

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

Status: Submitted

Last Updated: 08/23/2022 06:55 AM

## Technical Review Coversheet

Applicant: The College Bridge, Inc. (S411C220047)

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

	Points Possible	Points Scored
<b>Questions</b>		
<b>Selection Criteria</b>		
<b>Significance</b>		
1. Significance	20	20
<b>Quality of Project Design</b>		
1. Project Design	30	30
<b>Quality of Project Personnel</b>		
1. Project Personnel	10	7
<b>Quality of the Management Plan</b>		
1. Management Plan	10	9
<b>Quality of the Project Evaluation</b>		
1. Project Evaluation	30	0
<b>Sub Total</b>	100	66
<b>Priority Questions</b>		
<b>Competitive Preference Priority</b>		
<b>Competitive Preference Priority 1</b>		
1. Promoting Equity	3	3
<b>Competitive Preference Priority 2</b>		
1. COVID-19	3	3
<b>Sub Total</b>	6	6
<b>Total</b>	106	72

# Technical Review Form

Panel #10 - EIR Early Phase - 10: 84.411C

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

Applicant: The College Bridge, Inc. (S411C220047)

## Questions

### Selection Criteria - Significance

1. The Secretary considers the significance of the proposed project. In determining the significance of the proposed project, the Secretary considers:

Reader's Score: 20

#### Sub

1. The extent to which the proposed project involves the development or demonstration of promising new strategies that build on, or are alternatives to, existing strategies. (20 points)

#### Strengths:

The applicant has submitted an innovative and promising application for a program that provides dual enrollment college preparatory math coursework to 11th and 12th grade students. The proposal's importance lies in providing services to the target population that comprises nearly 8,000 low-income, Black, or Hispanic 11th or 12th grade students in rural high schools. These students are underrepresented in enrollment in advanced math course work or lack access to them at their traditional school building. The proposed program demonstrates potential to fill a gap in advanced mathematics instruction in environments that, more often than not, lack the resources and district/state financial, administrative, and instructional support to offer dual enrollment coursework to students capable of succeeding in STEM coursework. Additionally, the proposed project builds on the results and findings of previous iterations of the program. There is cited literature, Cevallos et al., 2022. on the relative success of the applicant's approach. Also, twenty percent of 1,889 Math Bridge alumni ultimately pursued a STEM major in college after experiencing a Math Bridge Statistics course. Additionally, Math Bridge students' have college persistence rates that outperform the national averages. These previous successes demonstrate promise that the project will lead to new promising new strategies, which makes the proposed project significant.

#### Weaknesses:

No weaknesses identified

Reader's Score: 20

### Selection Criteria - Quality of Project Design

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

**Reader's Score: 30**

**Sub**

- 1. (1) The extent to which there is a conceptual framework underlying the proposed research or demonstration activities and the quality of that framework. (10 points)**

**Strengths:**

The proposed project design is robust and solidly founded on theoretical and experiential research. The applicant cites existing literature on similar enrollment programs and their effectiveness in closing achievement gaps. Additionally, the proposed project is grounded upon a theoretical framework that articulates a rationale that there is a disconnect between students' academic preparation and mindsets for high school success and those required for success in postsecondary education. This is further complicated by the fact that high schools frequently do not use a standard method or tool that adequately indicates a student's preparedness for postsecondary education. The proposed project attempts to overcome these incongruences by simultaneously having high school teachers and college instructors collaborate on interventions to improve student performance and college readiness. The plan's curricular alignment between the high schools and postsecondary education requirements strengthens the program design. The applicant offers a comprehensive logic model that contains all of the critical elements necessary that prompt confidence in the applicant's vision of how the proposed project would operate and lead to the proposed outcomes.

**Weaknesses:**

No weaknesses are identified.

**Reader's Score: 10**

- 2. (2) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable. (5 points)**

**Strengths:**

The applicant has three student-level goals, including closing the equity and achievement gaps in mathematics, improving rates of underrepresented students pursuing STEM majors, and completing college transition plans. Additionally, the proposal outlines two professional development goals to create sustainable models for intersegmental math and two goals focused on sustainability and scaling of the project beyond the grant period. The applicant has provided a cogent and complete listing of its objectives for the proposed project. As presented, the objectives are measurable with appropriate data sources and activities for securing both quantitative and qualitative data to demonstrate program outcomes.

**Weaknesses:**

No weaknesses are identified.

**Reader's Score: 5**

- 3. (3) The extent to which the design of the proposed project is appropriate to, and will successfully address, the needs of the target population or other identified needs. (15 points)**

**Strengths:**

The applicant has both a strong identification and a comprehensive recruitment plan in place to ensure that targeted school districts and their students have the opportunity for participation in the proposed program. In total, the project will recruit 7764 students that would not traditionally have access to dual enrollment courses such as those

**Sub**

proposed. The proposal describes that participating students must be enrolled in a high school and meet GPA eligibility criteria, which is only necessary to determine which Math Bridge pathway students will follow. Additionally, the project plans to support students with lower grade point averages with greater support to facilitate the achievement of proposed outcomes.

**Weaknesses:**

No weaknesses are identified.

