

Technical Review Cover Sheet

Panel Details

Fiscal Year 2010 **CFDA/Subprogram** 84.295A **Schedule No** 1 **Tier No.** 1

Applicant Name	Window to the World Communications, Inc. -- WTTW National Media Production,	PR/Award No	U295A100026
Reviewer Name	R1		

Questions

	Points Possible	Points Scored
1. Selection Criteria		
Need for Project	15	15
Significance	10	9
Quality of Project Design	25	25
Project Personnel	10	10
Management Plan	20	20
Project Evaluation	20	20
TOTAL	100	99

Technical Review Form

Applicant Name	Window to the World Communications, Inc. -- WTTW National Media Production,	PR/Award No	U295A100026
Reviewer Name	R1		

Selection Criteria - Need for Project

1. The Secretary considers the need for the proposed project by considering the following factors:

- a) **The extent to which the proposed project will provide services or otherwise address the needs of students at risk of educational failure.**
- b) **The extent to which specific gaps or weaknesses in services, infrastructure, or opportunities have been identified and will be addressed by the proposed project, including the nature and magnitude of those gaps or weaknesses.**

Strengths

The applicant addressed the critical need for children to gain the math skills and competencies needed for school readiness. The applicant addressed the specific at risk children to be targeted - low income children, on pgs. 1 -3. The applicant addresses the gap and weaknesses in services on pgs. 5 - 7 and identified the gaps in support for mathematics learning, gaps in learning opportunities, and gaps in media and technology knowledge.

Weaknesses

No weaknesses identified.

Question Status:Completed

Reviewer Score: 15

Selection Criteria - Significance

2.

The Secretary considers the significance of the proposed project by considering the following factor:

- a) **The likely utility of the products (such as information, materials, processes, or techniques) that will result from the proposed project, including the potential for their being used effectively in a variety of other settings.**

Strengths

The applicant identified populations - teachers, parents, etc. - in addition to children who are in need of access to these types of products. The products developed as a result of this project could be used in various settings - home, school, child care, community setting, etc. - and there is a great likelihood of these products being utilized.

Weaknesses

The lack of professional development for teachers and parents in relation to the products developed decreases the likelihood of products being used in a variety of settings.

Question Status:Completed

Reviewer Score: 9

Selection Criteria - Quality of Project Design

3.

The Secretary considers the quality of the design of the proposed project by considering the following factors:

- a) The extent to which the design of the proposed project reflects up-to-date knowledge from research and effective practices.**
- b) The extent to which the proposed project is part of a comprehensive effort to improve teaching and learning and support rigorous academic standards for students.**
- c) The extent to which the proposed project is designed to build capacity and yield results that will extend beyond the period of Federal financial assistance.**

Strengths

The proposed design includes current research and best practices. This project is part of a larger, more comprehensive effort to improve student achievement for low income children as identified on pgs. 17 & 18. On pgs. 29 & 30 the applicant identifies efforts to secure sustainability beyond the grant period.

Weaknesses

No weaknesses identified.

Question Status:Completed

Reviewer Score: 25

Selection Criteria - Quality of Project Personnel

4.

The Secretary considers the quality of the personnel who will carry out the proposed project.

- a) In determining the quality of project personnel, the Secretary considers the extent to which the applicant encourages applications for employment from persons who are members of groups that have traditionally been underrepresented based on race, color, national origin, gender, age, or**

disability.

b) In addition, the Secretary considers the following factor. The qualifications, including relevant training and experience, of key project personnel.

Strengths

The applicant has identified qualified personnel to manage this project. The applicant has adequately identified underrepresented persons and will continue to recruit this population as positions become available.

Weaknesses

No weaknesses identified.

Question Status:Completed

Reviewer Score: 10

Selection Criteria - Quality of the Management Plan

5.

The Secretary considers the quality of the management plan for the proposed project by considering the following factors:

- a) 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.**
- b) The extent to which the time commitments of the project director and principal investigator and other key project personnel are appropriate and adequate to meet the objectives of the proposed project.**
- c) The adequacy of procedures for ensuring feedback and continuous improvement in the operation of the proposed project.**

Strengths

The timeline clearly outlines responsibilities and milestones and the project key personnel, including director and investigator, have allotted adequate time commitments for this project. The applicant has identified a method to receive feedback and incorporate that feedback in to continuous quality improvement.

