

Status: Submitted
 Last Updated: 06/30/2010 8:54 AM

Technical Review Coversheet

Applicant: EDUCATION CONNECTION -- Center for 21st Century Skills,School Services - Center for 21st Century Skills,School Services (U396C100520)

Reader #1:

	POINTS POSSIBLE	POINTS SCORED
Summary Statement		
1. Summary Statement	N/A	N/A
Selection Criteria		
1. A. Need for the Project and Quality of the Project Design (up to 25 Points)	25	23
2. C. Experience of the Eligible Applicant (up to 25 Points)	25	25
3. E. Strategy and Capacity to Further Develop and Bring to Scale (up to 5 Points)	5	5
4. F. Sustainability (up to 10 Points)	10	10
5. G. Quality of the Management Plan and Personnel (up to 10 Points)	10	5
Competitive Preference		
1. Competitive Preference 5: Innovations for Improving Early Learning Outcomes (0 or 1 Point)	1	_____
2. Competitive Preference 6: Innovations That Support College Access and Success (0 or 1 Point)	1	1
3. Competitive Preference 7: Innovations To Address the Unique Learning Needs of Students With Disabilities and Limited English Proficient Students (0 or 1 Point)	1	_____
4. Competitive Preference 8: Innovations That Serve Schools in Rural LEAs (0, 1, or 2 Points)	2	2

Technical Review Form

Development 35: 84.396C

Reader #1:

Applicant: EDUCATION CONNECTION -- Center for 21st Century Skills, School Services - Center for 21st Century Skills, School Services (U396C100520)

Summary Statement

1. Summary Statement

Selection Criteria

1. A. Need for the Project and Quality of the Project Design (up to 25 Points)

In determining the need for the project and quality of the design of the proposed project, the Secretary considers the following factors:

(1) The extent to which the proposed project represents an exceptional approach to the priorities the eligible applicant is seeking to meet (i.e., addresses a largely unmet need, particularly for high-need students, and is a practice, strategy, or program that has not already been widely adopted).

(2) The extent to which the proposed project has a clear set of goals and an explicit strategy, with the goals, objectives, and outcomes to be achieved by the proposed project clearly specified and measurable and linked to the priorities the eligible applicant is seeking to meet.

Strengths

The applicant clearly describes the ways in which the STEM21 Academy will provide a rigorous, standards based 9-12 coursework that are melded with Early College High school, Career Academy, and cyber learning strategies (p 3). The applicant provides clear data that shows the high needs population the project will reach (p 5). The applicant has provided a clear set of goals, objectives, and outcomes related to the project.

Weaknesses

The response could have been strengthened if the applicant included clear performance measures tied to the goals and objectives of the project.

Reader's Score: 23

2. C. Experience of the Eligible Applicant (up to 25 Points)

In determining the experience of the eligible applicant, the Secretary considers the following factors:

- (1) The past performance of the eligible applicant in implementing projects of the size and scope proposed by the eligible applicant.**
- (2) The extent to which an eligible applicant provides information and data demonstrating that -**
 - (a) In the case of an eligible applicant that is an LEA, the LEA has -**
 - (i) Significantly closed the achievement gaps between groups of students described in section 1111(b)(2) of the ESEA, or significantly increased student achievement for all groups of students described in such section; and**
 - (ii) Made significant improvements in other areas, such as graduation rates or increased recruitment and placement of high-quality teachers and principals, as demonstrated with meaningful data; or**
 - (b) In the case of an eligible applicant that includes a nonprofit organization, the nonprofit organization has significantly improved student achievement, attainment, or retention through its record of work with an LEA or schools.**

Strengths

The applicant has a substantial history, 38 years, working with grants, school district, and high needs populations. The applicant has the necessary past performance, CALI, to implement a project of this size (p 15-16). The applicant provides the relevant data necessary to support that it has significantly improved student achievement (Appendix H).

Weaknesses

No weaknesses

Reader's Score: 25

3. E. Strategy and Capacity to Further Develop and Bring to Scale (up to 5 Points)

In determining the quality of the strategy and capacity to further develop and bring to scale the proposed project, the Secretary considers:

(1) The number of students proposed to be reached by the proposed project, and the capacity of the eligible applicant and any other partners to reach the proposed number of students during the course of the grant period.

(2) The eligible applicant's capacity (e.g., in terms of qualified personnel, financial resources, or management capacity) to further develop and bring to scale the proposed practice, strategy, or program, or to work with others (including other partners) to ensure that the proposed practice, strategy, or program can be further developed and brought to scale, based on the findings of the proposed project.

(3) The feasibility of the proposed project to be replicated successfully, if positive results are obtained, in a variety of settings and with a variety of student populations. Evidence of this ability includes the availability of resources and expertise required for implementing the project with fidelity, and the proposed project's evidence of relative ease of use or user satisfaction.

(4) The eligible applicant's estimate of the cost of the proposed project, which includes the start-up and operating costs per student per year (including indirect costs) for reaching the total number of students proposed to be served by the project. The eligible applicant must include an estimate of the costs for the eligible applicant or others (including other partners) to reach 100,000, 250,000, and 500,000 students.

