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

**Applicant:** Cal Poly Corporation (U336S180010)  
**Reader #1:** **********

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**Sub Total**  
100 97

| Priority Questions                             |                 |               |
| Competitive Preference Priority                |                 |               |
| Promoting STEM ED w/a focus on Computer Science|                 |               |
| 1. CPP 1                                      | 3               | 3             |
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| 1. CPP 3                                      | 2               | 0             |

**Sub Total**  
8 6

**Total**  
108 103
Technical Review Form

Panel #1 - Teacher Quality Partnership - 1: 84.336S

Reader #1: ************
Applicant: Cal Poly Corporation (U336S180010)

Questions

Selection Criteria - Quality of Project Services

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

   (i) The extent to which the services to be provided by the proposed project involve the collaboration of appropriate partners for maximizing the effectiveness of project services.

   (ii) The extent to which the services to be provided by the proposed project reflect up-to-date knowledge from research and effective practice.

   (iii) The extent to which the training or professional development services to be provided by the proposed project are of sufficient quality, intensity, and duration to lead to improvements in practice among the recipients of those services.

Strengths:

i. The proposal strongly supports the strengthening of existing programs leading to teacher licensure in STEM and computer technology fields (e3-e4). One such strong partnership currently exists due to a prior Bechtel Grant that brought partners together to support pedagogy through coordinated field experiences and residency programs (e28).

Collaboration with community colleges to create introductory courses, teaching clubs, and education advisors to augment a seamless transfer for community college candidates to Cal Poly are currently in place and will support recruitment efforts found in the project (e33).

Collaboration is evident between the applicant and the University Diversity and Inclusion Office to recruit and retain diverse candidates (e34).

ii. The project does a good job of supporting services by incorporating a strong, up-to-date research base. The applicant is currently engaged in working with districts using research-based models such as Danielson’s Framework (e29). Additionally, professional development activities will be driven by the research behind nationally approved standards such as the Common Core, ITSE, NGSS, and bilingual and special education guidelines (e30). The use of a coteaching model is supported by the NCATE Blue Ribbon Panel and provides a valuable tool to promote PBL and engaged learning communities (e31).

iii. Professional development programs within the project are of sufficient quality, intensity, and duration to lead to improvements in practice among the recipients of those services. One such model that is research-based, is the use of ongoing coaching (e36). Additionally, the use of coteaching is evident and should provide sound pedagogical practices and skills development for new teachers and in-service teachers seeking to foster their teaching knowledge and skills (e36).

Weaknesses:

i. No weaknesses noted.

ii. No weaknesses noted.
Selection Criteria - Quality of Project Design

1. In determining the quality of the design of the proposed project, the Secretary considers the extent to which the proposed project consists of a comprehensive plan that includes a description of:

   (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 to the priority or priorities established for this competition.

Strengths:

i) Partners have worked collaboratively to devise sustainable project goals and outcomes that support project recruitment efforts, sustained professional development to strengthen partnerships and enhance STEM knowledge and skills, and a two-year induction program for novice teachers (e37; e51-e52). For instance, goal one involves the IHE creating a computer science credential. The timeline for the goal is through September of 2022, the individuals and teams responsible are listed, and clear milestones are provided (e61). Current programs such as CESAME and STAR, which promote early field and research experiences and support existing recruitment efforts, provide a foundation for the project (e39-e41). The project frequently builds from existing programs and practice. When creating new programs, pilot programs will be utilized with a smaller group of candidates then revised for possible expansion to additional populations. This is a positive change model (e56).

   A Logic Model (e99) and Work Plan (e147-e212) provide a detailed overview of components of the project. Included in the plans are links to a research base, clear and manageable timelines, activities, outputs, detailed listings of responsible parties, milestones, and short- and long-term outcomes (e99; e152-e207).

ii) Project objectives and outcomes are measurable and link directly to the goals of funding. The outcomes extend from a solid baseline of previously developed programs, clinical assessments, partnerships, and research (e18). The partnership is also extended to pod placements during field experiences, coteaching with clinical and content educators, in-service professional development and liaisons to promote alignment (e43-e44). Reallocation of funds at the University level for successful practice was also discussed and would serve as a positive sustainability measure (e62).