Weaknesses

No weaknesses identified.

Question Status:Completed

Reviewer Score: 20

Selection Criteria - Quality of the Project Evaluation

6.

The Secretary considers the quality of the evaluation to be conducted of the proposed project by considering the following factors:

- a) The extent to which the methods of evaluation include the use of objective performance measures that are clearly related to the intended outcomes of the project and will produce quantitative and qualitative data to the extent possible.
- b) The extent to which the methods of evaluation will provide performance feedback and permit periodic assessment of progress toward achieving intended outcomes.

Strengths

The evaluation plan includes methods which are related to intended outcomes and will produce both quantitative and qualitative data. The evaluation will allow for feedback and opportunities to address progress.

Weaknesses

No weaknesses identified.

Question Status:Completed

Reviewer Score: 20

Technical Review Cover Sheet

Panel Details

Fiscal Year 2010 **CFDA/Subprogram** 84.295A **Schedule No** 1 **Tier No.** 1

Applicant Name Window to the World Communications, Inc. -- WTTW National Media Production, **PR/Award No** U295A100026
Reviewer Name R2

Questions

	Points Possible	Points Scored
1. Selection Criteria		
Need for Project	15	15
Significance	10	9
Quality of Project Design	25	23
Project Personnel	10	10
Management Plan	20	20
Project Evaluation	20	20
TOTAL	100	97

Technical Review Form

Applicant Name Window to the World Communications, Inc. -- WTTW National Media Production, **PR/Award No** U295A100026
Reviewer Name R2

Selection Criteria - Need for Project

1.

The Secretary considers the need for the proposed project by considering the following factors:

a) The extent to which the proposed project will provide services or otherwise address the needs of

students at risk of educational failure.

b) **The extent to which specific gaps or weaknesses in services, infrastructure, or opportunities have been identified and will be addressed by the proposed project, including the nature and magnitude of those gaps or weaknesses.**

Strengths

A.)The plan uses research as identified by NCES and NMAP to indicate that American children are not achieving as well as children in other countries. Specifically it speaks to the need for students to acquire numeracy and math skills.

The Project will leverage media and technology for learning. This will help students become proficient in numeracy acquisition and will stress the need to restore learning by doing opportunities.

B. To address the gaps, the plan offers creative play opportunities for students to learn basic principle of math while thinking creatively, inventing and working collaboratively.

Weaknesses

No weaknesses were identified in this section.

Question Status:Completed

Reviewer Score: 15

Selection Criteria - Significance

2.

The Secretary considers the significance of the proposed project by considering the following factor:

a) **The likely utility of the products (such as information, materials, processes, or techniques) that will result from the proposed project, including the potential for their being used effectively in a variety of other settings.**

Strengths

Eight strengths are identified to allow accessibility to parent, students and teacher. These opportunities will be school and in the community and will accommodate various learning styles. The plan also provides for inclusion of pre-school and is based on comprehensive scaffolding. (pages 11-13)

Open Educational Resources will provide opportunities for distribution of materials to parents, students and teachers. Distribution will occur with the help of partners such as Head Start.

Weaknesses

There is no indication that professional development will be provided.

Question Status:Completed

Reviewer Score: 9

Selection Criteria - Quality of Project Design

3.

The Secretary considers the quality of the design of the proposed project by considering the following factors:

- a) The extent to which the design of the proposed project reflects up-to-date knowledge from research and effective practices.
- b) The extent to which the proposed project is part of a comprehensive effort to improve teaching and learning and support rigorous academic standards for students.
- c) The extent to which the proposed project is designed to build capacity and yield results that will extend beyond the period of Federal financial assistance.

Strengths

A. Project design is aligned with the National Council of Teachers of Mathematics. The program would provide meaningful experiences for early learners in number operation, geometry and measurement. The project will build on prior knowledge, scaffold instructions and allow the students to work at their own pace.

B. The project is aligned with common core state standards for early learners. Students will use the world wide web to create, explore and learn at no cost. Students will also have access to learning libraries where they can search and gather information.

The plan indicates that grant funding will be used during years one and two for the majority of the materials.

Weaknesses

If the majority of the funds are used during years one and two as indicated, sustaining the project after the five year period will be dependent on private sponsorships and possible revenues from the mobile applications.

