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

Technical Review Coversheet

Applicant: Wayne State University (U336S190025)
Reader #1:   **********

		Points Possible	**Points Scored**
Questions			
Selection Criteria			
Quality of Project Design			
1. Project Design		40	30
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	15
	Sub Total	100	85
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	90

Technical Review Form

Panel #3 - Teacher Quality Partnership - 4: 84.336S

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

Applicant: Wayne State University (U336S190025)

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:

    (i)The rationale for the proposed project is informed by research regarding the great shortage of science, mathematics and computer science teachers, the need for STEM and computer science learning and the need for upskilled workers. The rationale is also supported by the high annual teacher turnover rate and the high percentages of students from low income families in the district served by the proposed project. The proposed project does demonstrate a strategic plan that aligns with the identified needs; therefore, it is likely that there will be an improvement in the relevant outcomes. (Appendix C—needs assessment and Pages e23-28)

    (ii)The TRUE (Teaching Residency for Urban Excellence) project is supported by a goal that is specific and measurable. For example, "Goal 1: to recruit, prepare, and graduate diverse and high qualified STEM, including computer science, teachers to work in high-need urban schools." (Page e28)

    (ii)The applicant includes some performance measures that are clearly quantifiable and specific. For example, at least 80% of residents will pass state certification tests and become certified teachers in mathematics or science. (Page e201-202)

    (iii)The applicant indicates that this project will provide support for the College of Education's transformative revision of its teacher certification program. This project will enhance that revision by providing a more comprehensive induction plan and adding curriculum elements to include trauma-informed, socio-emotional learning and STEM education. These components will assist in extending the work beyond the period of Federal Financial assistance. (Page e46) (Letters of Support) (Pages e167-e180)

    (iv)The proposed project represents an exceptional approach as it is specifically addressing the needs that have been assessed for the communities. The project connects two realities, addressing the needs of both displaced professionals and students in high-need districts that do not have access to quality STEM education.   The approach is enhanced with the addition of trauma-informed, social-emotional learning and culturally responsive education. (Page e25)

Weaknesses:

(i)   No weaknesses noted

(ii)

a.   Goal 2: To immerse participants in year-long residencies in Michigan's largest urban, high-need school districts is not stated as a measurable goal. Without any specifics it is difficult to determine what the quality of "immersing participants" will be and how the applicant will assess this goal. (Page e37)

b.   The applicant does not indicate that participants need to have strong verbal and written communication skills. Without that criterion for the selection, it is difficult to determine if the participants will be highly qualified. Goal one states, "To recruit, prepare, and graduate diverse and highly qualified STEM teachers to work in high-need urban schools. To be highly qualified, the teacher will need to have strong verbal and written communication skills. (Page e92)

c.   The applicant does not include specific, measurable objectives to address Goal 4: to positively impact student achievement in high-need districts and schools. Without that information it is difficult to determine how success will be measured in attempts to meet the goal.   (Page e22)

(iii) No Weaknesses noted
(iv) No Weaknesses noted

Reader's Score: 30

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:

    (i)   Wayne State University, one of the partners, will provide meeting places with classrooms equipped with technology and labs that can be used for off-site courses and seminars. Supplies, software and office space will be provided for the use by participants. These resources are adequate for the support of the program. (Page e49)

    (ii)   Each of the partners in this project has demonstrated a commitment to the success of the project. For example, The College of Education will provide key staff personnel. The School District Partners will build on previous partner activities and will serve on the project's advisory board, become residency site and provide mentor teachers. The Detroit Regional Chamber will serve on the project's advisory board and support the project's recruitment efforts. The Wayne Regional Education Service Agency will serve on the advisory board and help address outreach and curriculum issues. Internal University Partners will cost share in the project.   (Page e53 and Letters of support pages e166-e180)

Weaknesses:

No weaknesses were identified.