The applicant has built into the budget a decline in requested funds for successful services where funding will be assumed by members of the partnership. This is an example of successful professional development efforts being funded in part, or whole, by the partnering district (e62; e213-e243).

The use of literacy coaches to help infuse a strong integrated literacy program and evaluation of the practice of integration are strong components of the program (e58).

iii) Sustainability is built into the entire project through tasks such as coteaching, integrated coursework, creation of evaluation tools in multiple areas, and professional development to build knowledge and skills in both content and pedagogical areas for all partners (e59-e60). Continuity across the teacher preparation continuum will also strengthen the sustainability of the program (e64).

iv) The coteaching model is an exceptional approach that should strengthen the content knowledge of education faculty, candidates, and professional development participants, as well as, strengthen the pedagogy of content faculty,
candidates, and professional development participants. Included with the coteaching is review of course syllabi and teacher evaluation using the edTPA model currently in place (e45-46). Coteaching/learning with clinical faculty is also a collaborative approach that should strengthen the alignment and consistency of the field experience and the understanding of content and skills (e46).

Weaknesses:

i. No weaknesses noted.

ii. No weaknesses noted.

iii. The applicant has failed to include the letter requesting a waiver for the first year of matching funds (e229-e230).

iv. No weaknesses noted.

Reader’s Score: 39

Selection Criteria - Quality of the Management Plan

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

   (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.

   (ii) The potential for the incorporation of project purposes, activities, or benefits into the ongoing program of the agency or organization at the end of Federal funding;

   (iii) The adequacy of support, including facilities, equipment, supplies, and other resources, from the applicant organization or the lead applicant organization.

Strengths:

i. The work plan provided a detailed list of project activities, a clear and detailed timeline, clearly defined responsibilities including brief job descriptions where needed, and milestones to assist with evaluation on an ongoing basis (e42, e67, e152-e207; (e147-e211)).

   The work plan will be reviewed bi-annually to ensure project activities are being met by all responsible partners. This will heighten the likelihood that the project will be successful (e67).

   The organizational structure of the project places members from all partnerships in focused roles. For instance, the PI and each Co-PI are charged with oversite of one of the four project goals (e65). This practice should increase the buy-in and coordination of efforts that will strengthen the opportunity to achieve the outcomes stated and support sustainability (e65). Both council meetings and partnership meetings will be held regularly for the purpose of reviewing program components, evaluations, and discussions on sustainability (e66).

   Materials developed and practices implemented will be utilized beyond the funding period, thereby improving sustainability (e68). Partnerships begun prior to project proposal will be maintained and built upon to create a long-term level of collaboration (e68).

   Vitae of project leadership support their roles in the grant (e101-e145).

   Project job descriptions are done in a timely manner so that the project timeline and outcomes can still be met (e165,
Weaknesses:

i. No weaknesses noted.

ii. No weaknesses noted.

iii. No weaknesses noted.

Selection Criteria - Quality of the Project Evaluation

1. In determining the quality of the evaluation, the Secretary considers:

   (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:

i. WestEd provides the applicant with an experienced team of evaluators and proven collection methods as well as access to data and analyses from other studies to drive a sound quasi-experimental approach to project evaluation (e69-e70).

   Table 2 provides a detailed evaluation plan with evaluation methods and sources directly linked to each goal and activity listed in the work plan. Evaluation done in this manner should easily provide data that is both reliable and valid (e70-e71). Additionally, a continuous improvement model of program evaluation will assist partners throughout the project in making informed decisions (e72).

   ii. The evaluation plan links to the goals and objectives of the project and uses both qualitative and quantitative methods of collecting data. Analyses will be done and feedback continuously provided to project personnel. GPRA and HEA measures will be assessed. (e72-e73).