Question Status:Completed

Reviewer Score: 23

Selection Criteria - Quality of Project Personnel

4.

The Secretary considers the quality of the personnel who will carry out the proposed project.

a) In determining the quality of project personnel, the Secretary considers the extent to which the applicant encourages applications for employment from persons who are members of groups that have traditionally been underrepresented based on race, color, national origin, gender, age, or disability.

b) In addition, the Secretary considers the following factor. The qualifications, including relevant training and experience, of key project personnel.

Strengths

The plan addresses monitoring the selection process for employment. Those seeking employment and have experience with or work directly with the targeted population will be encouraged to apply. WTTW will also monitor their contractors to ensure access for parents and teacher in underrepresented groups.

B. The seven individuals presented as key personnel bring a wealth of knowledge and experience. They relevant training seems appropriate to the completion of this project.

Weaknesses

A. No weaknesses were identified in this section.

Question Status:Completed

Reviewer Score: 10

Selection Criteria - Quality of the Management Plan

5.

The Secretary considers the quality of the management plan for the proposed project by considering the following factors:

a) 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.

b) The extent to which the time commitments of the project director and principal investigator and other key project personnel are appropriate and adequate to meet the objectives of the proposed project.

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

Strengths

B. Time commitments of key personnel are detailed on pages 31-33 along with roles and responsibilities. The time allotments seem appropriate to the objectives of the project.

C. The applicant acknowledges the challenges of providing a true programming structure for young learners. An advisory team will be selected to get ongoing feedback through a blended outreach approach. Partners from other preschool and elementary school entities will be engaged to provide feedback as well.

Weaknesses

No weaknesses were identified in this section.

Question Status:Completed

Reviewer Score: 20

Selection Criteria - Quality of the Project Evaluation

6.

The Secretary considers the quality of the evaluation to be conducted of the proposed project by considering the following factors:

a) The extent to which the methods of evaluation include the use of objective performance measures that are clearly related to the intended outcomes of the project and will produce quantitative and qualitative data to the extent possible.

b) The extent to which the methods of evaluation will provide performance feedback and permit periodic assessment of progress toward achieving intended outcomes.

Strengths

The evaluation plan includes the use of formative and summative research. Six hypotheses will be tested in the summative evaluation. This will include exposure and implementation of the product to students, attitudes toward reading and math.

The desired result is a gain in self confidence for the students as well as gains in reading and math. The formative assessment will research five areas of inquiry conducted in qualitative focus groups and interviews with students. Methods of dissemination the evaluation findings are still being considered.

B. With the feedback from scholar participants and advisors, new assessments will be used to measure the effectiveness of the project. Student feedback will be gathered from pre and post testing as baseline data.

Student interviews will be conducted with sample groupings of students.

Weaknesses

No weaknesses were identified in this section.

Question Status:Completed

Reviewer Score: 20

Technical Review Cover Sheet

Panel Details

Fiscal Year 2010 **CFDA/Subprogram** 84.295A **Schedule No** 1 **Tier No.** 1

Applicant Name	Window to the World Communications, Inc. -- WTTW National Media Production,	PR/Award No	U295A100026
Reviewer Name	R3		

Questions

	Points Possible	Points Scored
1. Selection Criteria		
Need for Project	15	15
Significance	10	8
Quality of Project Design	25	21
Project Personnel	10	9
Management Plan	20	19
Project Evaluation	20	18
TOTAL	100	90

Technical Review Form

Applicant Name	Window to the World Communications, Inc. -- WTTW National Media Production,	PR/Award No	U295A100026
Reviewer Name	R3		

Selection Criteria - Need for Project

1.

The Secretary considers the need for the proposed project by considering the following factors:

a) The extent to which the proposed project will provide services or otherwise address the needs of

students at risk of educational failure.

b) The extent to which specific gaps or weaknesses in services, infrastructure, or opportunities have been identified and will be addressed by the proposed project, including the nature and magnitude of those gaps or weaknesses.

Strengths

The applicant has coined a wonderful acronym (UMIGO) which stands for You Make It Go.

The applicant indicates the lack of mathematics proficiency by quoting the percentage provided by the National Center of Educational Statistics.

The applicant strengthens its case for the need to increase the target group's numeracy skills, mathematics achievement outcomes, and digital competencies because of the rapid growth of world wide digital commerce and communication.