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

Strengths

The applicant provides a reasonable initial target of 960 students to be reached by the project with a reasonable end target of 67,538 students at the end of the 5 years (p 20). The applicant has the capacity to further develop and bring to scale the proposed project through its partnership with RESCS and Education Connections Center for 21st Century Skills (p 20-21). The applicant plans to provide a mentor program, train-the-trainer, which will influence replication if positive results are obtained (p 21).

Weaknesses

No weaknesses

Reader's Score: 5

4. F. Sustainability (up to 10 Points)

In determining the adequacy of resources for the proposed project, the Secretary considers the following factors:

(1) The extent to which the eligible applicant demonstrates that it has the resources, as well as the support from stakeholders (e.g., State educational agencies, teachers' unions) to operate the project beyond the length of the Development grant.

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

Strengths

The evident growth in CCC since 2002 supports the applicants claim that sustainability and future scaling is realistic (p 22).

Weaknesses

Reader's Score: 10

5. G. Quality of the Management Plan and Personnel (up to 10 Points)

In determining the quality of the management plan and personnel for the proposed project, the Secretary considers:

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

(2) The qualifications, including relevant training and experience, of the project director and key project personnel, especially in managing projects of the size and scope of the proposed project.

Strengths

The staff outlined in the management plan has the qualification to successfully implement the proposed project (p23-25).

Weaknesses

The response could have been strengthened by providing more detail regarding responsibilities, timelines, project goals and objectives, and milestones for accomplishing project tasks.

Reader's Score: 5

Competitive Preference

1. Competitive Preference 5: Innovations for Improving Early Learning Outcomes (0 or 1 Point)

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

- (a) improving young children's school readiness (including social, emotional, and cognitive readiness) so that children are prepared for success in core academic subjects (as defined in section 9101(11) of the ESEA);**
- (b) improving developmental milestones and standards and aligning them with appropriate outcome measures; and**
- (c) improving alignment, collaboration, and transitions between early learning programs that serve children from birth to age three, in preschools, and in kindergarten through third grade.**

Strengths

Weaknesses

2. Competitive Preference 6: Innovations That Support College Access and Success (0 or 1 Point)

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

- (a) address students' preparedness and expectations related to college;**
- (b) help students understand issues of college affordability and the financial aid and college application processes; and**
- (c) provide support to students from peers and knowledgeable adults.**

Strengths

The applicant clearly provides outreach and strategies that address students' preparedness and expectations related to college; help students understand issues of college affordability and the financial aid and college application processes; and provide support to students from peers and knowledgeable adults. College faculty mentor students in all areas (p 1).

Weaknesses

No Weaknesses

Reader's Score: 1

3. Competitive Preference 7: Innovations To Address the Unique Learning Needs of Students With Disabilities and Limited English Proficient Students (0 or 1 Point)

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

Strengths

Weaknesses

4. Competitive Preference 8: Innovations That Serve Schools in Rural LEAs (0, 1, or 2 Points)

We give competitive preference to applications for projects that would implement innovative practices, strategies, or programs that are designed to focus on the unique challenges of high-need students in schools within a rural LEA (as defined in this notice) and address the particular challenges faced by students in these schools. To meet this priority, applications must include practices, strategies, or programs that are designed to improve student achievement or student growth, close achievement gaps, decrease dropout rates, increase high school graduation rates, or improve teacher and principal effectiveness in one or more rural LEAs.

Strengths

The applicant provides a plan to bring STEM21 to two high schools who received limited exposure due to geographic location (p 2). The applicant also proposes to educate 7th and 8th grade studnets attending middle schools connected to these rural high schools about STEM21 to increase exposure.

Weaknesses

No Weaknesses

Reader's Score: 2

Status: Submitted

Last Updated: 06/30/2010 8:54 AM

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Status: Submitted

Last Updated: 06/29/2010 8:12 PM

Technical Review Coversheet

Applicant: EDUCATION CONNECTION -- Center for 21st Century Skills,School Services - Center for 21st Century Skills,School Services (U396C100520)

Reader #2:

	POINTS POSSIBLE	POINTS SCORED
Summary Statement		
1. Summary Statement	N/A	N/A
Selection Criteria		
1. A. Need for the Project and Quality of the Project Design (up to 25 Points)	25	23
2. C. Experience of the Eligible Applicant (up to 25 Points)	25	25
3. E. Strategy and Capacity to Further Develop and Bring to Scale (up to 5 Points)	5	4
4. F. Sustainability (up to 10 Points)	10	10
5. G. Quality of the Management Plan and Personnel (up to 10 Points)	10	9
Competitive Preference		
1. Competitive Preference 5: Innovations for Improving Early Learning Outcomes (0 or 1 Point)	1	0
2. Competitive Preference 6: Innovations That Support College Access and Success (0 or 1 Point)	1	1
3. Competitive Preference 7: Innovations To Address the Unique Learning Needs of Students With Disabilities and Limited English Proficient Students (0 or 1 Point)	1	0
4. Competitive Preference 8: Innovations That Serve	2	1

Technical Review Form

Development 35: 84.396C

Reader #2:

Applicant: EDUCATION CONNECTION -- Center for 21st Century Skills, School Services - Center for 21st Century Skills, School Services (U396C100520)

Summary Statement

1. Summary Statement

Selection Criteria

1. A. Need for the Project and Quality of the Project Design (up to 25 Points)

In determining the need for the project and quality of the design of the proposed project, the Secretary considers the following factors:

(1) The extent to which the proposed project represents an exceptional approach to the priorities the eligible applicant is seeking to meet (i.e., addresses a largely unmet need, particularly for high-need students, and is a practice, strategy, or program that has not already been widely adopted).