   A data sharing MOU with the EdQ Center will facilitate collection and analysis of a broad array of data (e78).

Weaknesses:

i. No weaknesses noted.

ii. It is not clear if evaluation measures will be utilized to form a baseline, then measure change in student and teacher performance during the course of the five year project funding. It appears that the first cohort to complete all components of the project will not graduate until year five—which puts them in their first year of teaching. The same consideration may be made for success with the induction program. Limited data on these topics can be attained during the life of the funding period. Therefore, it would have been beneficial to see some form of commitment to continue evaluations after the conclusion of funding (e249-e276).
Priority Questions

Competitive Preference Priority - Promoting STEM ED w/a focus on Computer Science

1. Projects designed to improve student achievement or other educational outcomes in one or more of the following areas: science, technology, engineering, math, or computer science. These projects must address the following priority area:

   Increasing the number of educators adequately prepared to deliver rigorous instruction in STEM fields, including computer science, through recruitment, evidence-based (as defined in 34 CFR 77.1) professional development strategies for current STEM educators, or evidence-based retraining strategies for current educators seeking to transition from other subjects to STEM fields.

   NOTE:

   How does an applicant demonstrate that its proposed strategy for professional development and retention strategy for current STEM educators is evidence-based?

   1. Submitting a citation of a study that is (1) focused on a STEM-focused professional development or retraining strategies, (2) relevant to the proposed project, and meets at least the design standards set forth in the “Promising Evidence” definition; OR

   2. Submitting a “Logic Model” that (1) identifies the STEM professional development or retraining strategy of the project and (2) is informed by research or evaluation findings that suggest the project component is likely to improve “Relevant Outcomes.”

   Strengths:

   The project will provide summer professional development in computer science that, by year 5, could lead to credentialing in computer science (e23-e24). Professional development in STEM and literacy areas will be offered to teachers, including those who are a part of the induction program. Participants are adequately supported by release time and compensation which will help promote active participation (e24). The applicant has included a Logic Model which supports their proposal to do the work (e103).

   Weaknesses:

   No weaknesses noted.

Reader’s Score: 3

Competitive Preference Priority - Promoting Effective Instr. in Classrooms & Schools

1. Projects that are designed to support the recruitment or retention of educators who are effective and increase diversity (including, but not limited to, racial and ethnic diversity).

   Strengths:

   A key focus of the project is to augment the applicant’s recruitment efforts by reaching more diverse populations, incentivizing the call to teach, then supporting the candidates through a rigorous STEM program and a 2-year induction program. Goal 1 addresses the outcome to increase by 5% a year the number of highly-qualified prospective teachers from underrepresented populations. A specific plan to heighten recruitment and retention of underrepresented populations was presented (e24-e25).

   Co-teaching of methods courses by COE faculty and a social justice faculty member is an innovative way of infusing issues of diversity into traditional teacher education coursework (e25).
Weaknesses:
No weaknesses noted.

Reader's Score: 3

Competitive Preference Priority - Novice Applicant

1. Projects submitted by applicants that meet the definition of novice applicant at the time they submit their application.

NOTE:
The lead applicant must meet all three requirements to earn CPP 3 points:

1. Has never received a grant or sub-grant under the TQP program; and
2. Has never been a member of a group application (i.e. in a TQP eligible partnership); and
3. Has not had an active discretionary grant from the Federal Government in the five years before the deadline date for applications under the program.

Strengths:
N/A

Weaknesses:
The applicant did not meet all requirements to receive points.