**Reader's Score: 15**

**Selection Criteria - Quality of Project Personnel**

**1. The Secretary considers the quality of the personnel who will carry out the proposed project. In determining the quality of project personnel, the Secretary considers:**

**Reader's Score: 7**

**Sub**

**1. 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. In addition, the Secretary considers the qualifications, including relevant training and experience, of key project personnel. (10 points)**

**Strengths:**

The applicant has identified individuals to fill the roles of the key personnel and some of the support personnel. The proposal describes that these individuals will have advanced or terminal degrees in a STEM-related field or education (or similar field) to align with the primary content of the project. Additionally, these individuals will have sufficient experiential backgrounds to direct the activities outlined in the program correctly. The applicant makes a non-discriminatory statement regarding recruiting and hiring high school and college instructors for the program, which demonstrates a potential to employ members of traditionally underrepresented groups.

**Weaknesses:**

Weaknesses: There is no reference to the specific qualifications that key and support personnel must have to be hired by for employment with the project. Additionally, although the applicant seeks to formulate teams representing the students served in the project, there is no concrete plan to ensure that those employed in key upper-level or executive positions with the project will have backgrounds similar to the student population. The lack of specific strategies for hiring project leadership with this consideration is a weakness.

**Reader's Score: 7**

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

1. The Secretary considers the quality of the management plan for the proposed project. In determining the quality of the management plan, the Secretary considers:

Reader's Score: 9

Sub

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. (10 points)

**Strengths:**

The applicant offers a suitable timeline with projected activities and milestones necessary for the proposed project's implementation. The program personnel has delineated duties described in the proposal. The roles and responsibilities of program partners are transparent and align with the goals of the project. The applicant supplies a budgetary narrative outlining reasonable use of requested funding, and specifically details a plan to receive 26% in matching funds from partner colleges. The matching funds is a strength and demonstrates a clear commitment of partners to the success of the project.

**Weaknesses:**

The management plan does not reflect an intention to provide differentiated services and activities as it progresses through the grant cycle. This is a weakness because it is not clear if the plan has mechanisms for continuous feedback to improve over the course of the award period. This lack of clarity is compounded by uncertainty about how the project plans to manage unintended consequences and what protocols will be followed if modifications to the project plan are necessary.

Reader's Score: 9

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

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

Reader's Score: 0

Sub

1. (1) The extent to which the methods of evaluation will, if well implemented, produce evidence about the project's effectiveness that would meet the What Works Clearinghouse standards with or without reservations as described in the What Works Clearinghouse Handbook (as defined in this notice). (20 points)

**Strengths:**

x

Sub

**Weaknesses:**

x

**Reader's Score: 0**

2. (2) The extent to which the methods of evaluation will provide performance feedback and permit periodic assessment of progress toward achieving intended outcomes. (5 points)

**Strengths:**

x

**Weaknesses:**

x

**Reader's Score: 0**

3. (3) The extent to which the evaluation plan clearly articulates the key project components, mediators, and outcomes, as well as a measurable threshold for acceptable implementation. (5 points)

**Strengths:**

x

**Weaknesses:**

x

**Reader's Score: 0**

### Priority Questions

#### Competitive Preference Priority - Competitive Preference Priority 1

##### 1. Competitive Preference Priority 1:

**Promoting Equity in Student Access to Educational Resources and Opportunities (up to 3 points).**

Projects designed to promote educational equity and adequacy in resources and opportunity for underserved students in middle school or high school that examine the sources of inequity and inadequacy and implement responses, including rigorous, engaging, and well-rounded (e.g., that include music and the arts) approaches to learning that are inclusive with regard to race, ethnicity, culture, language, and disability status and prepare students for college, career, and civic life, including one or more of the following:

- (a) Student-centered learning models that may leverage technology to address learner variability (e.g., universal design for learning (as defined in this notice), K–12 competency-based education (as defined in this notice), project-based learning, or hybrid/blended learning) and provide high-quality learning content, applications, or tools.
- (b) Middle school courses or projects that prepare students to participate in advanced coursework in high school.
- (c) Advanced courses and programs, including dual enrollment and early college programs.
- (d) Project-based and experiential learning, including service and work-based learning.
- (e) High-quality career and technical education courses, pathways, and industry-recognized credentials that are integrated into the curriculum.

**Strengths:**

The applicant's proposed project has fulfilled the requirements of competitive preference priority 1 under sub-criterion c. The proposed project is a dual enrollment program designed to provide equitable access to rigorous college-level math courses for 11th and 12th grade high school students who otherwise lack such access due to under-preparation or a lack of availability. The attention to access to dual enrollment courses supports improvements in educational equity for the target population.

**Weaknesses:**

No weaknesses are identified.

