. There will be bi-annual convening of treatment teachers to share best practices and engage in professional development. Progress will be assessed using processes and products indicators that will monitor teacher participation and the products of their participation in accordance with annual performance targets.

The applicant includes support letters from three school districts, one charter school, CSU schools, the Alliance for Regional Collaboration to Heighten Educational Success (ARCHE), Project GRAD, Learningtech.org, College Bridge, and the Intersegmental Coordinating Committee (ICC) of the California Education Roundtable (current i3 development grant recipient). (p a8, Appendix G) Members from each organization will serve on the proposed project's advisory panel.

In addition to convening the treatment teachers, the external evaluator will have a strong role in providing ongoing feedback for continuous improvement and will meet weekly in Year 1 to refine project implementation. Progress reports on fidelity of implementation and progress will be made available quarterly and annually to the Advisory Panel for review and feedback. (p 20)

The proposed project's Principal Investigator (PI) has extensive experience in managing both state and federal grants. The PI is in charge of an NSF grant and i3 STEM project. The Project Director is a for school district supervisor of project and a former teacher and principal. The PI and Project Director are the leaders of the team that will implement the proposed project. (p 19-20)

**Weaknesses:**

The application does not include information or feedback from teachers on the need/desire for the proposed project. The applicant proposes a technology that leverages an existing practice (RTC) as a tool to improve student achievement in math but does not include information on the teachers' role in development of the proposal or application.

**Reader's Score: 18**

**Selection Criteria - Quality of the Project Evaluation**

1. In determining the quality of the project evaluation to be conducted, the Secretary considers the following factors:

(1) The clarity and importance of the key questions to be addressed by the project evaluation, and the appropriateness of the methods for how each question will be addressed.

(2) The extent to which the evaluation plan includes a clear and credible analysis plan, including a proposed sample size and minimum detectable effect size that aligns with the expected project impact, and an analytic approach for addressing the research questions.

(3) The extent to which the evaluation plan clearly articulates the key components and outcomes of the project, as well as a measurable threshold for acceptable implementation.

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

**Note:** In responding to this criterion, applicants should describe the key evaluation questions and address how the proposed evaluation methodologies will allow the project to answer those questions. The Secretary encourages applicants to include questions about the effectiveness of the proposed project with the specific student populations being served with grant funds. Further, the Secretary encourages applicants to identify what implementation and performance data the evaluation will generate and how the evaluation will provide data during the grant period to help indicate whether the project is on track to meet its goals. Finally, applicants should also address whether sufficient resources, which may include the qualifications of the independent evaluator, are included in the project budget to carry out the evaluation effectively.

**Strengths:**

N/A: This criterion was evaluated by another reviewer.

**Weaknesses:**

N/A: This criterion was evaluated by another reviewer.

**Reader's Score: 0**

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**Status:** Submitted  
**Last Updated:** 09/22/2014 10:37 PM

Status: Submitted

Last Updated: 09/23/2014 01:56 PM

## Technical Review Coversheet

Applicant: The University Corporation (U411C140007)

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

	Points Possible	Points Scored
<b>Questions</b>		
<b>Summary Statement</b>		
<b>Summary Statement</b>		
1. Summary Statement	0	0
<b>Selection Criteria</b>		
<b>Significance</b>		
1. Significance	35	30
<b>Quality of Project Design</b>		
1. Project Design	30	27
<b>Quality of the Management Plan</b>		
1. Management Plan/Personnel	20	19
<b>Quality of the Project Evaluation</b>		
1. Project Evaluation	15	0
<b>Total</b>	100	76

# Technical Review Form

Panel #12 - 2014 Development Full Panels - 12: 84.411C

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

Applicant: The University Corporation (U411C140007)

## Questions

### Summary Statement - Summary Statement

#### 1. Summary Statement (Optional)

##### General:

In summary this proposal was fully developed as the points and scores contained within this review indicate.

Reader's Score: 0

### Selection Criteria - Significance

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

(1) The extent to which the proposed project addresses the absolute priority the applicant is seeking to meet.

(2) The extent to which the proposed project would implement a novel approach as compared with what has been previously attempted nationally.