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:

   (i)   Based on the Logic Model and the work plan the applicant clearly outlines the resources, activities and outcomes for the project. These models also align each of the elements. For example, the activity which will develop and execute outreach will produce the outcome of a greater number of teachers of STEM. The key personnel responsible for the completion of activities are qualified, and the time allotted for these individuals to support the project is appropriate. The work plan includes a timeline for the major activities and milestones. The crucial aspects of the work proposal include planning, recruitment, coursework and residency, induction and evaluation.   These efforts will support completion of the project on time and within budget. (Pages e 53-e64) Logic Model (Page e95) Resumes (Pages e96-e165)

   Weaknesses:

   There were no weaknesses identified.

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:

   i) The Evaluation plan includes questions that involve both quantitative and qualitative approaches. These measures will provide valid and reliable performance data. For example, integration of educational technology for teaching and learning from the national accreditation process will be used to assess the residents' performance during coursework and residency. This aligns with the relevant outcomes of the project goals. (Page e66 and Project Objective and Performance

Measures Information-Pages e202)

(ii)The evaluation plan includes two major components: process evaluation and impact evaluation. These efforts provide for feedback to the project teams to determine if adjustments need to be made. This is done on an annual basis. This provides for adequate summative efforts to address improvement. (Table 7 and Pages e68-70)

(ii)The evaluation plan includes methods of evaluation that are thorough, feasible, and appropriate to the goals of the project. This is clearly supported by the data collection which includes interviews, focus groups, and document analysis. (Page e65)

Weaknesses:

(i)   No Weaknesses noted

(ii)   The evaluation plan does not clearly outline how frequently feedback of the results of the collected data will be shared with stakeholders. Without frequent, specific feedback it is not clear if formative data will be shared in a timely manner. For example, it is not clear how the lack of frequent specific data regarding the assessment of the curriculum application used to prepare teachers in the STEM area, which is outlined in Goal 1, will assure that this curriculum is meeting the needs of the teachers involved. If the feedback is not given in a timely manner the success of the outcomes may be hindered. If the feedback is not specific and timely, teachers will not know how to improve the application of the strategies learned. (Table 7, Pages e68-70 and e22)

Reader's Score: 15

Priority Questions

Competitive Preference Priority - Competitive Preference Priority 1

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 indicates that part of project will be to prepare highly qualified STEM teachers. (Page e18). Goal I addresses the effort to recruit, prepare and graduate highly qualified STEM teachers. This goal is met by providing STEM, including computer science, training for the recruits. This goal is met by providing STEM and computer science training for the recruits that includes a comprehensive list of courses in Math, Science, and technology with a focus on middle school level studies. This approach will provide an increase in the number of educators who are adequately prepared to deliver rigorous instruction in STEM fields, including computer science. (Page e29-31)

   Although the applicant does not specifically address intent to apply for Competitive Preference Priority I, the application meets the criteria for the priority. (Pages e29-30)

Weaknesses:

No weaknesses 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:

   This invitational priority is not addressed by the applicant.

   Weaknesses:

   NA

Reader's Score: 0

Status:	Submitted
Last Updated:	06/14/2019 05:25 PM

Status: Submitted
Last Updated: 06/14/2019 03:10 PM

Technical Review Coversheet

Applicant: Wayne State University (U336S190025)
Reader #2: **********

	Points Possible	Points Scored
Questions		
Selection Criteria		
Quality of Project Design		
1. Project Design	40	39
Adequacy of Resources		
1. Resources	20	19
Quality of the Management Plan		
1. Management Plan	20	20
Quality of the Project Evaluation		
1. Project Evaluation	20	20
Sub Total	100	98
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	103

Technical Review Form

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

Applicant: Wayne State University (U336S190025)

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 application provides focused and comprehensive details that note the quality of the project design.