**Reader's Score: 3**

**Competitive Preference Priority - Competitive Preference Priority 2****1. Competitive Preference Priority 2:****Addressing the Impact of COVID-19 on Students, Educators, and Faculty (up to 3 points).**

**Projects that are designed to address the impacts of the COVID–19 pandemic, including impacts that extend beyond the duration of the pandemic itself, on the students most impacted by the pandemic, with a focus on underserved students and the educators who serve them through:**

**(a) conducting community asset-mapping and needs assessments that may include an assessment of the extent to which students, including subgroups of students, have become disengaged from learning, including students not participating in in-person or remote instruction, and specific strategies for reengaging and supporting students and their families; and**

**(b) using evidence-based instructional approaches and supports, such as professional development, coaching, ongoing support for educators, high quality tutoring, expanded access to rigorous coursework and content across K–12, and expanded learning time to accelerate learning for students in ways that ensure all students have the opportunity to successfully meet challenging academic content standards without contributing to tracking or remedial courses.**

**Strengths:**

The applicant has fulfilled the requirements of competitive preference priority 2. The program plan calls for math instruction for students in the 11th and 12th grades who were negatively impacted by COVID-19 during their 9th and 10th grade years. Additionally, the program design calls for an online component. This approach will allow math instruction and intervention to be delivered electronically, mitigating the need to be present physically in school, which satisfies competitive preference priority a. The dual enrollment approach attenuates the need for students to enroll in remedial math coursework at the postsecondary level, which satisfies priority b. These components have the potential to address the impacts of COVID-19 for the target population.

**Weaknesses:**

No weaknesses are identified.



**Reader's Score:** 3

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**Status:** Submitted

**Last Updated:** 08/23/2022 06:55 AM

Status: Submitted

Last Updated: 08/22/2022 10:59 PM

## Technical Review Coversheet

Applicant: The College Bridge, Inc. (S411C220047)

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

	Points Possible	Points Scored
<b>Questions</b>		
<b>Selection Criteria</b>		
<b>Significance</b>		
1. Significance	20	20
<b>Quality of Project Design</b>		
1. Project Design	30	30
<b>Quality of Project Personnel</b>		
1. Project Personnel	10	8
<b>Quality of the Management Plan</b>		
1. Management Plan	10	9
<b>Quality of the Project Evaluation</b>		
1. Project Evaluation	30	0
<b>Sub Total</b>	100	67
<b>Priority Questions</b>		
<b>Competitive Preference Priority</b>		
<b>Competitive Preference Priority 1</b>		
1. Promoting Equity	3	3
<b>Competitive Preference Priority 2</b>		
1. COVID-19	3	3
<b>Sub Total</b>	6	6
<b>Total</b>	106	73

# Technical Review Form

Panel #10 - EIR Early Phase - 10: 84.411C

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

Applicant: The College Bridge, Inc. (S411C220047)

## Questions

### Selection Criteria - Significance

1. The Secretary considers the significance of the proposed project. In determining the significance of the proposed project, the Secretary considers:

Reader's Score: 20

#### Sub

1. The extent to which the proposed project involves the development or demonstration of promising new strategies that build on, or are alternatives to, existing strategies. (20 points)

#### Strengths:

The proposed project provides strong evidence of building upon multiple instances of prior work. These prior projects include a dissertation study to provide high school students access to remedial college courses, a subsequent pilot project with CSULA, and two additional phases of the pilot project focused on STEM and mathematics. The proposal describes the prior work in depth and the ways in which each subsequent phase, including the current proposal, build upon the previous to improve implementation and outcomes for students. The proposal reports successful results from the prior projects, which suggests potential for the project to achieve the desired results to demonstrate promising new strategies.

#### Weaknesses:

No weaknesses are noted.

Reader's Score: 20

### Selection Criteria - Quality of Project Design

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

Reader's Score: 30

#### Sub

1. (1) The extent to which there is a conceptual framework underlying the proposed research or demonstration activities and the quality of that framework. (10 points)

**Sub**

**Strengths:**

The theoretical framework for the project is detailed and provides a clear basis of existing research for the project (p. e30). The activities and supports for students are well-supported by research, and the combination of approaches is promising to achieve the intended outcomes. The proposed activities relate to the theoretical framework by providing both access and support for students and instructors for dual enrollment coursework. The logic model (p. e101) included in the proposal is a strength because it connects the research base and theoretical framework to the inputs, activities, outputs, and outcomes. This rationale demonstrates the proposal's rigorous design.

**Weaknesses:**

No weaknesses are noted.

**Reader's Score: 10**

**2. (2) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable. (5 points)**

**Strengths:**

The goals of the project are clearly linked to objectives and outcomes and each of those factors has associated metrics (p. e34). For example, the proposal describes the goal of utilizing dual enrollment as a strategy to close equity and achievement gaps. One associated objective is to maintain achievement rates that are similar across minority subgroups, and this will be measured by pass rates by subgroup and survey data. The proposed metrics are measurable and are clearly aligned to the objectives and goals of the project, making this a strength of the proposal.

**Weaknesses:**

No weaknesses are noted.

**Reader's Score: 5**

**3. (3) The extent to which the design of the proposed project is appropriate to, and will successfully address, the needs of the target population or other identified needs. (15 points)**

**Strengths:**

The target population is high school students who are underrepresented and underachieving in college mathematics courses or students who lack access to rigorous high school mathematics courses including low-income, Black, and/or Hispanic students. To reach this target population, the proposal has identified specific high schools that serve these populations and are also located within the service areas of the community college partners. The application addresses the specific needs of this target population including access to and sustained persistence in rigorous mathematics. The alignment between the selected locations, the target population, and the proposed activities indicates strong potential for the project's success to meet the needs of the target population.