(3) The potential contribution of the proposed project to the development and advancement of theory, knowledge, and practices in the field of study.

**Note:** In responding to this criterion, the Secretary encourages applicants to explain how the applicant's proposed project addresses the absolute priority and the subpart that it seeks to meet. Additionally, the Secretary asks that applicants explain how the proposed project is unique. Applicants should explain how their proposed projects fit into existing theory, knowledge, or practice, and how their proposed projects will serve as exemplars for new practices in the field.

##### Strengths:

The applicant addressed the real and known gaps between standards and current teaching practice in mathematics as an argument for the novelty of their proposal. p1.

The applicant fully addressed absolute priority 5b with the development of the app, a plan to implement rigorous college and career ready standards through student engagement and teacher efficacy by being able to design lessons on the app. (p3)

The applicant provided support for the novelty of the project by explaining how it differs from both eText apps, and existing interactive resources. (p3-4)

Another novelty is a focus on the collaboration between teachers, specifically pre-service and in-service teachers (p6) RTC in conjunction with the proposed app, would be an advancement of theory and practice in the form of professional development (p6-8)

The project could be easily scaled and thus advancing the practices in the field of technology and mathematics (p8)

**Weaknesses:**

The proposal has some weaknesses in regard to novelty of the intervention. Math applications such as software and websites are quite prevalent and many are adaptive. In addition, the proposal does not indicate that the development will extend beyond the tablet ecosystem nor does it specify which specific platform will be used (app store/Google play).

**Reader's Score: 30**

**Selection Criteria - Quality of Project Design**

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

**(1) The clarity and coherence of the project goals, including the extent to which the proposed project articulates an explicit plan or actions to achieve its goals (e.g., a fully developed logic model of the proposed project).**

**(2) The clarity, completeness, and coherence of the project goals, and whether the application includes a description of project activities that constitute a complete plan for achieving those goals, including the identification of potential risks to project success and strategies to mitigate those risks.**

**Note: In responding to this criterion, the Secretary encourages applicants to address what activities the applicant will undertake in its proposed project, and how the applicant will ensure its project implementation is successful in achieving the project goals.**

**Strengths:**

The project goals are clear and coherent. The logic model seems fair and reasonable to achieve the goals with inputs that are obtainable and activities that are supported by research. (p10)

The proposal outlines four key activities in detail that constitute a logical connection between the activity and the goal it intends to accomplish (p11-12)

The applicant noted the potential risks of inadequate support for mentor teachers and explained a mitigation strategy of proving time through retreats, conference calls, and site visits. This plan seems reasonable (p13).

**Weaknesses:**

Time to develop the app was noted as a risk. However, the applicant insufficiently provides support that the sub contractor has experience developing apps within a short period of time. (p13) In addition, maintenance upgrades were not noted as a risk and thus mitigation of potential platform challenges were not mentioned.

**Reader's Score: 27**

**Selection Criteria - Quality of the Management Plan**

**1. In determining the quality of the management plan and personnel for the proposed project, the Secretary considers the following factors:**

**(1) The extent to which the management plan articulates key responsibilities and well-defined objectives, including the timelines and milestones for completion of major project activities, the metrics that will be used to assess progress on an ongoing basis, and annual performance targets the applicant will use to monitor whether the project is achieving its goals.**

**(2) The extent of the demonstrated commitment of any key partners or evidence of broad support from stakeholders whose participation is critical to the project's long-term success.**

**(3) The adequacy of procedures for ensuring feedback and continuous improvement in the operation of**

the proposed project.

**(4) The extent to which the project director has experience managing projects of similar size and scope as the proposed project.**

**Note: In responding to this criterion, the Secretary encourages applicants to address how the project team will evaluate the success or challenges of the project and use that feedback to make improvements to the project, and the role of key partners and their impact on the long-term success of the project, and how the project director 's prior experiences have prepared them for implementing the proposed project of this size and scope successfully.**

**Strengths:**

The management plan is clearly articulated with major activities and who is responsible, what will be produced and the timeline in which it will be produced. This timeline seems reasonable and adequate to achieve the goals as stated in the application. (p16-17)

There is a demonstrated commitment and broad support for the project as demonstrated by the letters of intent in appendix G from organizations such as schools and LEAs that will make up the advisory board (Appendix G, and p18) The application designates an external evaluator to ensure feedback and continuous improvement in addition to quarterly reports by the project director. This plan seems reasonable and effective. (p18-19)

The project director has experience managing projects of similar size and scope as evidenced by managing three recent grants of similar size. (p19)

**Weaknesses:**

The proposal puts heavy responsibility on teacher involvement which makes them an important stakeholder. There was a lack of evidence of broad support from teachers.