The magnitude of the need is stressed even more in one of the statements made by the applicant (Children at risk for educational failure will become adults without basic math skills).

On p. 7, the applicant gives research that supports there are gaps in mathematics learning and gaps in learning opportunities, and gaps in media technology between low-income children and their middle-income peers.

To address the needs and gaps, WTTW has partnered with producers and expert in scientific evaluation of education initiatives to address the critical needs and gaps by using transmedia storytelling, research-based curriculum, outreach, and evaluation.

Weaknesses

There were no weaknesses identified.

Question Status:Completed

Reviewer Score: 15

Selection Criteria - Significance

2.

The Secretary considers the significance of the proposed project by considering the following factor:

a) The likely utility of the products (such as information, materials, processes, or techniques) that will result from the proposed project, including the potential for their being used effectively in a variety of other settings.

Strengths

The applicant discusses the easy-access to the media-based intervention that UMIGO will develop will be easy to use by teachers, students, children, and parents and will require no professional development for educators to use in the classrooms or for parents to use at home (p.11).

UMIGO will be accessible through various media platforms (cell phones, handheld gaming devices, touch screen devices (like the ipod or iphone), television, DVD's, traditional books and more.

Weaknesses

The applicant states that no professional development will be required for educators to use in their classrooms or parents to use at home. It is not quite clear how educators and parents will be able to utilize the program effectively without some type of professional training.

Question Status:Completed

Reviewer Score: 8

Selection Criteria - Quality of Project Design

3.

The Secretary considers the quality of the design of the proposed project by considering the following factors:

- a) The extent to which the design of the proposed project reflects up-to-date knowledge from research and effective practices.**
- b) The extent to which the proposed project is part of a comprehensive effort to improve teaching and learning and support rigorous academic standards for students.**
- c) The extent to which the proposed project is designed to build capacity and yield results that will extend beyond the period of Federal financial assistance.**

Strengths

The applicant includes several research studies and effective practice information.

The applicant will partner with post secondary media production programs, college teacher preparation programs, students from low performing schools, Flashpoint Media Arts Academy (Chicago) to list a few.

The applicant has constructed a business plan and has also added a statement about other potential sources of income (third-party equity investment, additional grant money, television license fees).

The applicant plans to sustain the program beyond the grant period through private sponsorships, advertising, subscription fees, mobile applications, traditional publishing, etc.

Weaknesses

More supportive details about the third party equity investment would have strengthened the issue of sustainability.

Question Status:Completed

Reviewer Score: 21

Selection Criteria - Quality of Project Personnel

4.

The Secretary considers the quality of the personnel who will carry out the proposed project.

a) In determining the quality of project personnel, the Secretary considers the extent to which the applicant encourages applications for employment from persons who are members of groups that have traditionally been underrepresented based on race, color, national origin, gender, age, or disability.

b) In addition, the Secretary considers the following factor. The qualifications, including relevant training and experience, of key project personnel.

Strengths

The applicant devotes a section of the narrative to discuss the plan to encourage underrepresented applicants by advertising through its network of partners, some of whom have worked directly with the target population.

Also, the applicant describes its staff as diverse as it is made up of 48 percent women and 24 percent from underrepresented groups.

The applicant includes a section that identifies personnel and their respective duties.

Weaknesses

The applicant does not identify who makes up the 24 percent in reference to the underrepresented groups.

Question Status:Completed

Reviewer Score: 9

Selection Criteria - Quality of the Management Plan

5.

The Secretary considers the quality of the management plan for the proposed project by considering the following factors:

- a) 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.
- b) The extent to which the time commitments of the project director and principal investigator and other key project personnel are appropriate and adequate to meet the objectives of the proposed project.
- c) The adequacy of procedures for ensuring feedback and continuous improvement in the operation of the proposed project.

Strengths

The applicant outlines the timeline for each activity and who will be responsible for satisfying each activity (pp.35-36).

The applicant has taken into consideration the magnitude of the project and the time necessary to successfully implement as can be seen by dividing some of the responsibilities between a project director and co-director.

An advisory committee will provide feedback by meeting once a year to discuss the progress, and members will also serve in consultative roles.

The applicant outreach plans allows for feedback from partner organization.

