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

Status: Submitted

Last Updated: 06/14/2019 04:38 PM

Technical Review Coversheet

Applicant: The CSU, Chico Research Foundation (U336S190030)

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

		Points Possible	Points Scored
Questions			
Selection Criteria			
Quality of Project Design			
1. Project Design		40	39
Adequacy of Resources			
1. Resources		20	20
Quality of the Management Plan			
1. Management Plan		20	20
Quality of the Project Evaluation			
1. Project Evaluation		20	20
	Sub Total	100	99
Priority Questions			
Competitive Preference Priority			
Competitive Preference Priority 1			
1. STEM/Computer Science		5	5
	Sub Total	5	5
Invitational Priority			
Invitational Priority			
1. Promise Zones		0	0
	Sub Total	0	0
	Total	105	104

Technical Review Form

Panel #4 - Teacher Quality Partnership - 5: 84.336S

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

Applicant: The CSU, Chico Research Foundation (U336S190030)

Questions

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:
 - (i) The extent to which the proposed project demonstrates a rationale (as defined in 34 CFR 77.1(c)).
 - (ii) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable.
 - (iii) The extent to which the proposed project is designed to build capacity and yield results that will extend beyond the period of Federal financial assistance.
 - (iv) The extent to which the proposed project represents an exceptional approach for meeting statutory purposes and requirements.

Strengths:

- The proposal provides a rationale for the project. For example, the proposal lists the goals of the project and those goals are driven by needs, such as the fact that California does not currently provide a specific credential for middle school (p. e23-e24)).
- These needs are further articulated in the needs assessment (appendix). The goals, objectives and outcomes are provided in the proposal in text as well as in the logic model (p. e23 and p. e30). The outcomes are specific and measurable.
- Goal number five of the project is to develop and sustain the project's partnerships and institutionalize its reforms. This institutionalization will be evidenced by creating an advisory board composed of representatives from each partner and conducting semi-annual meetings (p. e55). This suggests that institutional capacity will be established to potentially yield results beyond the term of the grant.
- Finally, the project represents an exceptional approach to the grant program through the focus on computational thinking and the development of mentoring, induction and collaborative opportunities to support computational thinking (p. e22-e26). This demonstrates a focus on pedagogy for facilitating computational thinking for students which, as a competency in computer science education, exceptionally addresses a focus of the grant program.

Weaknesses:

• It was not clear how the cohort numbers fit together. On pages e35-e36, the proposal states "Our goal is to place 8 residents at each of the three district partnerships, 4 in middle school and 4 in the high school, totaling 12 placements in the first year and 20 in years 2 - 5." Yet, goal 1 of the project is to recruit, train and place 72 highly qualified teachers (p. e54). It's not clear how these number match up. This raises concerns for the clarity of the social support for teachers and, therefore, the impact of the project.

Reader's Score: 39

Selection Criteria - Adequacy of Resources

- 1. The Secretary considers the adequacy of resources for the proposed project. In determining the adequacy of resources for the proposed project, the Secretary considers the following factors:
 - (i) The adequacy of support, including facilities, equipment, supplies, and other resources, from the applicant organization or the lead applicant organization.
 - (ii) The relevance and demonstrated commitment of each partner in the proposed project to the implementation and success of the project.

Strengths:

- The lead partners have experience managing and carrying out federal grant projects, which suggests that they have the necessary resources to carry out this work. (p. e50).
- Moreover, this project is aligned with other funded grants and scholarship programs, which have similar goals of teaching and learning reform efforts and can complement this proposed project (p. e50). This suggests that the facilities and supplies are available since this project furthers similar work.
- In addition, the proposal states some of the specific resources that the partners will commit, such as CSU Chico being committed to redesigning their program (p. e51).
- Finally, the proposal includes commitment letters from the partners, which articulate what they aim to commit and support in the project (appendix). These commitment letters additionally suggest that the facilities, supplies and human resources necessary to carry out this project effectively will be available.

Weaknesses:

No weaknesses noted.

Reader's Score:

Selection Criteria - Quality of the Management Plan

20

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

Strengths:

- The management plan includes the goals for the overall project and aligns objectives and activities for the project (p. e54-e55).
- Moreover, for each of the activities, the management plan includes milestones to indicate what will constitute completing each of the activities (p. e54-e55). These milestones are specific, which communicates that it will be clear when the activities are accomplished.
- The persons responsible for the activities and the milestones are listed to ensure accountability. (p. e54-e55). In addition, they have the necessary experience to carry out the activities at a high level.
- Finally, the timeline provided in the management plan includes the times of year and the years within the project that activities and milestones will be carried out. (p. e54-e55). These components suggest that the management plan is high-quality and feasible.