   1.   For example, the application contains a clear and easily understandable rationale. This can be seen in the description of the program intended outcomes. The project begins with an acknowledgement of the importance of the teacher and that teacher quality is perhaps the most important factor. Next is the note that there are significant shortages of science, mathematics, and computer science teachers. Finally, the application posits that one remedy for overall low science and math scores for students is to increase the number of qualified STEM and computer science teachers as a start. (p. e 23)

   2.   The goals, objectives, and outcomes of the project are complete and well specified. For example, the project calls for strong goals to be met including recruiting two cohorts of 20 teaching residents for an 18-month graduate-level teaching certification program, including coursework and placement in two school district partners (p. e 289). A related goal is to have an almost immediate immersion in a classroom, which will help participants acclimate more quickly. There are plans to use a co-teaching model immediately, which will allow the residents to work in partnership with the mentor teacher from the inception of the program. (pp. 18-19)

   3.   The proposed project provides a design that will build capacity and produce results beyond the end of funding. For example, with its innovative practices and strategies, such as building cultural literacy and using trauma informed strategies, the project will very likely serve as a new model for the alternative teaching certification in STEM education. The project will also create a new model for teacher induction. The project also forecasts that the work done will become a solid and thorough induction plan, to be used for other teacher education programs. Based on the evidence provided on page 27, it seems likely that the project can achieve such outcomes. The project will help inform future changes to the certification process, including that for STEM. It will also so serve as a new model for teacher induction (p. 27)

   4.   The project notes a couple of features that may represent an exceptional approach for meeting grant goals and

requirements. For example, the project is unique in that it addresses two challenges facing the proposed service area. One is the critical need for STEM education for struggling urban schools. Another need is in the arena of workforce development. The project anticipates that with changes in the economy ahead, there are likely future layoffs of individuals with important technical skills who will need to make contributions to the local economy. Becoming a computer science or STEM teacher is one way to do so. (p. 28)

Weaknesses:

1.   No weaknesses found.
2.   No weaknesses found.
3.   No weaknesses found.
4.   Although the overall quality of project design is well written, the application needed a more thorough explanation of the qualities of the project that makes it an exceptional approach, such as its inclusion of culturally responsive and trauma informed teaching features. One area that might have helped the application meet the standard for an exceptional approach would to be include some means by which the project reaches out business and industry to garner their interest and support. (p. 28)

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:

   1.   The application provides an adequate description of the resources that will be provided by the lead organization. One important resource is that the university has depth of experience in receiving and managing large grants from various funders to fund its STEM-related initiatives. (p. 29) The university has office space and appropriate facilities and equipment, including computers in three state-of-the-art computer laboratories. It has a room fitted for distance learning with video equipment that supports video making and editing. A technology grant has provided iPads in addition to existing computing equipment. The college of education also has a full-time technical support staff to aid students, faculty, and staff. (p. 31)

   2.   The application provides appropriate and adequate descriptions of the commitment and relevance of partners in the project. For example, both partnering school districts are offering substantial support in facilities, equipment and other resources. For example, one district has an office building available close to the university with several classrooms that can be used for workshops, seminars, and other meetings. The classrooms are equipped with internet, technology consoles for audio-visual presentations, and Smart Boards. There are also labs with Apple and PC desktop computers. (p. 30)

Weaknesses:

1.   No weaknesses found.

2.   More details on the involvement of the two school districts are needed to evaluate the relevance and commitment of these crucial partners in the proposed project, especially from the districts' leadership team that will help coordinate the project. In order for a project such as this to fully meet its goals and objectives, it seems that details about the support and leadership coming from both districts would be key to making sure that they have complete buy-in. More details on their own analysis and engagement in the project design would have been helpful. (pp. 31-33)

Reader's Score: **19**

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 management plan is well detailed and wide-ranging. It will provide for focused and comprehensive program oversight and guidance. As a result of the strong and thorough management plan, it is clearly documented that the potential project has the optimum chance for success with the project being completed on time and within budget. For instance, strategic planning and evaluation will take place throughout the duration of the project. Outreach and recruitment will be targeted during the first two years to attract applicants for the two cohorts of residents, with induction into careers in teaching within the last three years as participants complete their coursework and residency. These activities will lead to outcomes such as increased student academic progress, more diverse and highly qualified teachers with needed content expertise, and a new urban teacher preparation model. (p. 36) Also, the project evaluator will work with project team members and provide quarterly reports on progress toward project goals and make recommendations based on feedback and data to support program improvement over the grant period. (p. 44)