Weaknesses

It seems like an annual meeting of those serving in an advisory capacity is only enough time to discuss progress, but it does not appear to be enough time to offer suggestions and responses for those areas that may need improvement.

Question Status:Completed

Reviewer Score: 19

Selection Criteria - Quality of the Project Evaluation

6.

The Secretary considers the quality of the evaluation to be conducted of the proposed project by considering the following factors:

a) The extent to which the methods of evaluation include the use of objective performance measures that are clearly related to the intended outcomes of the project and will produce quantitative and qualitative data to the extent possible.

b) The extent to which the methods of evaluation will provide performance feedback and permit periodic assessment of progress toward achieving intended outcomes.

Strengths

The applicant has solicited the help of a third party independent evaluator. That evaluator's team consists of a consortium of partners (non-profit institutions, private sectors companies, university research experts, etc.

The evaluation plan includes both formative and summative research (p.41). The applicant also lists details about the summative research plan, the criteria for showing strong evidence, and the hypotheses to be tested (p. 42).

Weaknesses

Even though the applicant has outlined the methods of evaluations, I'm not sure how non-profit institutions weigh into the equation of evaluating the applicant's progression in terms of the objectives.

Question Status:Completed

Reviewer Score: 18

Technical Review Cover Sheet

Panel Details

Fiscal Year 2010 CFDA/Subprogram 84.295A Schedule No 1 Tier No. 2

Applicant Name	Window to the World Communications, Inc. -- WTTW National Media Production,	PR/Award No	U295A100026
Reviewer Name	R1		

Questions

	Points Possible	Points Scored
	1. Priorities	
Competitive Preference	20	14
	TOTAL	14

Technical Review Form

Applicant Name	Window to the World Communications, Inc. -- WTTW National Media Production,	PR/Award No	U295A100026
Reviewer Name	R1		

Priorities - Competitive Preference Priority

Up to twenty additional points will be awarded depending on how well the application meets this priority.

- 1. Points awarded under this priority will be determined by the quality of the proposed evaluation method. In determining the quality of the evaluation method, we will consider the extent to which the applicant presents a feasible, credible plan that includes the following:**

- (1) The type of design to be used (that is, random assignment or matched**

comparison). If matched comparison, include in the plan a discussion of why random assignment is not feasible.

(2) Outcomes to be measured.

(3) A discussion of how the applicant plans to assign students, teachers, classrooms, or schools to the project and control group or match them for comparison with other students, teachers, classrooms, or schools.

(4) A proposed evaluator, preferably independent, with the necessary background and technical expertise to carry out the proposed evaluation. An independent evaluator does not have any authority over the project and is not involved in its implementation.

In general, depending on the implemented program or project, under a competitive preference priority, random assignment evaluation methods will receive more points than matched comparison evaluation methods.

Strengths

The Evaluation Team is an independent group that has a designated PI with technical expertise and necessary background for conducting the proposed evaluation. There is evidence that the data collected will result in usable reports to determine continued implementation of success.

Weaknesses

On page 43 "a cluster-randomized control trial" is used to describe the research design. More information on how the groups will be clustered and randomized is needed. How this will be done successfully is unclear. The proposal includes a pre/post-test design, yet the pretest is not later discussed as a covariant. Validity and reliability of the mClass:Math assessments need to be included. How teachers will log information during the media activities is not clear as to how the data will be collected or assessed.

Question Status:Not Completed

Reviewer Score: 14

Technical Review Cover Sheet

Panel Details

Fiscal Year 2010 CFDA/Subprogram 84.295A Schedule No 1 Tier No. 2

Applicant Name	Window to the World Communications, Inc. -- WTTW National Media Production,	PR/Award No	U295A100026
Reviewer Name	R2		

Questions

	Points Possible	Points Scored
	1. Priorities	
Competitive Preference	20	15
	TOTAL	15

Technical Review Form

Applicant Name	Window to the World Communications, Inc. -- WTTW National Media Production,	PR/Award No	U295A100026
Reviewer Name	R2		

Priorities - Competitive Preference Priority

Up to twenty additional points will be awarded depending on how well the application meets this priority.

- 1. Points awarded under this priority will be determined by the quality of the proposed evaluation method. In determining the quality of the evaluation method, we will consider the extent to which the applicant presents a feasible, credible plan that includes the following:**

- (1) The type of design to be used (that is, random assignment or matched**

comparison). If matched comparison, include in the plan a discussion of why random assignment is not feasible.