Weaknesses:

No weaknesses noted.

Reader's Score:

Selection Criteria - Quality of the Project Evaluation

20

- 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:
 - (i) The extent to which the methods of evaluation will provide valid and reliable performance data on relevant outcomes.
 - (ii) The extent to which the methods of evaluation are thorough, feasible, and appropriate to the goals, objectives, and outcomes of the proposed project.

Strengths:

- The evaluation plan identifies the external firm that will carry out the evaluation. (p. e58). This suggests that the project has allocated for the role to carry out the evaluation. In addition, the external firm has the necessary experience and expertise to carry out the plan as intended.
- The evaluation is broken up into four components: implementation, challenges and supports, teacher outcomes and student outcomes (p. e59). Each of these components have their own data and analysis plans, which suggests that the evaluation is employing appropriate methods for the goals and questions addressed by the evaluation plan (p. e62).
- These align with the goals of the project as well as offer opportunities to make formative improvements. (p. e59-e61)
- The evaluation plan also describes the data that will be collected to address those four components of the evaluation. (p. e59-e61). The data are also carefully aligned with what the proposal communicates in the logic model, which further suggests that the evaluation plan is appropriate to the goals of the project.
- The evaluation plan provides a clear and rigorous analytic plan, employing qualitative and quantitative analysis. These elements of the evaluation plan suggest that the evaluation is feasible and well designed.

Weaknesses:

No weaknesses noted.

Reader's Score: 20

Priority Questions

Competitive Preference Priority - Competitive Preference Priority 1

Projects designed to improve student achievement or other educational outcomes in computer science by
increasing the number of educators adequately prepared to deliver rigorous instruction in STEM fields, including
computer science, through recruitment, evidence-based professional development strategies for current STEM
educators, or evidence-based retraining strategies for current educators seeking to transition from other subjects
to STEM fields.

Strengths:

• The proposal states that the project is specifically targeting the development of computational thinking, as a subset competency of computer science, and making it integral to all of the educational experiences they are providing (p. e40).

- In particular, the project clearly defines computational thinking (p. e40) and specifies what computational thinking looks like in practice (p. e41)).
- Moreover, the project is contextualized within a framework of argument-driven instruction that is based on the framework of teaching for robust understanding (p. e41-e43).
- The proposal also aims to track students' perceptions of computational thinking (p. e62).
- These elements indicate that the project is focused on developing teachers' instructional practice to support computational thinking as well as track how the teaching is impacting students.

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No weaknesses noted.

Reader's Score:

Invitational Priority - Invitational Priority

5

1. An applicant may address one or both of the following priority areas:

Propose to serve children or students who reside, or attend TQP project schools, in a qualified opportunity zone as designated by the Secretary of the Treasury under section 1400Z-1 of the Internal Revenue Code, as amended by the Tax Cuts and Jobs Act (Pub. L. 115-97). In addressing this priority, an applicant must provide the census tract number of the qualified opportunity zone for which it proposes to serve children or students and describe the extent to which the applicant will serve individuals in the Qualified Opportunity Zone(s). OR

Demonstrate in its application that it has received or will receive financial assistance from a qualified opportunity fund under section 1400Z-2 of the Internal Revenue Code, as amended by the Tax Cuts and Jobs Act, for a purpose directly related to its proposed project. In addressing this priority, an applicant must identify the qualified opportunity fund from which it has received or will receive financial assistance and describe the extent to which the applicant will use the financial assistance for its proposed project.

Strengths:

The proposal states that the project will be servicing students that reside in a qualified opportunity zone as designated by the Secretary of Treasury under section 1400Z-1 on the Internal Revenue code. (p. e47). The census tract numbers of the qualified opportunity zones is listed on page e48.