Reader's Score: 0

Status: Submitted
Last Updated: 08/06/2018 03:16 PM
### Technical Review Coversheet

**Applicant:** Cal Poly Corporation (U336S180010)

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

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**Priority Questions**

**Competitive Preference Priority**

**Promoting STEM ED w/ a focus on Computer Science**

1. CPP 1  
   - 3  
   - 3

**Promoting Effective Instr. in Classrooms & Schools**

1. CPP 2  
   - 3  
   - 3

**Novice Applicant**

1. CPP 3  
   - 2  
   - 0

**Sub Total**  

- 8  
- 6

**Total**  

- 108  
- 100
Selection Criteria - Quality of Project Services

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

   (i) The extent to which the services to be provided by the proposed project involve the collaboration of appropriate partners for maximizing the effectiveness of project services.

   (ii) The extent to which the services to be provided by the proposed project reflect up-to-date knowledge from research and effective practice.

   (iii) The extent to which the training or professional development services to be provided by the proposed project are of sufficient quality, intensity, and duration to lead to improvements in practice among the recipients of those services.

Strengths:

i. The applicant details strong collaborative partnerships (e34-e35) both within and outside the university. For example, within the university, there are four colleges, one school, and two centers involved in this partnership. These internal collaborations are supplemented by partnerships outside the university, including four high-need school districts (e344-e35).

ii. The applicant offers strong evidence in support of their intense focus on co-teaching (e35), with a clear plan for sustained supports and opportunities for feedback to those receiving professional development. For example, the two-year induction plan includes math education faculty working closely with new teachers in order to provide personalized supports for improved instruction (e35).

iii. The applicant makes clear that the training they will offer is designed around a strong evidence base, which gives support for the likelihood that it is of sufficient quality and duration. For example, the applicant states “The structure of our professional development programs will respond to the theory-based recommendations of Birman et al. (2000), Borko (2002), Guskey (2002), and Sparks (2002).” Specifically, the applicant’s plan includes a two-year induction period, wherein participants would receive direct support from a Cal Poly faculty member for the duration of the two years (e35-e36).

Weaknesses:

i. No weaknesses are identified.

ii. No weaknesses are identified.

iii. No weaknesses are identified.

Reader's Score: 15
1. In determining the quality of the design of the proposed project, the Secretary considers the extent to which the proposed project consists of a comprehensive plan that includes a description of:

(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 to the priority or priorities established for this competition.

Strengths:

i. The applicant’s project description includes a strong rationale (e.g., e-37), which includes a plan for continuous improvement. For example, the applicant states that the project partners will continuously engage in ongoing collaborative improvement efforts, using data from the project to inform their progress and necessary changes (e37). Specifically, the applicant’s plan includes sustained professional development, based on studies offering evidence for this approach in supporting reform (e60; Wonjnowski & Pea, 2013).

ii. The project goals are comprehensively described (e37-e64) with each goal aligned with measurable objectives. For example, the applicant presents project goal one, which is based on a needs assessment of the partner school districts, and is designed to recruit aspiring teacher for typically hard-to-staff areas (e.g., STEM, special education, bilingual education) (e38). Moreover, recruitment efforts will be aimed specifically at underrepresented populations (e.g., racial minorities, women for STEM).

iii. The applicant outlines a plan for sustainability as a specific project goal (pg. e43). One strategy the applicant outlines in pursuit of sustainability includes creating pod placements at each school site, to include multiple prospective teachers participating in the professional development program(s) offered via this grant (e43). Additionally, the applicant offers strong evidence in support of their plan (e43, Luczak et al., 2016 citation); the Luczak study demonstrates that when districts partner with teacher training programs, there is a greater likelihood that the district’s needs will be met due to the fact that the district gives input in the particular training foci.

iv. Overall, the project design as written is exemplary. The applicant’s goals and objectives are all based on a comprehensive needs assessment in cooperation with the project partner districts. For each goal, the applicant articulates specific outcomes that will be tracked over time (e.g., e44, “beginning year 2, increase annually by 2% prospective teacher knowledge and skill in research-based instructional strategies…”). One example of how strong the applicant’s plan is includes the two-year induction program, during which teachers will be partnered with not only a mentor teacher from the district, but also a university faculty member with whom they will work closely to become proficient in their new role as teacher (e35).

