

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

Status: Submitted

Last Updated: 05/24/2013 09:44 AM

## Technical Review Coversheet

**Applicant:** National Board for Professional Teaching Standards (U367D130002)

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

	Points Possible	Points Scored
<b>Questions</b>		
<b>Selection Criteria</b>		
<b>Significance</b>		
1. Significance	20	20
<b>Sub Total</b>	20	20
<b>Selection Criteria</b>		
<b>Quality of the Project Design and Services</b>		
1. Project Design & Service	25	20
<b>Quality of the Management Plan and Personnel</b>		
1. Management & Personnel	15	10
<b>Sub Total</b>	40	30
<b>Selection Criteria</b>		
<b>Sustainability</b>		
1. Sustainability	20	17
<b>Quality of the Project Evaluation</b>		
1. Project Evaluation	20	16
<b>Sub Total</b>	40	33
<b>Priority Questions</b>		
<b>Competitive Priority 2</b>		
<b>Improving Efficiency (Cost-Effectiveness)</b>		
1. Improving Efficiency	1	1
<b>Sub Total</b>	1	1
<b>Competitive Priority 3</b>		
<b>Promoting Science, Technology, Engineering, &amp; Math</b>		
1. Promoting STEM	3	2
<b>Sub Total</b>	3	2
<b>Total</b>	104	86

# Technical Review Form

Panel #5 - Panel 5 - 1: 84.367D

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

Applicant: National Board for Professional Teaching Standards (U367D130002)

## Questions

### Selection Criteria - Significance

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

- (1) The significance of the proposed project on a national level (as defined in this notice).
- (2) The potential contribution of the proposed project to the development and advancement of teacher and school leadership theory, knowledge, and practices.
- (3) The importance or magnitude of the results or outcomes likely to be attained by the proposed project, especially improvements in teaching and student achievement.

#### Strengths:

The application's focus is on increasing the number of NBCTs in high-need schools which will boost student achievement which is an important outcome.

Creating instructional leaders from the cadre of NBCTs is also proposed. Teacher leadership can lead to improved teaching and learning, per research. The potential contribution from this project can certainly advance knowledge and practices by providing evidence (findings) of increased student learning that resulted from the project.

The embedded labor-management collaboration can increase the probability of positive outcomes from this proposed project. This collaborative effort should enhance problem-solving and cooperation, which would lead to positive results and outcomes.

The Networked Improvement Community (NIC) will serve collaboration efforts as well, which should also lead to positive results and outcomes (findings) from this project.

The proposed initiative suggests measurable improvements in teaching effectiveness and student achievement in high-need schools, especially in STEM disciplines. (See comments in Project Evaluation section.)

The magnitude/extent of direct impact by the proposed project is good - four states and two large, urban cities. The outcomes can be significant in improving teaching and in increasing student learning as these partners share their results (findings) from participating in this project.

#### Weaknesses:

No weaknesses were identified

Reader's Score: 20

### Selection Criteria - Quality of the Project Design and Services

1. The Secretary considers the quality of the design and services of the proposed project. In determining

the quality of the design and services of the proposed project, the Secretary considers:

- (1) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified, aligned, and measurable.
- (2) The extent to which the proposed project is part of a comprehensive effort to improve teaching and learning and support rigorous academic standards for students.
- (3) The extent to which the training or professional development services to be provided by the proposed project will be of sufficient quality, intensity, and duration to lead to improvements in practice among the recipients of those services.

**Strengths:**

The goals, objectives and outcomes are well-defined and are measurable as defined on pp. 17 & 20.

The outcomes of this proposed project, and the findings from the project analysis, should lead to improved teaching and student learning as research has shown that advanced certification has led to increases in student performance.

Support for professional development is extensive, including site partners and the Networked Improvement Community (NIC) as professional learning communities as discussed on pp. 24-25.

Carnegie support within the presented 'hub' structure will also provide good network support.

**Weaknesses:**

The goals, objectives and outcomes, although aligned, are mainly descriptive. They can be measured but the impact that these will have on student learning is undefined.