**Weaknesses:**

No weaknesses are noted.

**Reader's Score: 15**

**Selection Criteria - Quality of Project Personnel**

1. The Secretary considers the quality of the personnel who will carry out the proposed project. In determining the quality of project personnel, the Secretary considers:

Reader's Score: 8

Sub

1. 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. In addition, the Secretary considers the qualifications, including relevant training and experience, of key project personnel. (10 points)

**Strengths:**

The project personnel have the appropriate qualifications for the project and for their roles. The project lead has over a decade of experience in the specific project area of mathematics dual enrollment research/practice. This is a strength because it demonstrates the project has both research and implementation expertise. The proposal states that instructors will be recruited from diverse groups (p. e8). The quality of project personnel and the intent to form diverse teams make this a strength of the proposal and increases the likelihood the project will achieve the proposed outcomes.

**Weaknesses:**

The proposal does not address the encouragement of applications for employment for key personnel from underrepresented groups. This is a weakness because it does not represent a clear set of strategies to include members of groups that have been traditionally underrepresented in the project team personnel to represent for diverse expertise similar to the target population.

Reader's Score: 8

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

1. The Secretary considers the quality of the management plan for the proposed project. In determining the quality of the management plan, the Secretary considers:

Reader's Score: 9

Sub

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. (10 points)

**Strengths:**

The responsibilities of each partner are clearly delineated (p. e36). Also, the project lead has extensive experience in the project activities. The management plan (p. e35) includes reasonable dates with sufficient preparation time to meet each milestone. Timelines and dates are included in separate tables across multiple sections of the proposal, including the evaluation timeline (p. e45). The level of detail in the management plan indicates potential for the project to achieve its objectives on time and within budget.

Sub

**Weaknesses:**

It is not clear how the project will evolve over the three school years, as the proposal states that the activities of the management plan (p. e35) repeats three times. However, the proposal does not link these activities to the evaluation timeline (p. e45) or the description of how the number of students served and type of program (e.g., BSTEM+ vs BSTEM) changes per year (p. e32). The lack of clarity is a weakness because it is not clear that the management plan includes all of the project activities over the full five years.

**Reader's Score: 9**

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

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

**Reader's Score: 0**

Sub

1. **(1) The extent to which the methods of evaluation will, if well implemented, produce evidence about the project's effectiveness that would meet the What Works Clearinghouse standards with or without reservations as described in the What Works Clearinghouse Handbook (as defined in this notice). (20 points)**

**Strengths:**

**Weaknesses:**

**Reader's Score:**

2. **(2) The extent to which the methods of evaluation will provide performance feedback and permit periodic assessment of progress toward achieving intended outcomes. (5 points)**

**Strengths:**

**Weaknesses:**

**Reader's Score:**

3. **(3) The extent to which the evaluation plan clearly articulates the key project components, mediators, and outcomes, as well as a measurable threshold for acceptable implementation. (5 points)**

**Strengths:**

Sub

**Weaknesses:**

**Reader's Score:**

**Priority Questions**

**Competitive Preference Priority - Competitive Preference Priority 1**

**1. Competitive Preference Priority 1:**

**Promoting Equity in Student Access to Educational Resources and Opportunities (up to 3 points).**

Projects designed to promote educational equity and adequacy in resources and opportunity for underserved students in middle school or high school that examine the sources of inequity and inadequacy and implement responses, including rigorous, engaging, and well-rounded (e.g., that include music and the arts) approaches to learning that are inclusive with regard to race, ethnicity, culture, language, and disability status and prepare students for college, career, and civic life, including one or more of the following:

- (a) Student-centered learning models that may leverage technology to address learner variability (e.g., universal design for learning (as defined in this notice), K–12 competency-based education (as defined in this notice), project-based learning, or hybrid/blended learning) and provide high-quality learning content, applications, or tools.
- (b) Middle school courses or projects that prepare students to participate in advanced coursework in high school.
- (c) Advanced courses and programs, including dual enrollment and early college programs.
- (d) Project-based and experiential learning, including service and work-based learning.
- (e) High-quality career and technical education courses, pathways, and industry-recognized credentials that are integrated into the curriculum.

**Strengths:**

This project focuses on part c of the competitive preference priority by providing rigorous, dual-enrollment college-level mathematics courses to low-income, Black, or Hispanic students in rural high schools. The student-focused goals of the project are to close mathematics achievement gaps, increase underrepresented students in STEM majors, and student completion of College Transition Plans. These three goals have the potential to promote educational equity with the students served.

**Weaknesses:**

No weaknesses are noted.