Weaknesses:

i. No weaknesses are identified.

ii. No weaknesses are identified.

iii. The applicant requested a waiver, but did not provide the waiver letter.

iv. No weaknesses are identified.

Reader’s Score: 39

Selection Criteria - Quality of the Management Plan

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

(ii) The potential for the incorporation of project purposes, activities, or benefits into the ongoing program of the agency or organization at the end of Federal funding;

(iii) The adequacy of support, including facilities, equipment, supplies, and other resources, from the applicant organization or the lead applicant organization.

Strengths:

i. The applicant offers a clear and comprehensive management plan, with a project team that is clearly experienced (e64 – e69). In particular, the plan for the core leadership team to meet weekly, supplemented by leadership team quarterly meetings is particularly strong (e65). One example of the level of specificity offered by the applicant includes their plan for a credential analyst, leadership team members, department chair, and computer science faculty to meet together and collectively design a new computer science credential (e61). For this project activity, the applicant outlines five individual milestones in their plan (e61); this level of detail in the project planning signals a very thoughtful approach from the leadership team.

ii. The applicant outlines strong institutional supports from Cal Poly (e.g., “learn by doing” motto at the university, fully-equipped STEM labs for undergraduates) that indicates a strong culture that is already in place that will be open to continuing this work beyond the funding period (e69).

iii. Given the detailed work plan outlined with each project partner’s responsibilities and associated tasks (e172), the applicant offers sufficient detail to assure that each project partner is prepared to meet their obligations in this work plan (e67). For example, page e172 offers one project activity “expand 10-week secondary education course on supporting limited English proficient students and students with special needs into two separate 10-week courses.” The plan additionally indicates that School of Education secondary faculty, leadership faculty, and university curriculum development experts will be responsible for achieving this over a two-year period (10/2018 – 9/2020).

Weaknesses:

i. No weaknesses are identified.

ii. No weaknesses are identified.

iii. No weaknesses are identified.

Reader’s Score: 25

Selection Criteria - Quality of the Project Evaluation

1. In determining the quality of the evaluation, the Secretary considers:

   (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:

(i) The evaluation plan (e69-e80) includes details for measuring each of the primary project components, and each of the required performance measures (e.g., e53-e54). For example, the evaluation plan makes clear the measures of project objectives and GRPA measures. The applicant’s evaluation firm, WestEd, will compare project performance against state and national standards of educator excellence (e69). In addition, WestEd’s plan for evaluation includes the collection of qualitative data in order to further understand the quantitative findings (e70).
(ii) No strengths noted.

Weaknesses:

(i) No weaknesses noted.

(ii) The evaluation plan specifies a quasi-experimental (QED) study as part of the approach to identifying how well the projects outcomes are met. The problem with this plan, however, is that the necessary data is not certain to be available to the project evaluation team (WestEd). The execution of a QED rests on the ability to secure data on a useful comparison group, and the applicant acknowledges the anticipated difficulties with obtaining these data (e78, “pending appropriate comparison data”). Although there is a plan to develop a data sharing MOU with the necessary group (e78, “data sharing MOU with the EdQ Center) it is not clear that the evaluation team will be successful in securing the necessary comparison group data.

Reader’s Score: 15

Priority Questions

Competitive Preference Priority - Promoting STEM ED w/a focus on Computer Science

1. Projects designed to improve student achievement or other educational outcomes in one or more of the following areas: science, technology, engineering, math, or computer science. These projects must address the following priority area:

Increasing the number of educators adequately prepared to deliver rigorous instruction in STEM fields, including computer science, through recruitment, evidence-based (as defined in 34 CFR 77.1) professional development strategies for current STEM educators, or evidence-based retraining strategies for current educators seeking to transition from other subjects to STEM fields.

NOTE:

How does an applicant demonstrate that its proposed strategy for professional development and retention strategy for current STEM educators is evidence-based?