(2) The extent to which the proposed project has a clear set of goals and an explicit strategy, with the goals, objectives, and outcomes to be achieved by the proposed project clearly specified and measurable and linked to the priorities the eligible applicant is seeking to meet.

Strengths

The applicant presents compelling evidence for the need for the project, e.g., the low percentage of students nationwide and in CT who graduate from high school prepared to complete college-level coursework in core subjects; huge achievement gaps in the state; a declining graduation rate among high-

need students in CT.

The proposal cites research reports that point out that our nation's ability to compete economically will be connected to public schools' success in teaching STEM subjects, and that such success will be dependent upon teaching them innovatively.

This project has clear goals that are aligned completely to the requirements of Absolute Priority 3.

Most of the schools that have signed on for STEM21 participation serve large percentages of high-need students.

The STEM21 courses, developed collaboratively by high school teachers, college faculty and STEM industry leaders, incorporate information and communications technology and 21st century skills. Further, they each have a contextual focus and require students to learn while solving real world problems. Also, it seems as if this project will allow for the creation of improved formative assessments.

A web-based platform (MOODLE) has already been developed and tested for delivery of STEM courses.

The middle school component of the project is a well-conceived program that will serve large numbers of students in order to get them interested in STEM careers and prepare them to succeed in STEM21 courses when in high school.

The experiential learning aspects of the project are outstanding.

The amount of collaboration among organizations in this project, what has come before and what is ahead, is impressive.

The proposal presents a carefully planned infrastructure and plan to implement the project with a high degree of success.

The participating schools have already been selected with support from the districts' superintendents.

Weaknesses

Greater evidence of prior STEM21 success, in the form of specific data on student success in high school and college, would have made this section even stronger.

The course syllabi were disappointing in that all shared very similar goal language, only stated generally that the goals were tied to CT state standards, and did not include a map of units that would be taught throughout the year.

Reader's Score: 23

2. C. Experience of the Eligible Applicant (up to 25 Points)

In determining the experience of the eligible applicant, the Secretary considers the following factors:

- (1) The past performance of the eligible applicant in implementing projects of the size and scope proposed by the eligible applicant.**
- (2) The extent to which an eligible applicant provides information and data demonstrating that -**
 - (a) In the case of an eligible applicant that is an LEA, the LEA has -**
 - (i) Significantly closed the achievement gaps between groups of students described in section 1111(b)(2) of the ESEA, or significantly increased student achievement for all groups of students described in such section; and**
 - (ii) Made significant improvements in other areas, such as graduation rates or increased recruitment and placement of high-quality teachers and principals, as demonstrated with meaningful data; or**
 - (b) In the case of an eligible applicant that includes a nonprofit organization, the nonprofit organization has significantly improved student achievement, attainment, or retention through its record of work with an LEA or schools.**

Strengths

The lead applicant, Education Connection, is a highly trusted non-profit with an excellent track record of supporting educational improvements in CT. Since 1972, it has served as a Regional Education Service Center in the western part of the state.

CT's Education Department previously selected Education Connection as the lead trainer in creation of common formative assessments, an important aspect of this project.

The applicant's Center for 21st Century Skills has been successfully collaborating with CT schools, colleges and industry leaders by managing the statewide Connecticut Career Choices program that has been funded

through a state budget line item since 2002. As the proposal states, the "project is a natural progression" of the work the applicant has already been doing in this area.

The applicant currently manages \$11 million in federal and state grant awards.

The significant number of active partners already been collaborating successfully with the applicant have a clear sense of the project's mission and a commitment to make it succeed.

Weaknesses

Reader's Score: 25

3. E. Strategy and Capacity to Further Develop and Bring to Scale (up to 5 Points)

In determining the quality of the strategy and capacity to further develop and bring to scale the proposed project, the Secretary considers:

- (1) The number of students proposed to be reached by the proposed project, and the capacity of the eligible applicant and any other partners to reach the proposed number of students during the course of the grant period.**

- (2) The eligible applicant's capacity (e.g., in terms of qualified personnel, financial resources, or management capacity) to further develop and bring to scale the proposed practice, strategy, or program, or to work with others (including other partners) to ensure that the proposed practice, strategy, or program can be further developed and brought to scale, based on the findings of the proposed project.**

- (3) The feasibility of the proposed project to be replicated successfully, if positive results are obtained, in a variety of settings and with a variety of student populations. Evidence of this ability includes the availability of resources and expertise required for implementing the project with fidelity, and the proposed project's evidence of relative ease of use or user satisfaction.**

- (4) The eligible applicant's estimate of the cost of the proposed project, which includes the start-up and operating costs per student per year (including indirect costs) for reaching the total number of students proposed to be served by the project. The eligible applicant must include an estimate of the costs for the eligible applicant or others (including other partners) to reach 100,000, 250,000, and 500,000 students.**

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

Strengths

Professional development for STEM21 teachers is planned.