(2) Outcomes to be measured.

(3) A discussion of how the applicant plans to assign students, teachers, classrooms, or schools to the project and control group or match them for comparison with other students, teachers, classrooms, or schools.

(4) A proposed evaluator, preferably independent, with the necessary background and technical expertise to carry out the proposed evaluation. An independent evaluator does not have any authority over the project and is not involved in its implementation.

In general, depending on the implemented program or project, under a competitive preference priority, random assignment evaluation methods will receive more points than matched comparison evaluation methods.

Strengths

Michael Cohen Group LLC is well qualified organizationally to conduct the work.

Good detail provided about the nature of the RCT model, sampling, power, attrition rates, etc.

The collaborative partners should help strengthen the project.

The inclusion of both summative and formative evaluation components, including a Randomized Controlled Trial (RCT) - is commendable.

Use of pretesting to control for initial group differences is commendable.

Phone calls weekly to teachers during RCT implementation should be helpful in terms of helping to ensure implementation fidelity.

Weaknesses

It appears that some of the assessments will be developed specifically for the study, rather than using existing validated measures. While this may allow for theoretically better alignment to the skills targeted by the program, it also introduces questions about reliability and validity of the outcome data that may compromise the interpretation of the RCT results.

There is no mention of how the sample might be affected if new students enter study environment during the course of the intervention (whether those students would be allowed to participate, etc. etc.).

There is mention of a log of children's activities that is to be kept by teachers (p. 45). This particular data collection mechanism sounds burdensome at a minimum and, if the intent is to measure activity levels of individual children rather than the class as a whole, perhaps even impossible.

Question Status:Not Completed

Reviewer Score: 15

Technical Review Cover Sheet

Panel Details

Fiscal Year 2010 **CFDA/Subprogram** 84.295A **Schedule No** 1 **Tier No.** 2

Applicant Name	Window to the World Communications, Inc. -- WTTW National Media Production,	PR/Award No	U295A100026
Reviewer Name	R3		

Questions

	Points Possible	Points Scored
1. Priorities		
Competitive Preference	20	16
TOTAL	20	16

Technical Review Form

Applicant Name	Window to the World Communications, Inc. -- WTTW National Media Production,	PR/Award No	U295A100026
Reviewer Name	R3		

Priorities - Competitive Preference Priority

1.

Up to twenty additional points will be awarded depending on how well the application meets this priority.

Points awarded under this priority will be determined by the quality of the proposed evaluation method. In determining the quality of the evaluation method, we will consider the extent to which the applicant presents a feasible, credible plan that includes the following:

- (1) The type of design to be used (that is, random assignment or matched comparison). If matched comparison, include in the plan a discussion of why random assignment is not feasible.
- (2) Outcomes to be measured.
- (3) A discussion of how the applicant plans to assign students, teachers, classrooms, or schools to

the project and control group or match them for comparison with other students, teachers, classrooms, or schools.

(4) A proposed evaluator, preferably independent, with the necessary background and technical expertise to carry out the proposed evaluation. An independent evaluator does not have any authority over the project and is not involved in its implementation.

In general, depending on the implemented program or project, under a competitive preference priority, random assignment evaluation methods will receive more points than matched comparison evaluation methods.

Strengths

A good description of the outside evaluation firm is provided, along with documentation of collaborating partners to the evaluation. A randomized control design will be used for the summative evaluation, and a thorough description of the sampling for treatment and control groups is provided. Three treatment groups are analyzed - UMIGO treatment, alternate media, or no additional treatment. A clear sequence of treatments presented from pre test to post test for each treatment group is provided. Sample size estimates and expected effect sizes are well documented. Covariates are indicated and rationale for their use is explained. Control and experimental conditions are well described.

Weaknesses

Project outcomes and how they are to be measured by the randomized control design and subsequent analysis is not clear. The methods for randomizing students into treatment and control groups are not well described. It is not mentioned if pre test data is to be included as a covariate to better insure pre test equality. Technical data for off the shelf tests is not provided. Little information is provided about the use of the hand held electronic data collection devise and why it's use is preferred.

Question Status:Completed

Reviewer Score: 16