**Reader's Score: 19**

**Selection Criteria - Quality of the Project Evaluation**

**1. In determining the quality of the project evaluation to be conducted, the Secretary considers the following factors:**

**(1) The clarity and importance of the key questions to be addressed by the project evaluation, and the appropriateness of the methods for how each question will be addressed.**

**(2) The extent to which the evaluation plan includes a clear and credible analysis plan, including a proposed sample size and minimum detectable effect size that aligns with the expected project impact, and an analytic approach for addressing the research questions.**

**(3) The extent to which the evaluation plan clearly articulates the key components and outcomes of the project, as well as a measurable threshold for acceptable implementation.**

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

**Note: In responding to this criterion, applicants should describe the key evaluation questions and address how the proposed evaluation methodologies will allow the project to answer those questions. The Secretary encourages applicants to include questions about the effectiveness of the proposed project with the specific student populations being served with grant funds. Further, the Secretary encourages applicants to identify what implementation and performance data the evaluation will generate and how the evaluation will provide data during the grant period to help indicate whether the project is on track to meet its goals. Finally, applicants should also address whether sufficient resources, which may include the qualifications of the independent evaluator, are included in the project budget to carry out the evaluation effectively.**

**Strengths:**

n/a

**Weaknesses:**

n/a

**Reader's Score:**     **0**

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**Status:**           Submitted

**Last Updated:**   09/23/2014 01:56 PM

Status: Submitted

Last Updated: 09/22/2014 01:54 PM

## Technical Review Coversheet

Applicant: The University Corporation (U411C140007)

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

	Points Possible	Points Scored
<b>Questions</b>		
<b>Summary Statement</b>		
<b>Summary Statement</b>		
1. Summary Statement	0	
<b>Selection Criteria</b>		
<b>Significance</b>		
1. Significance	35	30
<b>Quality of Project Design</b>		
1. Project Design	30	27
<b>Quality of the Management Plan</b>		
1. Management Plan/Personnel	20	19
<b>Quality of the Project Evaluation</b>		
1. Project Evaluation	15	0
<b>Total</b>	100	76

# Technical Review Form

Panel #12 - 2014 Development Full Panels - 12: 84.411C

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

Applicant: The University Corporation (U411C140007)

## Questions

### Summary Statement - Summary Statement

#### 1. Summary Statement (Optional)

General:

Reader's Score:

### Selection Criteria - Significance

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

(1) The extent to which the proposed project addresses the absolute priority the applicant is seeking to meet.

(2) The extent to which the proposed project would implement a novel approach as compared with what has been previously attempted nationally.

(3) The potential contribution of the proposed project to the development and advancement of theory, knowledge, and practices in the field of study.

**Note:** In responding to this criterion, the Secretary encourages applicants to explain how the applicant's proposed project addresses the absolute priority and the subpart that it seeks to meet. Additionally, the Secretary asks that applicants explain how the proposed project is unique. Applicants should explain how their proposed projects fit into existing theory, knowledge, or practice, and how their proposed projects will serve as exemplars for new practices in the field.

#### Strengths:

The Absolute Priority is addressed via the creation of the app and its delivery method via iPad. If successful, the project will serve as an exemplar not only for the K-12 school system, but for preservice/mentor teacher programs as well, due to the novel combination provided through the RTC model, which combines the preservice teacher experience with their mentors' professional development (p 2). The activities (addressed in further detail in section B below) support existing theory and knowledge as related to the nature of effective teacher professional development, as well as the previous successful deployment of preservice teachers to schools that participate in the RTC model (p 6). Beyond the importance of solid preservice and professional development programs, the content and methods on which the app will be built and deployed follow existing theory and knowledge related to Common Core math skills (p 7-8).