The participating schools have already piloted STEM21 courses.

The RESC Alliance will support a scale up plan. All six CT RESCs, supported through a train-the-trainer approach, work with all the districts in their regions to institute STEM21 in their high schools, if the projects results are successful.

The proposal's estimation of scale-up costs for large numbers of students takes into account the funds saved by having students enter college with college credits.

Weaknesses

The applicant should have better explained the timeline for engaging 960 students in STEM 21 academies in 12 high schools. It is not clear if each school will begin serving about 80 students each with the intent to expand each year of the project, or if the average of 80 is the number of students served over the course of the project in each school.

Reader's Score: 4

4. F. Sustainability (up to 10 Points)

In determining the adequacy of resources for the proposed project, the Secretary considers the following factors:

(1) The extent to which the eligible applicant demonstrates that it has the resources, as well as the support from stakeholders (e.g., State educational agencies, teachers' unions) to operate the project beyond the length of the Development grant.

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

Strengths

This project appears to be a natural progression of a continuum of work accomplished by a collaboration of organizations that were created by CT state statutes. The applicant's Center for 21st Century Skills continues to be funded through a line item in the state budget, even in our current economic

climate.

The leaders of the project are skilled at securing grant funding; there is reason to believe that this will continue as the project is operational.

There already appears to be a strong desire among schools to participate with the applicant's Center for 21st Century Skills, with a current waiting list of interested schools.

Weaknesses

Reader's Score: 10

5. G. Quality of the Management Plan and Personnel (up to 10 Points)

In determining the quality of the management plan and personnel for the proposed project, the Secretary considers:

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

(2) The qualifications, including relevant training and experience, of the project director and key project personnel, especially in managing projects of the size and scope of the proposed project.

Strengths

The management plan is carefully conceived and developed. It not only identifies and describes the key positions that will be created; it also identifies the personnel who will fill the positions.

Based on the proposal's descriptions and the resumes attached, all key personnel seem to be extremely qualified to manage their components of the project. Most of the personnel have expertise in science.

Each of the Co-Principal Investigators will also have another specific responsibility for project management, e.g., primary research scientist and urban LEA liaison.

The high quality and exceptional organization of the applicant's proposal inspires confidence in its ability to manage the project, if funded.

Weaknesses

Information is lacking about whom will be responsible for each aspect of the project.

Reader's Score: 9

Competitive Preference

1. Competitive Preference 5: Innovations for Improving Early Learning Outcomes (0 or 1 Point)

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

- (a) improving young children's school readiness (including social, emotional, and cognitive readiness) so that children are prepared for success in core academic subjects (as defined in section 9101(11) of the ESEA);
- (b) improving developmental milestones and standards and aligning them with appropriate outcome measures; and
- (c) improving alignment, collaboration, and transitions between early learning programs that serve children from birth to age three, in preschools, and in kindergarten through third grade.

Strengths

Weaknesses

Priority not addressed.

Reader's Score: 0

2. Competitive Preference 6: Innovations That Support College Access and Success (0 or 1 Point)

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

- (a) address students' preparedness and expectations related to college;
- (b) help students understand issues of college affordability and the financial aid and

college application processes; and
(c) provide support to students from peers and knowledgeable adults.

Strengths

The applicant provides evidence that all components of CP6 will be addressed.

Weaknesses

Reader's Score: 1

3. Competitive Preference 7: Innovations To Address the Unique Learning Needs of Students With Disabilities and Limited English Proficient Students (0 or 1 Point)

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

Strengths

Weaknesses

Priority not addressed.

Reader's Score: 0

4. Competitive Preference 8: Innovations That Serve Schools in Rural LEAs (0, 1, or 2 Points)

We give competitive preference to applications for projects that would implement innovative practices, strategies, or programs that are designed to focus on the unique challenges of high-need students in schools within a rural LEA (as defined in this notice) and address the particular challenges faced by students in these schools. To meet this priority, applications must include practices, strategies, or programs that are designed to improve student achievement or student growth, close achievement gaps, decrease dropout rates, increase high school graduation rates, or improve teacher and principal effectiveness in one or more rural LEAs.

Strengths

Two rural school districts will participate in the project.

Weaknesses

Few details are provided as to how the project will be differentiated for the needs of the rural participants.