Weaknesses:

N/A

Reader's Score: 0

Status: Submitted

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Status: Submitted

Last Updated: 06/12/2019 07:38 PM

Technical Review Coversheet

Applicant: The CSU, Chico Research Foundation (U336S190030)

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

		Points Possible	Points Scored
Questions			
Selection Criteria			
Quality of Project Design			
1. Project Design		40	39
Adequacy of Resources			
1. Resources		20	20
Quality of the Management Plan			
1. Management Plan		20	20
Quality of the Project Evaluation			
1. Project Evaluation		20	20
	Sub Total	100	99
Priority Questions			
Competitive Preference Priority			
Competitive Preference Priority 1			
1. STEM/Computer Science		5	5
	Sub Total	5	5
Invitational Priority			
Invitational Priority			
1. Promise Zones		0	0
	Sub Total	0	0
	Total	105	104

Technical Review Form

Panel #4 - Teacher Quality Partnership - 5: 84.336S

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

Applicant: The CSU, Chico Research Foundation (U336S190030)

Questions

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:
 - (i) The extent to which the proposed project demonstrates a rationale (as defined in 34 CFR 77.1(c)).
 - (ii) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable.
 - (iii) The extent to which the proposed project is designed to build capacity and yield results that will extend beyond the period of Federal financial assistance.
 - (iv) The extent to which the proposed project represents an exceptional approach for meeting statutory purposes and requirements.

Strengths:

- The applicant includes a rationale for the proposed project based on need in the area of middle school credentialing (p. e23). Further evidence of need is illustrated in the discussion of teacher shortages, particularly in mathematics, science, and special education (p. e27-e28).
- A logic model is included to connect project tasks with strategies and outcomes (p. e30).
- Embedded instructional coaching can increase the potential for training experiences to be implemented in the classroom with students (p. e40).
- The applicant proposes to utilize facilities, equipment, supplies and other resources that were established in the previous grant as a mechanism for extending results beyond this funding opportunity (p. e51).
- As part of the larger statewide initiative designed to prepare more teachers for STEM, the proposed project has potential for yielding results that extend beyond the initial period of financial assistance (p. e29). As the strategies within the proposed project are implemented on a larger scale, they can be used as effective components of the statewide initiative.
- The applicant proposed an exceptional approach to meeting the statutory purposes by addressing the needs of middle-level educators, an area which does not have a separate certification currently in the state (p. e28).

Weaknesses:

• It is not clear exactly how many teachers will be trained in the cohort (p. e29). The applicant indicates that the project will train 72 new teachers over the course of the five years. The explanation of placement numbers on page e36 in confusing. Clarifying the number of students in each cohort placement would assist with the assessment of the impact of the project on the region.

Reader's Score: 39

Selection Criteria - Adequacy of Resources

- 1. The Secretary considers the adequacy of resources for the proposed project. In determining the adequacy of resources for the proposed project, the Secretary considers the following factors:
 - (i) The adequacy of support, including facilities, equipment, supplies, and other resources, from the applicant organization or the lead applicant organization.
 - (ii) The relevance and demonstrated commitment of each partner in the proposed project to the implementation and success of the project.

Strengths:

- The applicant proposes to utilize facilities, equipment, supplies and other resources that were established in the previous grant (p. e51). These same resources are adequate to implement the activities in the current proposal.
- Sufficient evidence is provided to show the allocation of equipment, technology, and support from partners to meet the needs of the participants in the proposed project (p. e51).
- The letters of commitment provided demonstrate a commitment of each partner in the proposed project to the implementation and success of the project. Contributions are included to show both financial assistance and access to content knowledge and effective instructional practices.

Weaknesses:

No weaknesses were noted.

Reader's Score: 20

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 for the proposed project, the Secretary considers:
 - (i) 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.

Strengths:

- The applicant includes a timeline of key project activities (p. e54-e55). Milestones are included in the timeline, along with key people responsible for task completion to show clarity in the expectations of the proposed project (p. e54-e55).
- The management plan is clear and succinct, which increase the likelihood of achieving goals of the proposed project on time and within budget (p. e54-e55). For example, goals are accompanied by activities, milestones, and objectives. There are clear links to show how each milestone and activity are connected to the outcomes.

• The timeline and budget are sufficient to providing a guideline that is realistic and easy to follow throughout the proposed project (p. 33-34).

Weaknesses:

No weaknesses were noted.

Reader's Score: 20

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:
 - (i) The extent to which the methods of evaluation will provide valid and reliable performance data on relevant outcomes.
 - (ii) The extent to which the methods of evaluation are thorough, feasible, and appropriate to the goals, objectives, and outcomes of the proposed project.

Strengths:

- The applicant includes an evaluation plan which is driven by four key research questions (p. e58). This provides clear direction and specifics as to what measures will be used to assess progress toward achieving outcomes.
- Qualitative and quantitative methods of analysis will be used throughout the proposed project (p. e58-e59). Interviews, site visits, logs, and surveys will be data collected in the evaluation process (p. e59). The resident and mentor teacher logs will be reliable in capturing details as participants implement each project activity.
- HLM will be used as a quantitative method for analyzing effects on students' computational thinking perceptions and practices (p. e62). This method provides a way to analyze the effects of specific variables on student outcomes.