  Other aspects of the project's management will facilitate program effectiveness and provide ways for stakeholders to give input and guidance into operations and management. For example, all of the key players in project will have ample opportunities to provide ongoing feedback to inform program management. This can be seen when the application calls for additional contributors such as the Michigan Department of Education, the Regional Chamber of Commerce, and the local engineering professional organization to come to the table and be heard. (p. 38)

  Weaknesses:

  No weaknesses found

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:

   1.　　　The methods for evaluation of the project are completely detailed, thorough, and will provide valuable and crucial performance data to guide the program to success. For example, Data collection for the evaluation questions will involve quantitative and qualitative approaches. For the quantitative approach, valid and reliable data can be obtained from the participants' performance during coursework. In addition, the evaluator plans various measures of program success, including professional dispositions, lesson planning and implementation, integration of educational technology, student case study, student self-study. Evaluation questions will ask about partnerships and possible replication. The partnership question will investigate how much both the internal and external partners support the project. (pp. 46-47)

   2.　　　The methods of evaluation are comprehensive, thorough, and completely feasible, and will provide strong documentation regarding program goals and outcomes. For example, the evaluation will seek comprehensive data, including results from the required teaching certification tests as well as exit surveys of recent completers, surveys of graduates after one to five years, and principal satisfaction surveys. In order to assure validity of data for qualitative measurements, the project will use triangulation of sources and methods. The sources will include all stakeholders, the residents/completers residency/induction coaches, mentor teachers, and course instructors. Methods will include individual interviews, focus group interviews, and document analysis. (p. 47)

   Weaknesses:

   No weaknesses found.

Reader's Score:　　20

Priority Questions

Competitive Preference Priority - Competitive Preference Priority 1

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 project meets the criteria for the competitive priority. It is designed to meet competitive preference priority 1 through its plans to recruit, prepare, and graduate diverse and highly qualified STEM and computer science teachers to work in

high-need urban schools. (p. 3)   The applicant points out that by "improving the quality of STEM education, including computer science, we are doing our youth great service by giving them ample opportunity to compete in a 21st century workforce." (p. 28) Another example that demonstrates the quality of the project is that it calls for the project leadership to identify coaches who have STEM content knowledge and have experience teaching in urban schools. These coaches will play a key role in the everyday teaching and learning activities of the participants. (p. 24) One more outstanding feature of the project in this regard is the goal to "upskill mid-career professionals with STEM and CS expertise to transition as school teachers." (p. 25)

Weaknesses:

No weaknesses found

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:

   Weaknesses:

   Reader's Score:

Status: Submitted
Last Updated: 06/14/2019 03:10 PM

Technical Review Coversheet

Applicant: Wayne State University (U336S190025)
Reader #3: **********

		Points Possible	Points Scored
Questions			
Selection Criteria			
Quality of Project Design			
1. Project Design		40	40
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	100
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	105

Panel #3 - Teacher Quality Partnership - 4: 84.336S

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

Applicant: Wayne State University (U336S190025)

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:

   (i) As cited by the applicant, factors such as teacher shortage, a growing need for STEM teachers in urban high-need local education agencies, need for upskilled workers, new careers and pathways to become teachers for mid-career professionals and undergrads, regional unemployment and layoffs in the auto industry, economic, integration of culturally responsive, trauma informed, and socio-emotional approach to teaching impacting students all serve as rationale to develop the proposed project. (pages e21-24.) Additionally, a majority of the students come from a racially diverse and economically disadvantaged background. Many students have had adverse childhood experiences which are associated with mental health and behavior learning problems. (page e21.)

   The proposed project, "Teaching Residency for Urban Excellence" (TRUE) is an accelerated graduate level certification and residency program in science, technology, engineering, and math (STEM), prepares teachers to teach in high needs areas is designed to address the noted factors. Finally, by leveraging the residents' content expertise and knowledge with research- proven strategies, the participants become K-12 teachers in this growing field. (page e21.)