It is also a bit uncertain exactly what support the applicant (NBPTS) would provide throughout the proposed project.

**Reader's Score: 20**

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

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

- (1) The qualifications, including relevant training and experience, of the project director, key project personnel, and project consultants or subcontractors.
- (2) 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.
- (3) The extent to which the time commitments of the project director and other key project personnel are appropriate and adequate to meet the objectives of the proposed project.
- (4) The extent to which the proposed management plan includes sufficient and reasonable resources to effectively carry out the proposed project, including the project evaluation.

**Strengths:**

The Senior Advisors (Dr. Thorpe and Dr. Haselkorn) have strong background and experience, based on the written narrative and are capable of managing the proposed project.

The advisors from the Carnegie Foundation have good background and experience, based on the written narrative and are capable of managing the proposed project.

The lead researcher (Dr. Hinojosa) and the senior advisor (Dr. Friedman) from the American Institutes for Research (AIR)

have good background and experience, based on the written narrative. They should be capable of providing good independent evaluation of this proposed initiative.

The intensive five-day training outlined in the management plan is good. It will assist greatly in achieving the goals of the proposed project.

The 'maintenance period' addresses periodic review throughout the implementation period. It should also assist in achieving the goals of the proposed project.

**Weaknesses:**

Some of the qualifications for key personnel were unclear based on the brief narratives provided in the application. For example, Ms. DeBose "... holds degrees from the University of California, Berkeley." It is unclear whether or not the degrees are related to the proposed project. Since she is a key player in the execution of the proposed project, more detailed information would have been helpful to evaluate her training and experience.

The Project Director (Andy Coons) and the Project Manager (Joe Doctor) have some good background and experience but perhaps not closely aligned/related to this proposed project. It is uncertain whether or not they are qualified, based on this experience, to direct and manage a project of this magnitude. In particular, Mr. Doctor, who will be the point person for this initiative as he is projected to be assigned 100% of his time to this proposed project, it is questionable based on the information provided that he possesses the background and experience needed for a project of this scope and magnitude given his limited experience in public education, as presented in the narrative.

The "Management Plan" chart is difficult to follow; needs further explanation. For example, who is specifically responsible for each aspect of the plan and how will success be measured are details that are missing.

**Reader's Score: 10**

**Selection Criteria - Sustainability**

**1. The Secretary considers the adequacy of resources to continue the proposed project after the grant period ends. In determining the adequacy of resources and the potential for utility of the proposed project's activities and products by other organizations, the Secretary considers:**

- (1) 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.**
- (2) The extent to which the proposed project is likely to yield findings and products (such as information, materials, processes, or techniques) that may be used by other agencies and organizations.**
- (3) The extent to which the applicant will disseminate information about results and outcomes of the proposed project in ways that will enable others, including the public, to use the information or strategies.**

**Strengths:**

The proposed initiative is projected to result in more than 2,800 NBCTs and 800 NBCT instructional leaders across the six partner sites, indicating significant capacity building.

The collaboration mechanisms should enhance sustainability, particularly within the six partner sites. Sharing findings about the results from this project will assist other organizations improve student learning.

Both the National Board and the Carnegie Foundation's dissemination of the project and its findings will be extensive. These two national organizations have extensive networks and systems (e.g. website, conferences, etc.) which can be utilized and accessed by the public and organizations to improve their systems based on the findings from this project.

Additionally, each of the six partner sites has extensive networks where results from this proposed project can be shared.

Results will also be shared at large conferences sponsored by the National Board.

AIR, the independent external evaluators, will also disseminate results through their network.

**Weaknesses:**

The applicant did not fully explain how sustainability of the project would extend beyond the grant funding period.