Weaknesses:

No weaknesses were noted.

Reader's Score: 20

Priority Questions

Competitive Preference Priority - Competitive Preference Priority 1

Projects designed to improve student achievement or other educational outcomes in computer science by
increasing the number of educators adequately prepared to deliver rigorous instruction in STEM fields, including
computer science, through recruitment, evidence-based professional development strategies for current STEM
educators, or evidence-based retraining strategies for current educators seeking to transition from other subjects
to STEM fields.

Strengths:

• The applicant includes strategies to build skills in computational literacy for secondary students (p. e24). The combined classroom-based action research and full-time intensive clinical experience working specifically with Argument Driven Inquiry to promote computational literacy clearly represents a well-designed approach to increase student

achievement in computer science (p. e24).

• The project includes computational thinking as an integral element of all disciplines with a focus on data practices (p. 19-20).

Weaknesses:

No weaknesses were noted.

Reader's Score: 5

Invitational Priority - Invitational Priority

1. An applicant may address one or both of the following priority areas:

Propose to serve children or students who reside, or attend TQP project schools, in a qualified opportunity zone as designated by the Secretary of the Treasury under section 1400Z-1 of the Internal Revenue Code, as amended by the Tax Cuts and Jobs Act (Pub. L. 115-97). In addressing this priority, an applicant must provide the census tract number of the qualified opportunity zone for which it proposes to serve children or students and describe the extent to which the applicant will serve individuals in the Qualified Opportunity Zone(s). OR

Demonstrate in its application that it has received or will receive financial assistance from a qualified opportunity fund under section 1400Z-2 of the Internal Revenue Code, as amended by the Tax Cuts and Jobs Act, for a purpose directly related to its proposed project. In addressing this priority, an applicant must identify the qualified opportunity fund from which it has received or will receive financial assistance and describe the extent to which the applicant will use the financial assistance for its proposed project.

Strengths:

The applicant explains that students who will be serviced reside in a qualified opportunity zone. The counties in which they reside qualify as low-income community (p. e47).

Weaknesses:

No weaknesses were noted

Reader's Score: 0

Status: Submitted

Last Updated: 06/12/2019 07:38 PM

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Technical Review Coversheet

Applicant: The CSU, Chico Research Foundation (U336S190030)

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

		Points Possible	Points Scored
Questions			
Selection Criteria			
Quality of Project Design			
1. Project Design		40	39
Adequacy of Resources			
1. Resources		20	20
Quality of the Management Plan			
1. Management Plan		20	20
Quality of the Project Evaluation			
1. Project Evaluation		20	20
	Sub Total	100	99
Priority Questions			
Competitive Preference Priority			
Competitive Preference Priority 1			
1. STEM/Computer Science		5	5
	Sub Total	5	5
Invitational Priority			
Invitational Priority			
1. Promise Zones		0	
	Sub Total	0	
	Total	105	104

Technical Review Form

Panel #4 - Teacher Quality Partnership - 5: 84.336S

Reader #3: *******

Applicant: The CSU, Chico Research Foundation (U336S190030)

Questions

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:
 - (i) The extent to which the proposed project demonstrates a rationale (as defined in 34 CFR 77.1(c)).
 - (ii) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable.
 - (iii) The extent to which the proposed project is designed to build capacity and yield results that will extend beyond the period of Federal financial assistance.
 - (iv) The extent to which the proposed project represents an exceptional approach for meeting statutory purposes and requirements.

Strengths:

- The CLASSP program builds on the work of a previous TQP grant by broadening the scope of teacher preparation to middle level teachers and by building STEM and computational literacy. (e23) Seventy-two new teachers will be trained in a partnership that includes Chico State departments of Communication and Education, Natural Sciences, Engineering, and Arts and Sciences and four high-need, rural districts. (e22) It is evident that partners will have a great deal of collaboration as they will be working in tandem to develop criteria for recruiting candidates and mentors as well as developing instructional and field elements and assessment. (e36)
- A rationale for the project was established and supported by a thorough needs assessment conducted through multiple conversations with partners. Three specific needs were identified: teacher shortages especially in STEM-C fields and special education, funding for professional development, and a need for foundational level mathematics content and skills. Because of these results, the applicant proposes to improve computational literacy and address teacher shortages, especially in STEM-C fields, in the rural area of California; heighten professional development efforts in learning and inquiry; and strengthen the content knowledge of new teachers at the secondary level. (e25; e77-82) This area of northern California is a designated opportunity zone with one partner eligible for the Rural Low-Income Schools program and two qualifying based on a high population of students who live in poverty. (e78)
- A Logic Model was provided that outlined inputs, strategies, short- and long-term outcomes, and impacts. The use of the research-based models of ADI, ADM and CT are the foundation of the tasks included in the model. It is also admirable that the project will increase the number of teachers in STEM and special education fields at the secondary level. (e30; e94-95)
- The applicant has provided numerous examples of research-based content and pedagogical models to be utilized during the duration of the project. Examples included SIOP, culturally relevant pedagogy, and Observation Protocol for Academic Literacies. (e26)
- Two unique and exceptional emphasis areas for this proposal are 1) the focus on middle level educators with hopes of fostering discussions on a middle level certification in California, and 2) collaboration of special education faculty to provide a stronger base for working with special needs student populations. (e24-26)
- The proposal seeks to build capacity in the region by strengthening the quality of field mentoring, and increasing the diversity of the teachers in the region to better match the demographics of the students. The end result will be high achievement on the part of the students in the region, especially underrepresented populations. It is likely that the

benefits of the project will extend beyond the period of Federal financial assistance. (e26-27)

Weaknesses:

• The project will train 72 new teachers over the course of the five years. The explanation of placement numbers on page e36 in confusing. Clarifying the number of students in each cohort placement would assist with the assessment of the impact of the project on the region.

Reader's Score: 39

Selection Criteria - Adequacy of Resources

- 1. The Secretary considers the adequacy of resources for the proposed project. In determining the adequacy of resources for the proposed project, the Secretary considers the following factors:
 - (i) The adequacy of support, including facilities, equipment, supplies, and other resources, from the applicant organization or the lead applicant organization.
 - (ii) The relevance and demonstrated commitment of each partner in the proposed project to the implementation and success of the project.

Strengths:

- Numerous colleges and departments within CSU Chico have agreed to work within the project to provide direction and instruction. Additionally, three high-need, opportunity zone schools and five state educational agencies and program partners are included. Collaboration is evident with these long-time partners serving in various capacities throughout the planning (Needs Assessment), implementation (instructional, field services, advisory, and oversight), and data collection and analysis components of the project. Letters of support from each entity are provided and detail their level of commitment to the success of this project. (e47-52; e150-179)
- CSU Chico faculty and staff, ADI/ADM faculty, and SRI evaluation team members have submitted vitae that support their involvement. Each member of these teams appears to possess the appropriate credentials and experiences to fulfill their respective roles pursuant to the successful completion of this project. For many, their roles in a previous TQP project is similar to those found in this project and makes them uniquely qualified. (e97-149)
- The proposal includes detailed letters of commitment from partners specifying their role and level of commitment in time, personnel, facilities, and resources for the project. (e205-213)

Weaknesses:

There are no apparent weaknesses in this application.

Reader's Score: 20

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 for the proposed project, the Secretary considers:
 - (i) 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.

Strengths:

- The applicant utilizes elements of improvement science (Bryk) to leverage the partnership resources to bring about heightened student achievement. Goals are broken into smaller tasks, evaluated, and adjusted leading to the end results desired. This is an exemplary model that includes planning, instruction, evaluation, analysis, and goal-setting in chunks that align with the intended outcomes. It promotes learning and provides a sustainable model. (e52)
- Table 2 provides a timeline with activities, responsibilities and milestones for accomplishing project tasks for each of the three goals of the project. (e54-55) The first cohort groups begin in January of 2020. This plan is appropriate because partnerships are in place and much of the selection criteria, instructional and assessment protocol, and evaluation planning was in place due to the previous TQP project. In addition, a detailed statement of work is provided that outlines activities within each task for each year of the project. This is a very concise manner to display the work to be done, possible products and assessments, and tasks to bring about the successful completion of the project. (e182-183)
- An advisory board, planning committee and admissions committee that include multiple partners are in place to develop, select, analyze data, and provide feedback for program improvement. The oversight of these committees is commendable to ensure that the management plan is well-executed and goals of the project are achieved. (e52-53)
- The PI/Project Director has the education and expertise, including the management of a previous TQP project, to oversee the project toward successful completion. A detailed vitae is included. (e97-149) Her salary is commensurate with the responsibilities of the position. (e274-275)
- Additional staff members including a Computational Thinking Specialist, Continuous Improvement Coordinator, Director of Clinical Experience, and Recruitment Coordinator have been identified with the necessary credentials and experiences, much of it from the previous TQP project, to fulfill their responsibilities in a timely manner. (e55-57) Salaries are appropriate for the responsibilities of each position. (e274-275)
- CME and SOE will provide a Field Placement Coordinator, Credential Analyst, Pre-Credential Advisory, and grants office in the form of cost sharing. Each of these positions are filled with experienced personnel. (e274-275)
- Work plans and credentials for the SRI International team are provided. The SRI International evaluation team appears to be well qualified and experienced in evaluating large scale projects such as this. The budgeted expense for the level of evaluation is appropriate. (e184-204)