1. Submitting a citation of a study that is (1) focused on a STEM-focused professional development or retraining strategies, (2) relevant to the proposed project, and meets at least the design standards set forth in the “Promising Evidence” definition; OR

2. Submitting a “Logic Model” that (1) identifies the STEM professional development or retraining strategy of the project and (2) is informed by research or evaluation findings that suggest the project component is likely to improve “Relevant Outcomes.”

Strengths:

This project aims to recruit undergraduate students from typically underrepresented groups (e.g., women in STEM) and offer a strong training and induction program led by faculty at California Polytechnic University. The project plan includes foci on a co-teaching model with a strong emphasis on improved teaching and learning, both for the undergraduate trainees and the students they will serve. The professional development strategies are grounded in strong evidence (e.g., job-embedded, and ongoing). Additionally the project plan includes a focus in improved literacy across content areas, especially STEM and computer science (e18).

Weaknesses:

No weaknesses noted.
Competitive Preference Priority - Promoting Effective Instr. in Classrooms & Schools

1. Projects that are designed to support the recruitment or retention of educators who are effective and increase diversity (including, but not limited to, racial and ethnic diversity).

Strengths:
This proposal outlines a plan to recruit from traditionally underrepresented populations (e.g., women and minorities for STEM education) (e18). Additionally, the project partners seek to work with university faculty and office of diversity and inclusion to increase the diversity of the teacher trainees in these areas. The application offers a plan for working with the university’s recruiting department to create targeted efforts at recruiting from underrepresented populations (e.g., job fairs, mailing materials; e99, e144).

Weaknesses:
No weaknesses noted.

Reader’s Score: 3

Competitive Preference Priority - Novice Applicant

1. Projects submitted by applicants that meet the definition of novice applicant at the time they submit their application.

NOTE:
The lead applicant must meet all three requirements to earn CPP 3 points:
1. Has never received a grant or sub-grant under the TQP program; and
2. Has never been a member of a group application (i.e. in a TQP eligible partnership); and
3. Has not had an active discretionary grant from the Federal Government in the five years before the deadline date for applications under the program.

Strengths:
N/A

Weaknesses:
N/A

Reader’s Score: 0

Status: Submitted
Last Updated: 08/06/2018 03:17 PM
### Technical Review Coversheet

**Applicant:** Cal Poly Corporation (U336S180010)

### Questions

#### Selection Criteria

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#### Priority Questions

**Competitive Preference Priority**

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<th>Points Scored</th>
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**Sub Total**

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**Total**

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<td>108</td>
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</table>
Selection Criteria - Quality of Project Services

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

   (i) The extent to which the services to be provided by the proposed project involve the collaboration of appropriate partners for maximizing the effectiveness of project services.

   (ii) The extent to which the services to be provided by the proposed project reflect up-to-date knowledge from research and effective practice.

   (iii) The extent to which the training or professional development services to be provided by the proposed project are of sufficient quality, intensity, and duration to lead to improvements in practice among the recipients of those services.

Strengths:

   i) The applicant provides a comprehensive list of partners who will work together to try to meet the goals and objectives of the project. Partners include faculty representing four colleges; several offices within the university Office of University and Inclusion (OUDI), Center for Engineering Mathematics and Science Education (CESAME); community colleges; county offices; partner schools, and others (e22, e33-34).

   (ii) An extensive list of current and research-based resources is provided as background for the development and implementation of the proposal. Some include measurement of effective teaching, edTPA, co-teaching, standards for teacher preparation, and professional development (e35, e207-211).

   (iii) The applicant provides evidence that the project will provide high quality, sustained professional development by revising existing credential, induction, and in-service training– and plans to include other professional development such as increasing student literacy, language proficiency, as well as differentiated instruction (e36-37, e167-176).

Weaknesses:

   (i) No weaknesses noted.

   (ii) No weaknesses noted.