Reader's Score: 1

Status: Submitted

Last Updated: 06/29/2010 8:12 PM

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Status: Submitted
Last Updated: 06/30/2010 10:46 AM

Technical Review Coversheet

Applicant: EDUCATION CONNECTION -- Center for 21st Century Skills,School Services - Center for 21st Century Skills,School Services (U396C100520)

Reader #3:

	POINTS POSSIBLE	POINTS SCORED
Summary Statement		
1. Summary Statement	N/A	N/A
Selection Criteria		
1. A. Need for the Project and Quality of the Project Design (up to 25 Points)	25	24
2. C. Experience of the Eligible Applicant (up to 25 Points)	25	23
3. E. Strategy and Capacity to Further Develop and Bring to Scale (up to 5 Points)	5	5
4. F. Sustainability (up to 10 Points)	10	10
5. G. Quality of the Management Plan and Personnel (up to 10 Points)	10	10
Competitive Preference		
1. Competitive Preference 5: Innovations for Improving Early Learning Outcomes (0 or 1 Point)	1	0
2. Competitive Preference 6: Innovations That Support College Access and Success (0 or 1 Point)	1	1
3. Competitive Preference 7: Innovations To Address the Unique Learning Needs of Students With Disabilities and Limited English Proficient Students (0 or 1 Point)	1	0
4. Competitive Preference 8: Innovations That Serve	2	2

Schools in Rural LEAs (0, 1, or 2 Points)

TOTAL 80

75

Technical Review Form

Development 35: 84.396C

Reader #3:

Applicant: EDUCATION CONNECTION -- Center for 21st Century Skills, School Services - Center for 21st Century Skills, School Services (U396C100520)

Summary Statement

1. Summary Statement

Selection Criteria

1. A. Need for the Project and Quality of the Project Design (up to 25 Points)

In determining the need for the project and quality of the design of the proposed project, the Secretary considers the following factors:

(1) The extent to which the proposed project represents an exceptional approach to the priorities the eligible applicant is seeking to meet (i.e., addresses a largely unmet need, particularly for high-need students, and is a practice, strategy, or program that has not already been widely adopted).

(2) The extent to which the proposed project has a clear set of goals and an explicit strategy, with the goals, objectives, and outcomes to be achieved by the proposed project clearly specified and measurable and linked to the priorities the eligible applicant is seeking to meet.

Strengths

The STEM21 project is very collaborative in nature with professional input and skill resources from 6 core agencies and additional private sector input, a key unique factor in its implementation. The applicant indicates that the course work to be used in the program has already been field-tested in

diverse high school settings with the potential to support under-represented students entry into college and careers. The program has varied performance-based assessments, a key factor in supporting students be prepared for college based on the statistics provided by the applicant (23-37% of graduating seniors not being adequately prepared to pursue college-level coursework in core subjects, including mathematics and science).

According to the data provided, Connecticut has the highest achievement gap in the nation among poor and non-poor public school 8th grade students in mathematics, science, reading and writing. By having a project focusing on science and technology, the program aims to minimize these educational disparities especially among minority students. The project builds on the success of a previously implemented program (CCC) and will use an online learning system (MOODLE) with quarterly meetings between students and teachers and ongoing presentations of projects at the annual EXPO events and in online forums. There are summer and after school program enhancements, professional development for the teachers and formative/interim/summative assessments for program success.

The applicant has clearly articulated the goals of the project to include the inclusion/ preparation of under-represented students into the college-level STEM coursework, develop/ utilize assessments to inform/ improve teaching, effectively implement the STEM21 Academy model and scaling in diverse school settings and assess the impact of middle school programs on future STEM21 participation by high-need urban and rural students.

Weaknesses

The project goals, objectives and outcomes are well articulated although it would be beneficial to candidly highlight the criteria for choosing the under-represented students the income level is implied although it is not clear if that is the only criteria.

Reader's Score: 24

2. C. Experience of the Eligible Applicant (up to 25 Points)

In determining the experience of the eligible applicant, the Secretary considers the following factors:

(1) The past performance of the eligible applicant in implementing projects of the size and scope proposed by the eligible applicant.

(2) The extent to which an eligible applicant provides information and data demonstrating that -

(a) In the case of an eligible applicant that is an LEA, the LEA has -

(i) Significantly closed the achievement gaps between groups of students described in section 1111(b)(2) of the ESEA, or significantly increased student achievement for all groups of students described in such section; and

(ii) Made significant improvements in other areas, such as graduation rates or increased recruitment and placement of high-quality teachers and principals, as demonstrated with meaningful data; or

(b) In the case of an eligible applicant that includes a nonprofit organization, the nonprofit organization has significantly improved student achievement, attainment, or retention through its record of work with an LEA or schools.

Strengths

The applicant currently manages \$11 million in state and federal grant awards and contracts with a 38-year history of collaborations with school districts to improve student performance and teaching practice. The applicant's educational specialists have provide intervention services to administrators and teachers in 9 high minority, high poverty schools with positive results in the past two years.

The applicant also has a history with the CCC Program that provided blended learning courses in diverse settings targeting 40 schools, 1,200 students (with over 40% identified as minority). Currently, all 12 participating schools have piloted at least one of the courses that the STEM21 project wants to implement with this funding. Eleven of these schools have shown some level of student achievement through the reduction in the 4-year cumulative high school drop-out rate, an increase in the number of students pursuing higher education, and/or scoring above state averages in standardized tests.