**Reader's Score: 17**

**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 one or more of the following factors:**

**(1) The extent to which the methods of evaluation are thorough, feasible, and appropriate to the goals, objectives, and outcomes of the proposed project.**

**(2) The extent to which the evaluation includes the use of objective performance measures that are clearly related to the intended outcomes of the project and will produce quantitative and qualitative data.**

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

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

**Note: We encourage applicants to review the following technical assistance resources on evaluation: (1) WWC Procedures and Standards Handbook: <http://ies.ed.gov/ncee/wwc/references/idocviewer/doc.aspx?docid=19&tocid=1>; and (2) IES/NCEE Technical Methods papers: [http://ies.ed.gov/ncee/tech\\_methods/](http://ies.ed.gov/ncee/tech_methods/).**

**Strengths:**

The proposed evaluation uses a mixed-methods, multi-site evaluation, including a causal and a quasi-experimental design. This methodology should provide findings that are based on sound evaluative procedures.

Research design is presented very well and seems appropriate for the proposed project. The methodology that is discussed is closely aligned to the project and, when implemented, will lead to findings that analyze the effectiveness of the project.

The teacher and student outcomes analysis, presented on pg. 46, is very strong and a key component of this initiative. However, it was not explained or presented to any great extent in the project design and service section.

The qualitative analysis described is also very appropriate and necessary for the proposed project. This methodology is appropriate to analyze the goals, objectives and outcomes of the proposed project.

The use of an independent external evaluation - AIR - is a good means of providing an objective analysis of the effectiveness of this project. Their team seems very well qualified and the time allocation and resources seem appropriate for the scope of this initiative.

Perception data will be collected. This could be very important information for this proposed project. The data collected could be useful in providing immediate assessment of progress toward achieving intended project outcomes and modest modifications could be made, if necessary.

The evaluation component is presented in a continuous improvement vein which will allow for adjustments and continuous improvement throughout the duration of the proposed project.

**Weaknesses:**

It would have been helpful to list who would have been responsible for the various evaluation activities which were presented in Table 8 (pg. 49).

**Reader's Score: 16**

**Priority Questions**

**Competitive Priority 2 - Improving Efficiency (Cost-Effectiveness)**

- 1. This priority funds projects that will identify strategies for providing cost-effective, high-quality services at the State, regional, or local level by making better use of available resources. Such projects may include innovative and sustainable uses of technology, modification of school schedules and teacher compensation systems, use of open educational resources (as defined in the notice), or other strategies.**

**General:**

The initiative proposes to reduce teacher attrition, thus making better use of existing resources. (This would reduce recruitment, selection and induction costs.) The initiative also suggest that this program will reduce expenses for remediation programs, summer school and other support services; implying that NBCT will have a great impact on student learning which will lessen the need for these support services.

**Reader's Score: 1**

**Competitive Priority 3 - Promoting Science, Technology, Engineering, & Math**

- 1. This priority funds projects that address one or both of the following priority areas:**

**(a) Increasing the opportunities for high-quality preparation of, or professional development for, teachers of STEM subjects.**

**(b) Increasing the number of individuals from groups traditionally underrepresented in STEM, including minorities, individuals with disabilities, and women, who are teachers of STEM subjects and have increased opportunities for high-quality preparation or professional development.**

**In addition, applicants must describe how they plan to measure the impact the proposed project activities have on teacher effectiveness. Applicants must determine teacher effectiveness through a rigorous, transparent, and fair evaluation in which performance is differentiated using multiple measures of effectiveness and based in significant part on student growth (as defined in this notice).**

**General:**

The application proposes a specific focus on STEM teachers in the recruitment, selection, development, and instructional leadership for this initiative. This is prevalent throughout the application. However, the focus seems to be mainly in the area of science (teachers), which is fine, but not as broad as if the focus included the other STEM areas as well.

It is unclear if the proposed project would increase the number of individuals from underrepresented groups; this was not specifically addressed.