#### Weaknesses:

The weaknesses of the proposal lie in its limited accessibility – only an iPad app is being developed, and not a program that could simultaneously also be accessed via another tablet or personal computing device. Additionally, certain aspects of the project are not novel, such as the dynamic/simultaneous quality (p 4), the use of an app for instruction and/or planning, or using structured collaboration to provoke methodological thought-change. Finally, while it can serve as an exemplar, no plans for how to share findings beyond the involved stakeholders are apparent.

### Selection Criteria - Quality of Project Design

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

**(1) The clarity and coherence of the project goals, including the extent to which the proposed project articulates an explicit plan or actions to achieve its goals (e.g., a fully developed logic model of the proposed project).**

**(2) The clarity, completeness, and coherence of the project goals, and whether the application includes a description of project activities that constitute a complete plan for achieving those goals, including the identification of potential risks to project success and strategies to mitigate those risks.**

**Note: In responding to this criterion, the Secretary encourages applicants to address what activities the applicant will undertake in its proposed project, and how the applicant will ensure its project implementation is successful in achieving the project goals.**

**Strengths:**

The project goals are clearly and coherently laid out in the logic model (p 25). The activities are aligned with successful attainment of project goals. These include:

- ongoing and embedded professional development (important for consistent and continuous implementation)
- Responsive Teaching Cycle (RTC) implementation, which has already been successful with participants which blends mentorship of preservice teachers with the professional development of their mentor teachers (p 4)
- creating self-perpetuating facilitators for future implementation through peer and cognitive coaching (p 13)
- strong focus on training teachers on the “why” as well as the “how” of the project, ensuring true fidelity to the goal of enabling teachers to create aligned content to new standards, due to their ability to adapt to new instructional practices required to support necessary student learning and skills (p 1)

Legitimate risks are also identified and addressed (p 13):

- support for mentor teachers in the areas of confidence, time, and resources, such as ongoing collaboration, retreats, and site visits; imperative parts of previously stated research and theories of effective teacher professional development
- app development process will be defined by a contract which will address time and budget
- technical support and quality control for app will be provided by in-house computer science department, which should mitigate user and technical risks

**Weaknesses:**

While a contract will define the time and budget for app development and deployment, the actual time is not indicated, leaving it unclear as to whether enough time is allotted between development and deployment to mitigate risks such as bugs/usability. Additionally, while it is stated that participants will be trained on how to use the app itself, the proposal does not indicate if participants will also be trained on how to use the delivery mechanism (iPad), which requires an additional set of skills beyond just navigating an app.

### Selection Criteria - Quality of the Management Plan

**1. In determining the quality of the management plan and personnel for the proposed project, the Secretary considers the following factors:**

**(1) The extent to which the management plan articulates key responsibilities and well-defined**

objectives, including the timelines and milestones for completion of major project activities, the metrics that will be used to assess progress on an ongoing basis, and annual performance targets the applicant will use to monitor whether the project is achieving its goals.

(2) The extent of the demonstrated commitment of any key partners or evidence of broad support from stakeholders whose participation is critical to the project 's long-term success.

(3) The adequacy of procedures for ensuring feedback and continuous improvement in the operation of the proposed project.

(4) The extent to which the project director has experience managing projects of similar size and scope as the proposed project.

**Note:** In responding to this criterion, the Secretary encourages applicants to address how the project team will evaluate the success or challenges of the project and use that feedback to make improvements to the project, and the role of key partners and their impact on the long-term success of the project, and how the project director 's prior experiences have prepared them for implementing the proposed project of this size and scope successfully.

**Strengths:**

Key responsibilities, timelines, milestones, metrics, and performance targets are laid out in detail and appropriate to goals and outcomes (Tables 1 and 2), and, in addition to product data, includes the collection of process data to determine adherence of each component to objectives as they are implemented (p 14). Appropriate personnel have been identified and seem qualified. The project director has a background as project supervisor and grant director, as well as content-specific expertise in the areas of professional development and teacher education (p 20).

**Weaknesses:**

The size and scope of the project director's grant experience is not indicated, only that she directed grant activities across 14 school districts.