Weaknesses

It would have been beneficial to have meaningful data highlighting the student recruitment/graduation rates and the placement of teachers in the programs. The applicant was very detailed in their explanation of the positive collaborative efforts with other programs and some of the successes they have accomplished, but that did not include the data highlighting the specific contributions by EDUCATION CONNECTION.

Reader's Score: 23

3. E. Strategy and Capacity to Further Develop and Bring to Scale (up to 5 Points)

In determining the quality of the strategy and capacity to further develop and bring to scale the proposed project, the Secretary considers:

(1) The number of students proposed to be reached by the proposed project, and the capacity of the eligible applicant and any other partners to reach the proposed number of students during the course of the grant period.

(2) The eligible applicant's capacity (e.g., in terms of qualified personnel, financial resources, or management capacity) to further develop and bring to scale the proposed practice, strategy, or program, or to work with others (including other partners) to ensure that the proposed practice, strategy, or program can be further developed and brought to scale, based on the findings of the proposed project.

(3) The feasibility of the proposed project to be replicated successfully, if positive results are obtained, in a variety of settings and with a variety of student populations. Evidence of this ability includes the availability of resources and expertise required for implementing the project with fidelity, and the proposed project's evidence of relative ease of use or user satisfaction.

(4) The eligible applicant's estimate of the cost of the proposed project, which includes the start-up and operating costs per student per year (including indirect costs) for reaching the total number of students proposed to be served by the project. The eligible applicant must include an estimate of the costs for the eligible applicant or others (including other partners) to reach 100,000, 250,000, and 500,000 students.

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

Strengths

The project aims to involve all high schools in the targeted districts (67,538 enrollments) during the five-year project period. Initially, over 960 students and 60-80 teachers will be engaged. An extension of the program to include summer programs will increase the number of students involved to 263,238 (total). The applicant is actively involved with the statewide RESC Alliance, an alliance that has a 20-year history of collaborative development and implementation of educational/ technology-related instruction. The applicant has clearly articulated the scope of the program and indicates that the project will encompass summer programs, train-the-trainer approaches, and mentoring instructional staff. Additionally, the web-based learning platform, MOODLE, enables rapid dissemination because of easier installation, no costs attached and capacity for ongoing downloading of the program, a key component in aiding the replication process. The applicant also hopes to disseminate the project through the ongoing use of an online/innovation portal, sharing best practices (at the state, national and regional levels), and

print media. The costs per student over the five-year period will translate to \$1,552 and the amount leverages the tuition savings for obtaining 15 college credits at \$5,100 per student (based on \$340/credit hour).

Weaknesses

None

Reader's Score: 5

4. F. Sustainability (up to 10 Points)

In determining the adequacy of resources for the proposed project, the Secretary considers the following factors:

(1) The extent to which the eligible applicant demonstrates that it has the resources, as well as the support from stakeholders (e.g., State educational agencies, teachers' unions) to operate the project beyond the length of the Development grant.

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

Strengths

EDUCATION CONNECTION alongside with OWC and COT are created under the state statutes. The current funding for CCC (the project that STEM21 emulates) is funded as a line item in the state budget and 20% of the matching funding requirement being provided by private sources. Collaborating agencies such as CSDE and OWC funded the science course sequence and supported the model development while in-kind services provided by high schools, college faculty and industry partners for the last 8 years. Additionally, the applicant has indicated that STEM21 will have regional sustainability through the existing partnership with CSDE's collaboration via the New England Secondary School Consortium.

Additionally, the applicant indicates that STEM21 is modeled on the successful growth of the CCC sites from six to forty-one in 2010 and the technological system in use (MOODLE) will be hosted through funding by CSDE in all the 169 CT LEAs and CSDE will assist in disseminating the program through the CT High School Redesign initiative.

Weaknesses

None

Reader's Score: 10

5. G. Quality of the Management Plan and Personnel (up to 10 Points)

In determining the quality of the management plan and personnel for the proposed project, the Secretary considers:

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

(2) The qualifications, including relevant training and experience, of the project director and key project personnel, especially in managing projects of the size and scope of the proposed project.

Strengths

The proposal has included the skills and responsibilities of the project management team with most of the team members having extensive backgrounds in science, technology, curriculum development and project management. All project leaders have a successful history of collaborating in previously implemented educational initiatives. The applicant has also attached resumes highlighting some of the lead staff who have managed grant-awarded projects and the success of such initiatives. The lead project staff includes the Project Director (Principal Investigator), four Co-Principal Investigators with varied roles, Senior Project Staff, an Independent Evaluator, an Advisory Board and official implement partners. The Advisory Board in will meet quarterly with key project staff for purposes of reviewing evaluations and research findings in order to provide recommendations for project improvement.

The applicant has also attached information on the project budget, relevant timelines and the responsible project staff charged with implementing and/or performing each of the project responsibilities.

Weaknesses

None

Reader's Score: 10

Competitive Preference

1. Competitive Preference 5: Innovations for Improving Early Learning Outcomes (0 or 1 Point)

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

- (a) improving young children's school readiness (including social, emotional, and cognitive readiness) so that children are prepared for success in core academic subjects (as defined in section 9101(11) of the ESEA);**
- (b) improving developmental milestones and standards and aligning them with appropriate outcome measures; and**
- (c) improving alignment, collaboration, and transitions between early learning programs that serve children from birth to age three, in preschools, and in kindergarten through third grade.**

Strengths

None

Weaknesses

This project does not target young children below the third grade.