**Reader's Score: 3**

**Competitive Preference Priority - Competitive Preference Priority 2**

**1. Competitive Preference Priority 2:**

**Addressing the Impact of COVID-19 on Students, Educators, and Faculty (up to 3 points).**

Projects that are designed to address the impacts of the COVID–19 pandemic, including impacts that extend beyond the duration of the pandemic itself, on the students most impacted by the pandemic, with a focus on underserved students and the educators who serve them through:

- (a) conducting community asset-mapping and needs assessments that may include an

assessment of the extent to which students, including subgroups of students, have become disengaged from learning, including students not participating in in-person or remote instruction, and specific strategies for reengaging and supporting students and their families; and

(b) using evidence-based instructional approaches and supports, such as professional development, coaching, ongoing support for educators, high quality tutoring, expanded access to rigorous coursework and content across K–12, and expanded learning time to accelerate learning for students in ways that ensure all students have the opportunity to successfully meet challenging academic content standards without contributing to tracking or remedial courses.

**Strengths:**

The proposal addresses this competitive priority by having math faculty engage in team grading and determine content interventions. The proposal states that the faculty will apply the knowledge beyond this project. The proposal has conducted asset-mapping and needs assessments for the specific communities and will select students for the intervention model based on student GPAs. These activities align with addressing the impacts of COVID-19 on the community.

**Weaknesses:**

No weaknesses are noted.

**Reader's Score:** 3

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**Status:** Submitted  
**Last Updated:** 08/22/2022 10:59 PM



Status: Submitted

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## Technical Review Coversheet

Applicant: The College Bridge, Inc. (S411C220047)

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

	Points Possible	Points Scored
<b>Questions</b>		
<b>Selection Criteria</b>		
<b>Significance</b>		
1. Significance	20	20
<b>Quality of Project Design</b>		
1. Project Design	30	29
<b>Quality of Project Personnel</b>		
1. Project Personnel	10	8
<b>Quality of the Management Plan</b>		
1. Management Plan	10	9
<b>Quality of the Project Evaluation</b>		
1. Project Evaluation	30	0
<b>Sub Total</b>	100	66
<b>Priority Questions</b>		
<b>Competitive Preference Priority</b>		
<b>Competitive Preference Priority 1</b>		
1. Promoting Equity	3	3
<b>Competitive Preference Priority 2</b>		
1. COVID-19	3	3
<b>Sub Total</b>	6	6
<b>Total</b>	106	72

# Technical Review Form

Panel #10 - EIR Early Phase - 10: 84.411C

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

Applicant: The College Bridge, Inc. (S411C220047)

## Questions

### Selection Criteria - Significance

1. The Secretary considers the significance of the proposed project. In determining the significance of the proposed project, the Secretary considers:

Reader's Score: 20

#### Sub

1. The extent to which the proposed project involves the development or demonstration of promising new strategies that build on, or are alternatives to, existing strategies. (20 points)

#### Strengths:

The project is based on the evolution of a series of longitudinal research/practice projects that College Bridge has successfully developed, implemented, and evaluated since 2013. (e21) In the new phase being proposed, the project requests to solidify a California Community College (CCC) model of dual enrollment Math Bridge for scale, and develop, implement, and evaluate an asynchronous CT Bridge model facilitated by dual enrollment Bridge teachers. (e29)

Another strength of the project is the provision of equitable access to rigorous college-level math courses for high school students who otherwise lack access due to under-preparation or a lack of availability. The project seeks to support students who are deemed underprepared for college math by providing access to college-level dual-enrollment math courses with built-in systems of support. (e21) All of these strengths contribute to the project's demonstration of promising new strategies that build on, or are alternatives to, existing strategies.

#### Weaknesses:

No weakness were noted.

Reader's Score: 20

### Selection Criteria - Quality of Project Design

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

**Reader's Score: 29**

**Sub**

- 1. (1) The extent to which there is a conceptual framework underlying the proposed research or demonstration activities and the quality of that framework. (10 points)**

**Strengths:**

Strengths of the proposed includes the two theoretical frameworks such as the Academic Disjuncture Theory and College Readiness Indicator Systems (CRIS))that are the foundation of the project design. This creates a seamless K-16 educational pipeline as the key to progress for students between educational institutions. Another strength is the fusing of K-12 and higher education in an effort bridge curriculum, assessments, financial systems, human resources, and student data.

Additionally, the inclusion of two stretch models, (Stats+ and BSTEM+), with built-in intervention, and two traditional models, (Stats and BSTEM), without intervention to provide students with various needs to have access to a college-level math class and an opportunity to earn transferrable college-math credit also contributes to the likelihood the project will achieve the intended outcomes. (e30)

**Weaknesses:**

No weakness were noted.

**Reader's Score: 10**

- 2. (2) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable. (5 points)**

**Strengths:**

The goals, objectives, and outcomes to be achieved by the project are clearly specified. The goals a plan to develop and maintain strategic high school/college partnerships to address educational inequities and foster college success, to provide an intersegmental Professional Development program to foster continuous improvement, to utilize dual enrollment as a strategy to close equity and achievement gaps, develop a sustainability plan, and to scale Dual Enrollment (DE) Math Bridge. (e32) The proposal demonstrates a plan that would allow them to measure the majority of their goals and objectives.