   (iii) The scope of the proposal appears to be too broad to achieve stated goals and objectives – restructuring the education pathway for under-represented groups, adding a computer science credential program, and providing high quality professional development to preservice, and in-service teachers in the partner school districts. Some reasons why the program might seem too ambitious are included here. (e18) The project application stated that the projected numbers of teachers included in the project would be 2216 – a very large number of teachers needing services. The application also describes co-teaching with an IHE faculty content specialist as part of the induction program – although the budget narrative provides pay for overload/release time for faculty, it may be difficult to service all of the teachers with planning, reflection, and instruction. (e36,214-221) Lastly, there was no description of what is required in the clinical phase of the
project as far as individual education coursework. The was a lack of clarity as to whether or not the professional
development courses were in lieu of regular credit courses, or an addition to them. The range of the proposed clinical
program might prove to be an overload for prospective teachers (e49-50).

Reader's Score: 14

Selection Criteria - Quality of Project Design

1. In determining the quality of the design of the proposed project, the Secretary considers the extent to which the
   proposed project consists of a comprehensive plan that includes a description of:

   (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 to the priority or priorities
        established for this competition.

Strengths:

(i) The proposal thoroughly demonstrates, through their logic model, that research methods and
    data driven decisions are used to improve teacher knowledge, pedagogy, instruction, and
    ultimately student performance. For example, the four generalized goals upon which the
    project is based – recruitment, partnership, induction, and literacy development are backed up
    by specific activities leading to specific outcomes. Some of these include increasing the
    number of diverse STEM teachers; increasing professional development for pre-service
    teachers, training high quality mentors, and better classroom performance. Implementation of
    these should result in improved pre-college student test scores. (e99).

(ii) The proposal's goals, objectives and outcomes are comprehensive and specified in the work plan. See the
    previous comment above for examples. (e183-207).

(iii) The proposed project provides a promising way to build capacity through the use of partnerships built during the
    time of the grant. It is probable that these relationships and positions will already be in place and could continue without
    the expenditure of additional funds (e62-63).

(iv) The applicant has provided strong evidence that the formation of partnerships to recruit and improve teacher
The delivery of sustained high-quality profession development will serve to form a continuum of undergraduate coursework, teacher practicum, and induction. All of these partners will collaborate to assist high needs districts, hire and retain teachers trained in the latest educational research-based practices. (e63-64).

Weaknesses:

(i) No weaknesses noted

(ii) No weaknesses noted

(iii) The proposal requests a waiver for matching funds during the first year of the project due to university unreplaced School of Education retirements, budget cuts in the School of Education, as well as, previously established budgets in the partner school districts. Partners cannot provide matching funds for the time period stated (e97).

(iv) No weaknesses noted

Reader's Score: 37

Selection Criteria - Quality of the Management Plan

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

(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.

(ii) The potential for the incorporation of project purposes, activities, or benefits into the ongoing program of the agency or organization at the end of Federal funding;

(iii) The adequacy of support, including facilities, equipment, supplies, and other resources, from the applicant organization or the lead applicant organization.

Strengths:

(i) The proposal contains a comprehensive management plan including listed partners with outcomes based on responsibilities, timelines, and milestones (e152-207). For example, the leadership team and others in the first month of the project will development a recruitment plan that can evaluate data from teacher candidates enrolled in STEM shortage areas, then annually refine this area as needed. (e153)

(ii) The application provides evidence to show that a large number of practices and programs which were developed during the grant that would continue to be ongoing after the end of the grant. Some of these include pathways for transfer to a STEM education program, ongoing curriculum reform, possible computer science teaching credential, bilingual education, and developed rubrics for coteaching and literacy (e68.)

(ii) The application provides evidence that there are a variety of supports already in place. The IHE already has an established science lab in The Center for Excellence in science and math education (CESAME), which provides early undergraduate field experiences, tutoring opportunities in K-12 schools, and opportunities for student research centers. The School of Education contains an education technology lab for use by teacher candidates. Other offices on campus, education, literacy, and STEM faculty are also available for implementation of the project’s goals and objectives (e49, 57, 69).
Weaknesses:

(i) No weaknesses noted.
(ii) No weaknesses noted.
(iii) No weaknesses noted.