Weaknesses:

There are no apparent weaknesses in this application.

Reader's Score: 20

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:
 - (i) The extent to which the methods of evaluation will provide valid and reliable performance data on relevant outcomes.
 - (ii) The extent to which the methods of evaluation are thorough, feasible, and appropriate to the goals, objectives, and outcomes of the proposed project.

Strengths:

• A national, experienced nonprofit research organization, SRI International, will serve as the evaluation team for the project. The evaluation will focus on responses to questions in four focus areas: implementation, challenges and supports, teacher outcomes, and student outcomes. (e57-63) A detailed timeline of deliverables has been provided in

Table 4. (e63)

- Both qualitative (observations, teacher logs, interviews) and quantitative (survey results and GPRA indicators) methods will be utilized. Of particular interest, is the development of and piloting of instruments to measure computational perceptions and practices of students. Such development will improve the validity and reliability of measuring computational thinking for this project as well as others seeking a viable measurement for this task. The protocol for developing and validating these measures is provided. (e57-62)
- The evaluation appears to be thorough and will assist the partners in reaching the goals and objectives of the project on time and in budget. The budgeted amount for evaluation services is appropriate to the complexity of the evaluation plan. (e36-42) One take-away from the project is the hope that California will use the project model to support development of a middle level certification. (e24)

Weaknesses:

There are no apparent weaknesses in this application.

Reader's Score: 20

Priority Questions

Competitive Preference Priority - Competitive Preference Priority 1

Projects designed to improve student achievement or other educational outcomes in computer science by
increasing the number of educators adequately prepared to deliver rigorous instruction in STEM fields, including
computer science, through recruitment, evidence-based professional development strategies for current STEM
educators, or evidence-based retraining strategies for current educators seeking to transition from other subjects
to STEM fields.

Strengths:

• The proposal does a commendable job of outlining the manner in which additional educators that have high qualifications in the STEM-C fields will be trained and mentored. (e22-23; e36; e95) It is evident that a strong collaboration exists and that communication was held to drive all phases of the project. Partners have worked to recruit underrepresented teachers and to provide research-based practices while training these new teacher candidates. The applicant seeks to promote heightened use of data practices and Argument-Driven Inquiry in mathematics, sciences, English and Special Education in an effort to fulfill a national emphasis on computational literacy in STEM fields. The research-based ADI and ADM models appear to possess value-added strategies to promote critical thinking skills in students. (e25; e40-47)

Weaknesses:

There are no apparent weaknesses in this application.

Reader's Score: 5

Invitational Priority - Invitational Priority

1. An applicant may address one or both of the following priority areas:

Propose to serve children or students who reside, or attend TQP project schools, in a qualified opportunity zone as designated by the Secretary of the Treasury under section 1400Z-1 of the Internal Revenue Code, as amended by the Tax Cuts and Jobs Act (Pub. L. 115-97). In addressing this priority, an applicant must provide the census tract number of the qualified opportunity zone for which it proposes to serve children or students and describe the extent to

which the applicant will serve individuals in the Qualified Opportunity Zone(s). OR

Demonstrate in its application that it has received or will receive financial assistance from a qualified opportunity fund under section 1400Z-2 of the Internal Revenue Code, as amended by the Tax Cuts and Jobs Act, for a purpose directly related to its proposed project. In addressing this priority, an applicant must identify the qualified opportunity fund from which it has received or will receive financial assistance and describe the extent to which the applicant will use the financial assistance for its proposed project.

Reader's Score:			
Weaknesses:			
Strengths:			

Status: Submitted

Last Updated: 06/14/2019 02:01 PM