**Weaknesses:**

Although the goals and objectives are specific, the proposed criteria that measure the progress toward the accomplishment of the goal could be more specific. For example, the objective 1.2 states a plan to maintain robust communities of practice between partners with data sharing for continuous improvement as measured by the number of sessions. However, the proposal does not describe a clear target to indicate the expected outcome. The lack of an exact number or an estimate of the number of sessions is a weakness because it is not clear what the project will use to demonstrate progress. (e34)

**Reader's Score: 4**

- 3. (3) The extent to which the design of the proposed project is appropriate to, and will successfully address, the needs of the target population or other identified needs. (15 points)**

**Strengths:**

The strength of the project is that it will serve low-income, Black, or Hispanic high school students, which are populations that are both underrepresented and underachieving in college-level math classes. Additionally, the project plans to serve students in rural high schools that lack access to rigorous math courses. The project will include six California Community College (CCC) partners located in California's rural Central Valley and 21 high schools in those CCC's service areas which will impact approximately 4,000 high school students. The targeted

**Sub**

population is nearly 8,000 students which demonstrates a significant scope and opportunity to serve the target population. (e17)

The project also plans to support students with access to a college-level math class and an opportunity to earn transferrable college-math credit. (e31) Another strength of the the project is that it impacts administrators, counselors, and teachers as they learn to align programs and advising to the college’s math placement metrics to improve student outcomes in the target population. (e22)

**Weaknesses:**

No weakness were noted.

**Reader's Score: 15**

**Selection Criteria - Quality of Project Personnel**

**1. The Secretary considers the quality of the personnel who will carry out the proposed project. In determining the quality of project personnel, the Secretary considers:**

**Reader's Score: 8**

**Sub**

**1. 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. In addition, the Secretary considers the qualifications, including relevant training and experience, of key project personnel. (10 points)**

**Strengths:**

The project identifies key personnel and provides a resume for each position. The applicant offers relevant training and experience that demonstrates alignment of expertise with the project strategies. The project indicates that the recruitment of high school and college instructors for the program will represent diverse genders, marital status, nationalities, races, religions, ethnicities, sexual orientations, socioeconomic status, disabilities, or national origins. This is to ensure project teams represent the students served in the program. (e8)

**Weaknesses:**

The project does not indicate how or if the project plans to recruit personnel for the key project leadership positions to demonstrate diversity on race, color, national origin, gender, age, or disability of its applicants. (e37) The lack of discussion on how the project team will recruit and hire diverse individuals to represent the target population is a weakness.

**Reader's Score: 8**

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

**1. The Secretary considers the quality of the management plan for the proposed project. In determining the quality of the management plan, the Secretary considers:**

**Reader's Score: 9**

**Sub**

- 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. (10 points)**

**Strengths:**

The proposal includes an adequate timeline, milestones, and identification of responsible party. These elements are incorporated into a comprehensive management plan that is a strength of the project because it demonstrates a clear plan to achieve the improvements in student learning outcomes. (e36)

**Weaknesses:**

The proposed project's timeline does not extend pass the summer of 2024. This leads to uncertainty of the activities that will take place within the next two years of the grant indicating a weakness of the project. (e35)

**Reader's Score: 9**

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

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

**Reader's Score: 0**

**Sub**

- 1. (1) The extent to which the methods of evaluation will, if well implemented, produce evidence about the project's effectiveness that would meet the What Works Clearinghouse standards with or without reservations as described in the What Works Clearinghouse Handbook (as defined in this notice). (20 points)**

**Strengths:**

**Weaknesses:**

**Reader's Score:**

- 2. (2) The extent to which the methods of evaluation will provide performance feedback and permit periodic assessment of progress toward achieving intended outcomes. (5 points)**

**Strengths:**

Sub

**Weaknesses:**

**Reader's Score:**

3. (3) The extent to which the evaluation plan clearly articulates the key project components, mediators, and outcomes, as well as a measurable threshold for acceptable implementation. (5 points)

**Strengths:**

**Weaknesses:**

**Reader's Score:**

### Priority Questions

#### Competitive Preference Priority - Competitive Preference Priority 1

##### 1. Competitive Preference Priority 1:

**Promoting Equity in Student Access to Educational Resources and Opportunities (up to 3 points).**

Projects designed to promote educational equity and adequacy in resources and opportunity for underserved students in middle school or high school that examine the sources of inequity and inadequacy and implement responses, including rigorous, engaging, and well-rounded (e.g., that include music and the arts) approaches to learning that are inclusive with regard to race, ethnicity, culture, language, and disability status and prepare students for college, career, and civic life, including one or more of the following:

- (a) Student-centered learning models that may leverage technology to address learner variability (e.g., universal design for learning (as defined in this notice), K–12 competency-based education (as defined in this notice), project-based learning, or hybrid/blended learning) and provide high-quality learning content, applications, or tools.
- (b) Middle school courses or projects that prepare students to participate in advanced coursework in high school.
- (c) Advanced courses and programs, including dual enrollment and early college programs.
- (d) Project-based and experiential learning, including service and work-based learning.
- (e) High-quality career and technical education courses, pathways, and industry-recognized credentials that are integrated into the curriculum.