Selection Criteria - Quality of the Project Evaluation

1. In determining the quality of the evaluation, the Secretary considers:

   (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:

(i) The applicant provides comprehensive information to describe the evaluation plan. The external evaluator will use a variety of methods to measure how goals, objective, and outcomes have been met. Following, according to the work plan, results will be reviewed and altered to implement continuous improvement in expected results. (e69, e71-e72).

(ii) The proposal provides an explicit match to evaluation measures for goals and objectives in the work plan. An example of this is...the addition of a computer science credential by 9/2022 would be spearheaded by the leadership team, and the department of Computer Science Software and Engineering so that a new Computer Science credential track would attract at least 15 students as noted on (e155-156)

Weaknesses:

(i) No weaknesses noted.

(ii) There will be insufficient data available which is needed for the evaluation of the effect of the project teachers on student achievement because the first cohort of candidates would not be finished with the program until the end of year five. Other provisions for data evaluation would be able to be addressed (e80).

Priority Questions

Competitive Preference Priority - Promoting STEM ED w/a focus on Computer Science

1. Projects designed to improve student achievement or other educational outcomes in one or more of the following areas: science, technology, engineering, math, or computer science. These projects must address the following priority area:

Increasing the number of educators adequately prepared to deliver rigorous instruction in STEM fields,
including computer science, through recruitment, evidence-based (as defined in 34 CFR 77.1) professional development strategies for current STEM educators, or evidence-based retraining strategies for current educators seeking to transition from other subjects to STEM fields.

NOTE:

How does an applicant demonstrate that its proposed strategy for professional development and retention strategy for current STEM educators is evidence-based?

1. Submitting a citation of a study that is (1) focused on a STEM-focused professional development or retraining strategies, (2) relevant to the proposed project, and meets at least the design standards set forth in the “Promising Evidence” definition; OR

2. Submitting a “Logic Model” that (1) identifies the STEM professional development or retraining strategy of the project and (2) is informed by research or evaluation findings that suggest the project component is likely to improve “Relevant Outcomes.”

Strengths:
The project provides an extensive plan to increase underrepresented candidates to teach in STEM, special education, agricultural, and bilingual fields through recruitment, alterations to existing teacher preparation programs, and high quality, sustained professional development. This is based on an over-arching theme of extended use of partnerships to increase teacher performance, and hence student achievement. During teacher training, candidates will work with co-teachers such as university faculty and mentors to plan, produce and reflect on integrated STEM lessons. Cited research includes Bacharach, Heck and Dahlberg, 2010; Scantlebury, Fox, and Wassel, 2008, which indicated that the co-teaching model resulted in increased teacher and student learning (e31).

Weaknesses:
No weaknesses noted.

Reader's Score: 3

Competitive Preference Priority - Promoting Effective Instr. in Classrooms & Schools

1. Projects that are designed to support the recruitment or retention of educators who are effective and increase diversity (including, but not limited to, racial and ethnic diversity).

Strengths:
The project’s proposal provides a comprehensive plan to recruit under-represented teachers to their program. Once the recruitment is complete, the project plans to provide research based, professional development, as well as, opportunities for co-teaching experiences (e22).

Weaknesses:
No weaknesses noted.

Reader's Score: 3

Competitive Preference Priority - Novice Applicant

1. Projects submitted by applicants that meet the definition of novice applicant at the time they submit their application.

NOTE:
The lead applicant must meet all three requirements to earn CPP 3 points:
1. Has never received a grant or sub-grant under the TQP program; and
2. Has never been a member of a group application (i.e. in a TQP eligible partnership); and
3. Has not had an active discretionary grant from the Federal Government in the five years before the deadline date for applications under the program.

Strengths:

n/a

Weaknesses:

n/a

Reader's Score: 0

Status: Submitted
Last Updated: 08/06/2018 05:32 PM