Reader's Score: 0

2. Competitive Preference 6: Innovations That Support College Access and Success (0 or 1 Point)

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

- (a) address students' preparedness and expectations related to college;**
- (b) help students understand issues of college affordability and the financial aid and college application processes; and**
- (c) provide support to students from peers and knowledgeable adults.**

Strengths

The proposed STEM21 Academy model is a standards-based model targeting 9th to 12th grade students with math, science and technology courses delivered in an interactive blended learning manner and students are eligible to obtain up to 15 college credits that are equivalent to the CT state colleges and universities. The credits are obtained at no cost to the students

and the standardized college entrance exams are part of the assessment strategy.

According to the applicant, the students participating in STEM21 must pass the College Board Accuplacer exam (used by CT state colleges and universities to determine student readiness for credit-bearing coursework) and students will receive tutoring to enable them pass the exams. Additionally, the College an Work Readiness Assessment will also be used to assess college readiness.

The applicant also indicates that a new content module namely College Ready 21 will be developed in order to address college selection and application process for participants.

Additionally, the project will include mentoring of students on college pathways, financial aid and scholarships with additional integrated company tours, job shadowing and internships to increase the competitiveness of high-need students? college applications.

Weaknesses

None

Reader's Score: 1

3. Competitive Preference 7: Innovations To Address the Unique Learning Needs of Students With Disabilities and Limited English Proficient Students (0 or 1 Point)

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

Strengths

None

Weaknesses

Although there are some minimal statistics in the proposal about low income Latino and African American students, there is no clear indication that the STEM21 project will target students with limited English proficiency and neither has the proposal addressed any specific strategies for students with disabilities.

Reader's Score: 0

4. Competitive Preference 8: Innovations That Serve Schools in Rural LEAs (0, 1, or 2 Points)

We give competitive preference to applications for projects that would implement innovative practices, strategies, or programs that are designed to focus on the unique challenges of high-need students in schools within a rural LEA (as defined in this notice) and address the particular challenges faced by students in these schools. To meet this priority, applications must include practices, strategies, or programs that are designed to improve student achievement or student growth, close achievement gaps, decrease dropout rates, increase high school graduation rates, or improve teacher and principal effectiveness in one or more rural LEAs.

Strengths

The applicant identifies high-need middle and high school students in two rural high schools. Region 1 High School services six rural municipalities in the remote northwestern corner of CT and it has a four year cumulative school drop-out rate that is nearly twice the state average. Drury High School's drop-out rate exceeds the state average with 26% of students having family incomes below the poverty level. Students in both schools are geographically isolated from STEM-related industries and programs, and the applicant wants to engage them through after school and summer STEM21 Academy preparatory programs in partnership with a local non-profit organization (CT Pre-Engineering Program). Additionally, the applicant states that the students and their parents will receive language and literacy-appropriate program information and facilitated enrollment to the program.

Weaknesses

None

Reader's Score: 2

Status: Submitted

Last Updated: 06/30/2010 10:46 AM

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Status: Submitted

Last Updated: 07/23/2010 2:12 PM

Technical Review Coversheet

Applicant: EDUCATION CONNECTION -- Center for 21st Century Skills,School Services - Center for 21st Century Skills,School Services (U396D100520)

Reader #1:

	POINTS POSSIBLE	POINTS SCORED
Evaluation Criteria		
1. B. Strength of Research, Significance of Effect, and Magnitude of Effect (up to 10 Points)	10	10
2. D. Quality of the Project Evaluation (up to 15 Points)	15	15
<i>SUB TOTAL</i>	25	25
TOTAL	25	25

Technical Review Form

Development Tier 2 Panel 03: 84.396D

Reader #1:

Applicant: EDUCATION CONNECTION -- Center for 21st Century Skills,School Services - Center for 21st Century Skills,School Services (U396D100520)

1. B. Strength of Research, Significance of Effect, and Magnitude of Effect (up to 10 Points)

The Secretary considers the strength of the existing research evidence, including reported practice, theoretical considerations, and the significance and magnitude of

any effects reported in prior research, on whether the proposed project will improve student achievement or student growth, close achievement gaps, decrease dropout rates, increase high school graduation rates, or increase college enrollment and completion rates. Eligible applicants may also demonstrate success through an intermediate variable that is strongly correlated with improving these outcomes, such as teacher or principal effectiveness.

In determining the strength of the existing research evidence, the Secretary considers the following factors:

(1) The extent to which the eligible applicant demonstrates that there are research-based findings or reasonable hypotheses that support the proposed project, including related research in education and other sectors.

(2) The extent to which the proposed project has been attempted previously, albeit on a limited scale or in a limited setting, with promising results that suggest that more formal and systematic study is warranted.