**Strengths:**

The project plans to it provides students with equitable access to rigorous college-level math courses for high school students who otherwise lack such access due to under-preparation or a lack of availability. Students who are deemed underprepared for college math are provided access to college-level dual-enrollment math courses with built-in systems of support to improve educational equity.

**Weaknesses:**

No weakness were noted.

Reader's Score: 3

Competitive Preference Priority - Competitive Preference Priority 2

1. Competitive Preference Priority 2:

Addressing the Impact of COVID-19 on Students, Educators, and Faculty (up to 3 points).

Projects that are designed to address the impacts of the COVID–19 pandemic, including impacts that extend beyond the duration of the pandemic itself, on the students most impacted by the pandemic, with a focus on underserved students and the educators who serve them through:

(a) conducting community asset-mapping and needs assessments that may include an assessment of the extent to which students, including subgroups of students, have become disengaged from learning, including students not participating in in-person or remote instruction, and specific strategies for reengaging and supporting students and their families; and

(b) using evidence-based instructional approaches and supports, such as professional development, coaching, ongoing support for educators, high quality tutoring, expanded access to rigorous coursework and content across K–12, and expanded learning time to accelerate learning for students in ways that ensure all students have the opportunity to successfully meet challenging academic content standards without contributing to tracking or remedial courses.

**Strengths:**

The project's deep analysis of student assessment outcomes resulting from the team grading strategy will allow math faculty from the high schools and colleges to determine what, if any, content interventions are needed and apply this knowledge beyond the project. This approach supports the project to address the needs of the students in response to COVID-19.

**Weaknesses:**

: No weakness were noted.

Reader's Score: 3

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**Status:** Submitted  
**Last Updated:** 08/22/2022 10:38 PM

Status: Submitted

Last Updated: 10/07/2022 12:45 PM

## Technical Review Coversheet

**Applicant:** The College Bridge, Inc. (S411C220047)

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

	Points Possible	Points Scored
<b>Questions</b>		
<b>Selection Criteria</b>		
<b>Quality of the Project Evaluation</b>		
1. Project Evaluation	30	27
<b>Total</b>	30	27



# Technical Review Form

Panel #10 - EIR Tier 2 - 9: 84.411C

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

Applicant: The College Bridge, Inc. (S411C220047)

## Questions

### Selection Criteria - Quality of the Project Evaluation

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

Reader's Score: 27

#### Sub

1. (1) The extent to which the methods of evaluation will, if well implemented, produce evidence about the project's effectiveness that would meet the What Works Clearinghouse standards with or without reservations as described in the What Works Clearinghouse Handbook (as defined in this notice). (20 points)

#### Strengths:

The application proposes a Randomized Control Trial (RCT) where course applicants in twenty-one high schools will be randomized into treatment and control groups. The proposed impact evaluation design, if well implemented, will produce reliable evidence about DE Math Bridge's effectiveness that would meet the What Works Clearinghouse (WWC) standards without reservations.

In line with WWC guidelines, the application clearly defines eligibility criteria for inclusion in the impact study (e.g., GPA of > 3.0 for the Bridge statistics course + intervention) and demonstrates an appropriate randomization process where assignment to control vs intervention groups would occur at the student level. Moreover, the application adequately addresses potential threats to the internal validity of the impact study including the risks of contamination and attrition. The proposed sample size of 7,764 students across 21 schools is appropriate for the scale of the study and the application demonstrates that the team has the capacity to successfully recruit the target number of schools, teachers, and colleges for the study. Moreover, the application includes appropriate power calculations to indicate that the statistical power is sufficient to elicit acceptable minimum detectable effect sizes for evidence without reservations for the confirmatory impact studies.

The application also meets WWCs guidelines for appropriate analytic techniques. The equation denoting the proposed two-level hierarchical linear model is appropriate for the nested structure of the data where students are nested within teachers and teachers and students are nested within schools. Likewise, the hypothesized moderator models, if well implemented, have the potential to contribute to an understanding of how student outcomes differ by student characteristics.

#### Weaknesses:

The application does not describe the potential effects of teaching approaches. Specifically, the application describes two possible teaching or curriculum delivery approaches—a co-teaching model with the college instructor leading the college content and the high school teacher leading the intervention content and a single teacher model where the high school teacher implements both the college course and the intervention content. However, the

**Sub**

proposed impact and fidelity studies do not explore the potential effects of the delivery model on student outcomes. Moreover, the application does not provide actual reliability indices to support the statement that the math achievement assessment tools are reliable and valid measures of basic numeracy skills for adults.

**Reader's Score: 17**

**2. (2) The extent to which the methods of evaluation will provide performance feedback and permit periodic assessment of progress toward achieving intended outcomes. (5 points)**

**Strengths:**

The application proposes implementation studies to understand the extent to which the program was implemented as designed and to uncover the contextual factors that enable or constrain the implementation of key program dimensions. The implementation studies, if well implemented, will contribute to continuous quality improvement, and enhance future replicability in similar settings. The application also describes a feasible and appropriate plan for collecting and triangulating quantitative and qualitative implementation data (e.g., interviews, observations, and student usage data in Canvas) to assess fidelity. Moreover, the planned annual regional meetings and monthly meetings between the evaluation and project teams have the potential to provide useful data for periodic feedback and enhance continuous assessment of progress towards achievement of project goals.