**Reader's Score:** 19

**Selection Criteria - Quality of the Project Evaluation**

1. In determining the quality of the project evaluation to be conducted, the Secretary considers the following factors:

(1) The clarity and importance of the key questions to be addressed by the project evaluation, and the appropriateness of the methods for how each question will be addressed.

(2) The extent to which the evaluation plan includes a clear and credible analysis plan, including a proposed sample size and minimum detectable effect size that aligns with the expected project impact, and an analytic approach for addressing the research questions.

(3) The extent to which the evaluation plan clearly articulates the key components and outcomes of the project, as well as a measurable threshold for acceptable implementation.

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

**Note:** In responding to this criterion, applicants should describe the key evaluation questions and address how the proposed evaluation methodologies will allow the project to answer those questions. The Secretary encourages applicants to include questions about the effectiveness of the proposed project with the specific student populations being served with grant funds. Further, the Secretary encourages applicants to identify what implementation and performance data the evaluation will generate and how the evaluation will provide data during the grant period to help indicate whether the

project is on track to meet its goals. Finally, applicants should also address whether sufficient resources, which may include the qualifications of the independent evaluator, are included in the project budget to carry out the evaluation effectively.

**Strengths:**

N/A

**Weaknesses:**

N/A

**Reader's Score:**     **0**

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**Status:**           Submitted

**Last Updated:**   09/22/2014 01:54 PM

Status: Submitted

Last Updated: 09/22/2014 10:31 AM

## Technical Review Coversheet

Applicant: The University Corporation (U411C140007)

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

	Points Possible	Points Scored
<b>Questions</b>		
<b>Summary Statement</b>		
<b>Summary Statement</b>		
1. Summary Statement	0	
<b>Selection Criteria</b>		
<b>Significance</b>		
1. Significance	35	0
<b>Quality of Project Design</b>		
1. Project Design	30	0
<b>Quality of the Management Plan</b>		
1. Management Plan/Personnel	20	0
<b>Quality of the Project Evaluation</b>		
1. Project Evaluation	15	12
<b>Total</b>	100	12

# Technical Review Form

Panel #12 - 2014 Development Full Panels - 12: 84.411C

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

Applicant: The University Corporation (U411C140007)

## Questions

### Summary Statement - Summary Statement

#### 1. Summary Statement (Optional)

General:

Reader's Score:

### Selection Criteria - Significance

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

(1) The extent to which the proposed project addresses the absolute priority the applicant is seeking to meet.

(2) The extent to which the proposed project would implement a novel approach as compared with what has been previously attempted nationally.

(3) The potential contribution of the proposed project to the development and advancement of theory, knowledge, and practices in the field of study.

**Note:** In responding to this criterion, the Secretary encourages applicants to explain how the applicant's proposed project addresses the absolute priority and the subpart that it seeks to meet. Additionally, the Secretary asks that applicants explain how the proposed project is unique. Applicants should explain how their proposed projects fit into existing theory, knowledge, or practice, and how their proposed projects will serve as exemplars for new practices in the field.

**Strengths:**

n/a

**Weaknesses:**

n/a

Reader's Score: 0

### Selection Criteria - Quality of Project Design

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

(1) The clarity and coherence of the project goals, including the extent to which the proposed project articulates an explicit plan or actions to achieve its goals (e.g., a fully developed logic model of the proposed project).

**(2) The clarity, completeness, and coherence of the project goals, and whether the application includes a description of project activities that constitute a complete plan for achieving those goals, including the identification of potential risks to project success and strategies to mitigate those risks.**

**Note: In responding to this criterion, the Secretary encourages applicants to address what activities the applicant will undertake in its proposed project, and how the applicant will ensure its project implementation is successful in achieving the project goals.**

**Strengths:**

n/a

**Weaknesses:**

n/a

**Reader's Score: 0**

**Selection Criteria - Quality of the Management Plan**

**1. In determining the quality of the management plan and personnel for the proposed project, the Secretary considers the following factors:**

**(1) The extent to which the management plan articulates key responsibilities and well-defined objectives, including the timelines and milestones for completion of major project activities, the metrics that will be used to assess progress on an ongoing basis, and annual performance targets the applicant will use to monitor whether the project is achieving its goals.**