(3) The extent to which the eligible applicant demonstrates that, if funded, the proposed project likely will have a positive impact, as measured by the importance or magnitude of the effect, on improving student achievement or student growth, closing achievement gaps, decreasing dropout rates, increasing high school graduation rates, or increasing college enrollment and completion rates.

Strengths

The research cited is relevant and supports the significance of possible effects of the proposed program to be implemented. The research that the program is based upon has both internal and external validity. The Appendix H includes results of previous studies of the project, as well as, results of a pilot study.

Weaknesses

No weaknesses were noted.

Reader's Score: 10

2. D. Quality of the Project Evaluation (up to 15 Points)

In determining the quality of the evaluation, the Secretary considers the following factors.

(1) The extent to which the methods of evaluation are appropriate to the size and scope of the proposed project.

(2) The extent to which the methods of evaluation will provide high-quality

implementation data and performance feedback, and permit periodic assessment of progress toward achieving intended outcomes.

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

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

Strengths

The Evaluation Plan is thorough and includes a quasi-experimental design that addresses all foreseeable issues that may occur during the implementation of the proposed program. There is evidence that the data collected will result in usable reports to determine continued implementation of success. The timeline on page 12 gives overall plan for all years. The evaluator is independent. The budget is clear for the evaluation costs; therefore, it is clear that the scope of the project can be fulfilled. The evaluation models are well described and could be replicated.

Weaknesses

No weaknesses were noted.

Reader's Score: 15

Status: Submitted

Last Updated: 07/23/2010 2:12 PM

[show names](#)

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Status: Submitted
Last Updated: 07/26/2010 10:14 AM

Technical Review Coversheet

Applicant: EDUCATION CONNECTION -- Center for 21st Century Skills,School Services - Center for 21st Century Skills,School Services (U396D100520)

Reader #2:

	POINTS POSSIBLE	POINTS SCORED
Evaluation Criteria		
1. B. Strength of Research, Significance of Effect, and Magnitude of Effect (up to 10 Points)	10	9
2. D. Quality of the Project Evaluation (up to 15 Points)	15	15
<i>SUB TOTAL</i>	25	24
TOTAL	25	24

Technical Review Form

Development Tier 2 Panel 03: 84.396D

Reader #2:

Applicant: EDUCATION CONNECTION -- Center for 21st Century Skills,School Services - Center for 21st Century Skills,School Services (U396D100520)

1. B. Strength of Research, Significance of Effect, and Magnitude of Effect (up to 10 Points)

The Secretary considers the strength of the existing research evidence, including reported practice, theoretical considerations, and the significance and magnitude of

any effects reported in prior research, on whether the proposed project will improve student achievement or student growth, close achievement gaps, decrease dropout rates, increase high school graduation rates, or increase college enrollment and completion rates. Eligible applicants may also demonstrate success through an intermediate variable that is strongly correlated with improving these outcomes, such as teacher or principal effectiveness.

In determining the strength of the existing research evidence, the Secretary considers the following factors:

(1) The extent to which the eligible applicant demonstrates that there are research-based findings or reasonable hypotheses that support the proposed project, including related research in education and other sectors.

(2) The extent to which the proposed project has been attempted previously, albeit on a limited scale or in a limited setting, with promising results that suggest that more formal and systematic study is warranted.

(3) The extent to which the eligible applicant demonstrates that, if funded, the proposed project likely will have a positive impact, as measured by the importance or magnitude of the effect, on improving student achievement or student growth, closing achievement gaps, decreasing dropout rates, increasing high school graduation rates, or increasing college enrollment and completion rates.

Strengths

The applicant provided evidence, including evaluation executive summaries and lesson plans of previous positive outcomes of STEM 21 academy for two subject areas.

The applicant provides promising research on early college and career academies which help to supplement the work that they propose.

The applicant provides evidence for the success of STEM 21 for students who are of priority populations of interest for this grant.

The applicant provides reports of the success for an 8 year project (CCC), upon which the proposed project will build.

Weaknesses

The evaluation results that the applicant provides as evidence in support of STEM 21 does not provided empirical evidence for increases in student achievement.

Reader's Score: 9

2. D. Quality of the Project Evaluation (up to 15 Points)

In determining the quality of the evaluation, the Secretary considers the following factors.

(1) The extent to which the methods of evaluation are appropriate to the size and scope of the proposed project.

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

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

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

Strengths

The applicant proposes a comprehensive/mixed-method evaluation which will allow for analyses of: relationships between program inputs and student outcomes, accurate implementation and implementation effectiveness. Moreover, appropriate attention is given to analyses as three lead evaluators will have responsibility for the different aspects of evaluation.

The study will include middle and high school students to become involved, thus the size and scope of the proposed project will allow for evaluation of latent growth models, which the applicant proposes to perform.

The applicant provided a logic model with a timeline of activities that will permit periodic assessments of progress and evaluation results that can be produced within the grant period timeline.

The applicant provides information about the statistical analyses that will be conducted.

The applicant provided a detailed budgetary report of resources that will go to evaluation activities.

There will be an evaluation of 4 STEM curricula.

Weaknesses

None found.

Reader's Score: 15

Status: Submitted

Last Updated: 07/26/2010 10:14 AM