**Weaknesses:**

None

**Reader's Score: 5**

**3. (3) The extent to which the evaluation plan clearly articulates the key project components, mediators, and outcomes, as well as a measurable threshold for acceptable implementation. (5 points)**

**Strengths:**

The application clearly articulates the key project components, outcomes, and performance metrics/measures for each project goal. The performance metrics are meaningful and relevant to the project activities and components. For example, the application identifies college readiness metric and high school math sequence as performance metrics for the extent to which the project utilizes dual enrollment as a strategy to close equity and achievement gaps. The application also articulates fidelity measures and implementation thresholds for core program components. For example, the application identifies measurable thresholds for support dosage (2-7 units) and curriculum dosage (10 lessons of asynchronous curriculum). These implementation thresholds are reasonable for the project context. Moreover, the application specifies appropriate potential mediators (e.g., course characteristics and student engagement with the College Transition Bridge Curriculum) of the impact of the intervention on student outcomes.

**Weaknesses:**

None

**Reader's Score: 5**

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**Status:** Submitted  
**Last Updated:** 10/07/2022 12:45 PM

Status: Submitted

Last Updated: 10/07/2022 03:42 PM

## Technical Review Coversheet

**Applicant:** The College Bridge, Inc. (S411C220047)

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

	Points Possible	Points Scored
<b>Questions</b>		
<b>Selection Criteria</b>		
<b>Quality of the Project Evaluation</b>		
1. Project Evaluation	30	28
<b>Total</b>	30	28

# Technical Review Form

Panel #10 - EIR Tier 2 - 9: 84.411C

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

Applicant: The College Bridge, Inc. (S411C220047)

## Questions

### Selection Criteria - Quality of the Project Evaluation

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

Reader's Score: 28

#### Sub

1. (1) The extent to which the methods of evaluation will, if well implemented, produce evidence about the project's effectiveness that would meet the What Works Clearinghouse standards with or without reservations as described in the What Works Clearinghouse Handbook (as defined in this notice). (20 points)

#### Strengths:

The evaluation plan is designed to meet What Works Clearinghouse standards without reservations for high-school outcomes (p. e42 packet, p. 22 application). Specifically, the evaluation team will randomly assign students in each participating school (n=21) to either treatment or control groups. Students randomly assigned to the control condition will participate in regular high school courses (p. 21 application, p. e41 packet). For postsecondary outcomes, where there is an expectation for higher rates of missing data, the evaluation plan is designed for and aims to meet What Works Clearinghouse standards with reservations (p. 22, p e42 packet).

In addition, the external evaluation team at RAND conducted power analyses separately for different treatments (i. e., courses).

#### Weaknesses:

Part of the program includes working with instructors (high-school teachers and college instructors) to develop their capacity to deliver the program with fidelity (e.g., team grading, p. e101, logic model). The lack of instructor-level outcomes is a limitation to the design, as this key piece would allow for a stronger interpretation of program impacts.

Reader's Score: 18

2. (2) The extent to which the methods of evaluation will provide performance feedback and permit periodic assessment of progress toward achieving intended outcomes. (5 points)

#### Strengths:

The plan for evaluation includes an implementation study which will generate data for improving program partners on progress and areas for improvement. Table 9 (p. 18, p. e38 packet) includes evaluation research questions, including specific questions for implementation. For example, the evaluation team will observe instructor training beginning in the 3rd quarter of 2023 and continue these observations through the 2nd quarter of 2026 (p. 25 application, p. e45 packet). Multiple phases of interview data collection are planned (Evaluation Timeline, p. 25) and

**Sub**

included as part of the performance feedback.

The plan for qualitative data collection and analyses is a particular strength of this evaluation plan. The reviewer sees this as a particularly important factor in early-phase work, where the project team seeks to understand how various components of the logic model a) fit together and b) need to be revised.

**Weaknesses:**

none

**Reader's Score: 5**

**3. (3) The extent to which the evaluation plan clearly articulates the key project components, mediators, and outcomes, as well as a measurable threshold for acceptable implementation. (5 points)**

**Strengths:**

Key project components are explained clearly via Table 5 (pp. 14-15 application, pp. e34-35 packet) and the logic model (p. e101 packet). Each project goal is outlined with corresponding objectives, outcomes, measures, and activities. For example, in order to close equity and achievement gaps, the project team will offer college-level math courses to underrepresented high-school students and measure their attendance and pass rates (p. 14). Table 12 (p. 24, p. e44 packet) outlines outcome measures and mediators identified by the evaluation team as important for analyses; these include course characteristics, student engagement (i.e., time spent on Canvas), and data on instructor training. Table 10 summarizes the fidelity measures and implementation thresholds for each of the key components (p. 19, p.e39 packet). For example, instructor training is expected to include 42-84 high school teachers and 10-21 college faculty once per semester.

**Weaknesses:**

none

**Reader's Score: 5**

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**Status:** Submitted  
**Last Updated:** 10/07/2022 03:42 PM