   (ii) The goals, objectives, and outcomes are clearly articulated, measurable and are in alignment with the identified needs. The goals and objectives center around the major components of the project - Teaching (recruiting, preparing, and graduating highly qualified STEM teachers to work in urban schools), Residency (immersing participants in a yearlong residency program), Urban and Excellence (positively impact student achievement in high-need schools and districts). (page e22.)

   (iii) There are multiple indications that the proposed project will build sustainable models and capacity in the area of increased skills, knowledge and pedagogy of teachers to effectively deliver STEM related content to high need students as well as for teachers to assume leadership in delivering high-quality professional development training for fellow teachers.   The proposed project has the potential for sustainability by disseminating evaluation findings and studies; contributing to the body of knowledge with a progressive design approach that will develop new curricula that incorporates trauma-informed, socio-emotional learning and culturally responsive STEM content, including computer science; and by scaling up and expanding an evidenced-based project to other school districts within the state and across the country. Program completers will have acquired new skills and knowledge as well as met the state teacher certification

requirements. Example as cited by applicant, the TRUE Project will incorporate culturally responsive teaching, a research-proven pedagogy that integrates students' cultural identities and funds of knowledge in teaching and learning (Ladson-Billings, 1995). (e34) Also, the applicant proposes" to prepare two cohorts of urban educators who will positively impact student learning and the teaching profession. At least 80% of TRUE residents will pass the MTTC." These teachers will have impact on the critical teacher shortage in high need schools that lack teachers to teach rigorous STEM content, including computer science.

(iv) Many components of the TRUE project are evidenced-based as cited by the applicant, innovative strategies, learning activities, coursework are designed with students in mind and preparing teachers to deliver challenging content matter while relating to the needs of the students. Additionally, the model addresses two challenges facing the Detroit area: workforce development and STEM education. As cited by the applicant, with a shortage of highly qualified teachers, there is a threat that our next generation of workers and leaders will be unprepared for the high demand of a global economy. This project addresses both challenges. (page e47.) The strength is in the project design model. The proposed project is an innovative model designed to build capacity for training prospective teachers as well as veteran teachers in new roles such as mentor teachers, residency coaches, induction coaches and highly qualified STEM teachers. For instance, an innovative feature of the model is the development of a culturally responsive STEM and computer science curriculum with trauma-informed pedagogy that equips teachers with cultural knowledge and skills in order to better respond to students and the community. The model prepares teachers to meet the need for skilled STEM content teachers while reducing the teacher shortage in this area.

Weaknesses:

No weakness noted for (i) – (iv)

Reader's Score: 40

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:

   (i)   There are several sources of funding that will support this project. The University has funds from other grant programs that support the redesign of the math curriculum for elementary mathematic teachers from NSF Robert Noyce Teacher's Fellows program. Facilities in Dearborn School District are used for workshops and professional development activities. The labs are equipped with Wi-Fi, internet, Apple and PC computers. And, the University has state-of-the-art facilities with tech support, to include iPads used by faculty, a library for participant use and multiple spaces for hosting meetings and conducting classes. (e49-50)

   (ii)   The College of Education at Wayne State has demonstrated commitment to this project. Principal Investigator and

other Wayne State faculty members are also on the grant. Both Detroit and Dearborn Public Schools have fully supported this project. Among the letters of support provided are from both internal (Wayne State) and external partners to include the LEAs, Michigan Department of Education, Detroit Regional Chamber, Wayne Regional Education Service Center, and the Engineering Society of Detroit. The Education Service Center will also serve on the Advisory Board. The support from the district is demonstrated through providing the schools to participate in the proposed project as well as use of the facilities, teachers, time etc.(e52-53) (Appendix H- Letters of Support)
Weaknesses:

Weaknesses:

No weaknesses noted for (i) and (ii).