**Reader's Score:** 2

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**Status:** Submitted

**Last Updated:** 05/24/2013 09:44 AM

Status: Submitted

Last Updated: 05/28/2013 10:35 AM

## Technical Review Coversheet

**Applicant:** National Board for Professional Teaching Standards (U367D130002)

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

	Points Possible	Points Scored
<b>Questions</b>		
<b>Selection Criteria</b>		
<b>Significance</b>		
1. Significance	20	20
<b>Sub Total</b>	20	20
<b>Selection Criteria</b>		
<b>Quality of the Project Design and Services</b>		
1. Project Design & Service	25	20
<b>Quality of the Management Plan and Personnel</b>		
1. Management & Personnel	15	10
<b>Sub Total</b>	40	30
<b>Selection Criteria</b>		
<b>Sustainability</b>		
1. Sustainability	20	17
<b>Quality of the Project Evaluation</b>		
1. Project Evaluation	20	20
<b>Sub Total</b>	40	37
<b>Priority Questions</b>		
<b>Competitive Priority 2</b>		
<b>Improving Efficiency (Cost-Effectiveness)</b>		
1. Improving Efficiency	1	1
<b>Sub Total</b>	1	1
<b>Competitive Priority 3</b>		
<b>Promoting Science, Technology, Engineering, &amp; Math</b>		
1. Promoting STEM	3	2
<b>Sub Total</b>	3	2
<b>Total</b>	104	90

# Technical Review Form

Panel #5 - Panel 5 - 1: 84.367D

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

Applicant: National Board for Professional Teaching Standards (U367D130002)

## Questions

### Selection Criteria - Significance

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

- (1) The significance of the proposed project on a national level (as defined in this notice).
- (2) The potential contribution of the proposed project to the development and advancement of teacher and school leadership theory, knowledge, and practices.
- (3) The importance or magnitude of the results or outcomes likely to be attained by the proposed project, especially improvements in teaching and student achievement.

### Strengths:

(1) The applicant has a defined national program in place which provides educators with the opportunity to earn advanced degrees in various areas of certification. The proposal outlines the applicant's plan to expand this initiative by placing 3,650 NBCT, of which 972 would specialize in STEM-related instruction (page 14). In addition, the initiative will create a pipeline into instructional leadership and foster a Networked Improvement Community (NIC) for cross-site collaboration which will increase the effectiveness of teachers from various communities and backgrounds. (page 10) Through this grant, the applicant has refined its strategy to ensure students in high-need schools receive intensive instruction by concentrating the number of NBCTs in those schools. (page 8)

(2) ) The applicant adequately outlines how it plans to contribute to the development and advancement of school leadership theory, knowledge and practices through promoting teacher effectiveness, instructional leadership, and professional learning (page 10). The applicant cites research which suggests that students of NBCTs outperform students of non-NBCTs. The initiative will work to promote an understanding of how teacher effectiveness is determined and developed by using its National Board Standards, process and certification. The instructional leadership structures and practices will be in the six partner sites to determine how leadership opportunities promote retention. This study may yield good information into what is needed to increase teacher job satisfaction.

(3) The applicant provides adequate justification of the magnitude of the proposed project. The initiative would place 3,650 NBCTs and NBCT instructional leaders, of which 972 would specialize in STEM-related instruction in high need schools. The applicant has outlined four anticipated outcomes as a result of the proposed project which include: creating and strengthening systems for teachers to earn advanced certification and creating and developing a Networked Improvement Community supporting the initiatives strategies. By partnering with four states and two school districts, the applicant will be able to compare results from various demographics which would most likely have broader impact thus increasing the likelihood of replication.

### Weaknesses:

- (1) No weaknesses noted.
- (2) No weaknesses noted.
- (3) No weaknesses noted.

Reader's Score: 20

### Selection Criteria - Quality of the Project Design and Services

1. The Secretary considers the quality of the design and services of the proposed project. In determining the quality of the design and services of the proposed project, the Secretary considers:

- (1) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified, aligned, and measurable.
- (2) The extent to which the proposed project is part of a comprehensive effort to improve teaching and learning and support rigorous academic standards for students.
- (3) The extent to which the training or professional development services to be provided by the proposed project will be of sufficient quality, intensity, and duration to lead to improvements in practice among the recipients of those services.