**(2) The extent of the demonstrated commitment of any key partners or evidence of broad support from stakeholders whose participation is critical to the project 's long-term success.**

**(3) The adequacy of procedures for ensuring feedback and continuous improvement in the operation of the proposed project.**

**(4) The extent to which the project director has experience managing projects of similar size and scope as the proposed project.**

**Note: In responding to this criterion, the Secretary encourages applicants to address how the project team will evaluate the success or challenges of the project and use that feedback to make improvements to the project, and the role of key partners and their impact on the long-term success of the project, and how the project director 's prior experiences have prepared them for implementing the proposed project of this size and scope successfully.**

**Strengths:**

n/a

**Weaknesses:**

n/a

**Reader's Score: 0**

**Selection Criteria - Quality of the Project Evaluation**

**1. In determining the quality of the project evaluation to be conducted, the Secretary considers the following factors:**

(1) The clarity and importance of the key questions to be addressed by the project evaluation, and the appropriateness of the methods for how each question will be addressed.

(2) The extent to which the evaluation plan includes a clear and credible analysis plan, including a proposed sample size and minimum detectable effect size that aligns with the expected project impact, and an analytic approach for addressing the research questions.

(3) The extent to which the evaluation plan clearly articulates the key components and outcomes of the project, as well as a measurable threshold for acceptable implementation.

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

**Note:** In responding to this criterion, applicants should describe the key evaluation questions and address how the proposed evaluation methodologies will allow the project to answer those questions. The Secretary encourages applicants to include questions about the effectiveness of the proposed project with the specific student populations being served with grant funds. Further, the Secretary encourages applicants to identify what implementation and performance data the evaluation will generate and how the evaluation will provide data during the grant period to help indicate whether the project is on track to meet its goals. Finally, applicants should also address whether sufficient resources, which may include the qualifications of the independent evaluator, are included in the project budget to carry out the evaluation effectively.

**Strengths:**

The application includes key questions for implementation (pg. 25) that are aligned with project activities listed on page 11 and measures of progress included on page 17. Data collection strategies, data sources, indicators (pg. 14), are aligned to the key questions for which they aim to answer. The evaluation plan includes key questions that are appropriate to evaluate program impact related to student learning and teaching practices. Data analysis methods are clearly explained and are appropriate for the key questions for which they aim to answer. A sample size for teachers and a minimum detectable effect size are provided for student outcomes. Outcomes are aligned with goals are included in a logic model (pg. 10). A solid design plan is clearly articulated on pages 22-23. For example, the use of a randomized control trial is strong because this type of design increases validity and reliability.

**Weaknesses:**

Explanations of data analysis focused on quantitative analysis only with little to no discussion on how qualitative data will be analyzed (pgs. 23-25). While indicators are provided for the implementation evaluation, no measurable thresholds are provided. The applicant mentions that the external evaluator will operationalize indicators (pg. 14). The applicant states that the treatment and control group will be required to avoid sharing information to prevent contamination (p.23). However, there is no discussion on how this potential risk would be mitigated. The applicant provides a minimum detectable effect size for student outcomes. While a sample size for teachers is provided, the student sample size is unclear. Page e13 indicates that 28,375 pupils will score higher on standardized assessments; however, no student sample size is included in the evaluation plan. Therefore, it is unclear whether the effect size is appropriate for student outcomes.

**Reader's Score:** 12

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**Status:** Submitted  
**Last Updated:** 09/22/2014 10:31 AM

Status: Submitted

Last Updated: 09/22/2014 10:21 PM

## Technical Review Coversheet

Applicant: The University Corporation (U411C140007)

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

	Points Possible	Points Scored
<b>Questions</b>		
<b>Summary Statement</b>		
<b>Summary Statement</b>		
1. Summary Statement	0	
<b>Selection Criteria</b>		
<b>Significance</b>		
1. Significance	35	0
<b>Quality of Project Design</b>		
1. Project Design	30	0
<b>Quality of the Management Plan</b>		
1. Management Plan/Personnel	20	0
<b>Quality of the Project Evaluation</b>		
1. Project Evaluation	15	13
<b>Total</b>	100	13

# Technical Review Form

Panel #12 - 2014 Development Full Panels - 12: 84.411C

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

Applicant: The University Corporation (U411C140007)

## Questions

### Summary Statement - Summary Statement

#### 1. Summary Statement (Optional)

General:

Reader's Score:

### Selection Criteria - Significance

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

(1) The extent to which the proposed project addresses the absolute priority the applicant is seeking to meet.