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:

   (i)   The Logic Model presented a visual representation of all the components of the project and how program planning, collaboration and monitoring come together. Additionally, the Work Plan (page e58) filled in the details for implementation of key activities, project management and organization of the workflow. As cited by the applicant -Year 1 includes the development and implementation of new curriculum for computer science, development of a new endorsement for computer science, integration of state standards and the accreditation quality assurance system, incorporation of socio-emotionally learning and culturally responsive teaching, STEM integration. Work Plan table (page e56) effectively conveyed the timeline for implementing and scheduling key components of the 5-year project such as recruitment cycle, coursework for participants, and when residency and induction occurs with each cohort.

   The Project Team will be comprised of Wayne State faculty and staff. Principal Evaluator and Project Director, Program Coordinator, Residency and Induction Coordinator, Lead Advisor, Recruitment Specialist, Residency and Induction Coaches (10) and the Lead Evaluator to make up the project staff. The roles and responsibilities are provided. All project team members have years of experience in their field and have served in the same capacity on similar Department grants. Time allocation is adequate. This experienced Project Team should be able to effectively manage the proposed project within budget and on time. (Pages e55 -59.)

Weaknesses:

No weakness noted for (i)

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:

   (i)   The project evaluation will center around the seven outcomes in the Logic Model that are aligned to the four project goals. The suggested questions are divided among the 4 program goals. For instance, Goal One1- Teaching has three questions related to awareness and recruitment of mid-career STEM and Computer Science professionals to teaching. (Page e45.)

   The applicant used an inquiry-based approached to evaluating the project which is quite fitting for the information and data that they wish to collect about the project. The questions are framed in a manner that will collect the desired data and the appropriate data collection tools and instruments are aligned to the questions. The questions are clearly stated and aligned very well to each project goal. Further, the questions are framed in such a way as to provide feedback that can be used for quality improvement and self-correction during the grant years. The question method is a more direct approach for project implementers to learn about effectiveness of the strategies used for Goal 1.Teaching components, Goal 2.Residency - preparation of coaches and mentors, Goal 3. Urban teacher preparation, mentoring and support, and Goal 4. Excellence - impact of project residents/completers on student learning and academic progress.
   (ii)

   These questions will be answered through qualitative and quantitative acceptable methods such as interviews, focus groups, document analysis, and surveys. Measure of program impact includes increased student performance as attained through reliable and valid deidentified student record data sources. (Page e68.)

   (ii)
   Table 7 – Evaluation Timelines and Activities (page e69) outlines by year, the Evaluation activities and the extent to which they are impact or process measures. Years 3-5 will assess the project's impact. The evaluation model has a set of relevant questions and outcome measures-based on the project's goals and objectives that are thorough and aligned. The Evaluation Team will include an Evaluator and two graduate assistants trained in program evaluation, data collection, analysis as well as focused groups and interviewing. (Page e69.)

Weaknesses:

No weakness noted for (i) and (ii).

Reader's Score: 20

Priority Questions

Competitive Preference Priority - Competitive Preference Priority 1

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 Teaching Residency for Urban Excellence (TRUE) is an accelerated graduate-level certification and residency program for mid-career professional and undergraduates in science, technology, engineering and mathematics (STEM) and computer science. The project will prepare teachers to work with students in two-high need local education agencies – Detroit and Dearborn. MI. The project has evidenced-based components embedded throughout the project's duration. In addition to coursework, there is a residency and induction component. The project proposes to design a culturally responsive STEM and computer science curriculum with trauma-informed pedagogy that equip teachers with cultural knowledge and skills in order to better respond to students and the community. While the proposed project focuses on preparing teachers, it also addresses the learner and the underlying conditions that high need, underserved, low income, and the disruptive existence that plague these students. The project calls to attention to the fact teachers are ill-prepared to deal with social and emotional issues of their students. Their strength is in pedagogy and subject matter. In order to effectively reach these students, teachers must be trained, as the project proposes, how to address these issues as they deliver challenging STEM and computer science instruction. The effective implementation of this project will not only inform the body of knowledge in this area but will serve as a model to be replicated by other high need school districts.

   Weaknesses:

   No weakness 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:

N/A

Weaknesses:

N/A

Reader's Score: 0

Status: Submitted

Last Updated: 06/17/2019 08:53 AM