(2) The extent to which the proposed project would implement a novel approach as compared with what has been previously attempted nationally.

(3) The potential contribution of the proposed project to the development and advancement of theory, knowledge, and practices in the field of study.

**Note:** In responding to this criterion, the Secretary encourages applicants to explain how the applicant's proposed project addresses the absolute priority and the subpart that it seeks to meet. Additionally, the Secretary asks that applicants explain how the proposed project is unique. Applicants should explain how their proposed projects fit into existing theory, knowledge, or practice, and how their proposed projects will serve as exemplars for new practices in the field.

#### Strengths:

This selection criterion was scored by another peer reviewer.

#### Weaknesses:

This selection criterion was scored by another peer reviewer.

Reader's Score: 0

### Selection Criteria - Quality of Project Design

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

(1) The clarity and coherence of the project goals, including the extent to which the proposed project articulates an explicit plan or actions to achieve its goals (e.g., a fully developed logic model of the proposed project).

**(2) The clarity, completeness, and coherence of the project goals, and whether the application includes a description of project activities that constitute a complete plan for achieving those goals, including the identification of potential risks to project success and strategies to mitigate those risks.**

**Note: In responding to this criterion, the Secretary encourages applicants to address what activities the applicant will undertake in its proposed project, and how the applicant will ensure its project implementation is successful in achieving the project goals.**

**Strengths:**

This selection criterion was scored by another peer reviewer.

**Weaknesses:**

This selection criterion was scored by another peer reviewer.

**Reader's Score: 0**

**Selection Criteria - Quality of the Management Plan**

**1. In determining the quality of the management plan and personnel for the proposed project, the Secretary considers the following factors:**

**(1) The extent to which the management plan articulates key responsibilities and well-defined objectives, including the timelines and milestones for completion of major project activities, the metrics that will be used to assess progress on an ongoing basis, and annual performance targets the applicant will use to monitor whether the project is achieving its goals.**

**(2) The extent of the demonstrated commitment of any key partners or evidence of broad support from stakeholders whose participation is critical to the project 's long-term success.**

**(3) The adequacy of procedures for ensuring feedback and continuous improvement in the operation of the proposed project.**

**(4) The extent to which the project director has experience managing projects of similar size and scope as the proposed project.**

**Note: In responding to this criterion, the Secretary encourages applicants to address how the project team will evaluate the success or challenges of the project and use that feedback to make improvements to the project, and the role of key partners and their impact on the long-term success of the project, and how the project director 's prior experiences have prepared them for implementing the proposed project of this size and scope successfully.**

**Strengths:**

This selection criterion was scored by another peer reviewer.

**Weaknesses:**

This selection criterion was scored by another peer reviewer.

**Reader's Score: 0**

**Selection Criteria - Quality of the Project Evaluation**

**In determining the quality of the project evaluation to be conducted, the Secretary considers the following factors:**

- (1) The clarity and importance of the key questions to be addressed by the project evaluation, and the appropriateness of the methods for how each question will be addressed.**
- (2) The extent to which the evaluation plan includes a clear and credible analysis plan, including a proposed sample size and minimum detectable effect size that aligns with the expected project impact, and an analytic approach for addressing the research questions.**
- (3) The extent to which the evaluation plan clearly articulates the key components and outcomes of the project, as well as a measurable threshold for acceptable implementation.**
- (4) The extent to which the proposed project plan includes sufficient resources to carry out the project evaluation effectively.**

**Note:** In responding to this criterion, applicants should describe the key evaluation questions and address how the proposed evaluation methodologies will allow the project to answer those questions. The Secretary encourages applicants to include questions about the effectiveness of the proposed project with the specific student populations being served with grant funds. Further, the Secretary encourages applicants to identify what implementation and performance data the evaluation will generate and how the evaluation will provide data during the grant period to help indicate whether the project is on track to meet its goals. Finally, applicants should also address whether sufficient resources, which may include the qualifications of the independent evaluator, are included in the project budget to carry out the evaluation effectively.

#### **Strengths:**

##### Key Outcome Questions

A strength of the evaluation plan is that it clearly states the key outcome (pp. e36-e37) and process (pp. e40-e41) questions to be addressed in the evaluation.

The outcome questions are consistent with the outcomes identified in the proposal and indicated in the logic model. Having a logic model allows for a clearer determination of the success of the program because purpose and the intended outcomes of the program are clear. Accordingly, the evaluation questions include both outcomes for students and teachers. For example, on page e26, question 1 states, "What is the impact on pupil learning" and on page e27, question 3 states, "to what extent do teachers continue using RTC..."

Another positive related to the outcome evaluation questions is that they address project sustainability and scaling (page e37). Producing answers to these questions will help program development by identifying and justifying program modification.

##### Analysis Plan

The evaluation plan proposes a randomized control trial (RCT) which meets What Works Clearinghouse (WWC) standards for program evaluation without reservation.

##### Sampling

A strength of the evaluation plan is that it clearly outlines the number of students that will be recruited each year of the project and the recruitment plan includes teacher incentives equitably (for both treatment and control participants as indicated on page e37). Equitably distributing incentives reduces it as a potential threat to validity. Another strength is that the sampling plan includes random assignment to conditions.

Sampled teachers in the treatment condition "will participate in summer trainings related to RTC, have ongoing meetings..." (pp. e37-e38). Treatment teachers will not be allowed to share information/content with control teachers, "to avoid contamination" (p. e 38) which is a strength of the evaluation plan because it reduces validity threats that could reduce evaluators' ability to accurately assess program impact.

The evaluation plan includes measures for data confidentiality by limiting data access to only the external evaluator. As

indicated on page e38, “only the external evaluator will have access to survey and focus group data; reports will only include aggregate summaries of data, and individual teachers will not be identified.”

#### Data Analysis

The evaluation plan clearly identifies the sampling plan, and the calculation of effect size and power for student outcomes (p. e38).

A strength of the evaluation plan is that analysis plan, which has analysis methods that are clearly aligned with the evaluation questions. For example, on page e39, it states, “to compare treatment and control group in Year 2 using both an analysis of covariance (ANCOVA) and hierarchical linear regressions (HLR). These approaches are appropriate for compare student assessment scores and the HLR is fitting for determining student outcomes nested within teacher groups.

As indicated on p. e29, mixed-method approach will be used in data collection and analysis for the outcome evaluation (and for the process evaluation; p e.41), which allows for the triangulation and validation of findings.

#### Resources

Sufficient financial resources have been designated for the program evaluation. The plan includes communication mechanisms between the evaluator and program staff and state how evaluation findings will be reported and used. These final steps are critical parts of an evaluation plan and inform stakeholders of results in order to inform their programmatic decisions.

#### **Weaknesses:**

##### Implementation Fidelity

The implementation questions are comprehensive; however, for some it is unclear how the indicators can/will be measured and used to determine success. For example, on page e40, it states “are teachers, ...using the app regularly and consistently throughout the implementation of the project;” however, there is no indication regarding what regularly and consistently mean. Further, there is no threshold for success (or failure) indicated. Similarly, other descriptions such as “appropriate” and “sufficient” are used, but are not clearly defined. Further, no thresholds are indicated in the evaluation plan. Although on page e40, it states, “thresholds for acceptable implementation will be determined based on results from the pilot study in Year 1”, for many of the questions, implementation thresholds could be indicated and therefore tested in the pilot.

##### Data Collection

Although the plan indicates that only the external evaluator will have access to survey and focus group data. It does not clearly indicate if the evaluator will be the primary or sole person collecting data survey and focus group data. A table displaying the data sources, staff responsible for data collection, and data collection time points would have made the evaluation plan clearer and stronger.

##### Data Analysis

The data analysis plan does not include subgroup analysis to compare results for disadvantaged students in treatment versus control conditions.

**Reader's Score: 13**

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**Status:** Submitted  
**Last Updated:** 09/22/2014 10:21 PM