#### Strengths:

- (1) The goals are clearly articulated in the proposed project. The two goals of the project are to: (1) increase the number of highly effective NBCTs in high need schools and (2) increase the number of highly effective NBCTs in instructional leadership roles. The objectives, outcomes and measures are specified and aligned to the goals. (page17)
- (2) The applicant has outlined a comprehensive effort to improve teaching and learning and support rigorous academic standards for students. The proposal requires active involvement from all relevant stakeholders including participants from each site and a network of NBCTs to ensure that there are sustainable models of recruitment, selection and support that will be responsive for each sites' reform priorities (page 18). The criteria for earning NBC will include evidence of effectiveness which will be derived in part by using local teacher evaluation criteria. (page 19) In addition, the site partners will be included in the instructional leadership by targeting local priorities through working as Peer Assistance and Review, mentor teachers, and STEM coaches (page 18).
- (3) The proposed program will provide participants with focused professional development. Completing the process to become a National Board Certified teacher will involve job-embedded and content-focused, and student based development ( page 22). In order to receive advanced certification, educators must demonstrate, analyze and reflect upon their individual teaching performances. This process will demand between 200-400 hours for completion. Various partners have established programs and mentorships which provide additional support and training for participants pursuing the advanced certification (page 23). The additional support given to NBCT candidates increases their achievement rates by 20 percentage points. (page 23).

#### Weaknesses:

- (1) The applicant does not provide specific percentages (i.e. outcomes) to determine the success rates of the proposed program.
- (2) The proposal does not provide a clear description of the role the applicant will have in the project other than to engage or encourage site partners to pursue the outlined goals.
- (3) No weaknesses noted.

Reader's Score: 20

### Selection Criteria - Quality of the Management Plan and Personnel

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

- (1) The qualifications, including relevant training and experience, of the project director, key project personnel, and project consultants or subcontractors.**
- (2) 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.**
- (3) The extent to which the time commitments of the project director and other key project personnel are appropriate and adequate to meet the objectives of the proposed project.**
- (4) The extent to which the proposed management plan includes sufficient and reasonable resources to effectively carry out the proposed project, including the project evaluation.**

**Strengths:**

- (1) The applicant clearly provides a description of appropriate staff assigned to the project. Key personnel identified to work on the project will include a project manager, Hub leader, State and District Site Manager, District Improvement Expert, Process Improvement Expert, Senior Advisors(3), Improvement Experts (2) and Lead Evaluator (pages 28-30) Personnel identified for this project are highly qualified and experienced in the areas related to the project management as evidenced on pages 28-30. The senior advisors have background knowledge which will be beneficial to the implementation of the project.
- (2) The applicant has developed an adequate management plan which details timelines, milestones and group responsible for each task (pages 33-34). For example, during the fourth quarter of the 2013 the hub will be responsible for all tasks related to hub training and establishing a process framework (page 33)
- (3) Time commitments of key personnel are appropriate and adequate to meet the objectives of the proposed project. The project director and two improvement experts will devote 25% of time to the project. Full time personnel include the project manager, hub leader and improvement expert, and district/state site manager.
- (4) The proposed management plan includes an abundant amount of resources to carry out the proposed project. The applicant is requesting \$15 million to complete the proposed plan. An estimated 3,650 teachers will receive NBC. A knowledge management software program is budgeted, which will likely increase the applicant's ability to evaluate and disseminate results to the public. ( page 35)

**Weaknesses:**

- (1) No weaknesses noted.
- (2) The management plan does not appear to be detailed enough to assure that the applicant will be able to accomplish each task in a timely manner. For example, the applicant could have planned monthly meetings with key personnel to ensure that timelines are properly adhered to, barriers to implementation are addressed and project coordination occurs. The key personnel were not listed on the table or narrative which references the management plan.
- (3) No weaknesses noted.
- (4) No weaknesses noted.

**Reader's Score: 10**

**Selection Criteria - Sustainability**

- 1. The Secretary considers the adequacy of resources to continue the proposed project after the grant period ends. In determining the adequacy of resources and the potential for utility of the proposed project's activities and products by other organizations, the Secretary considers:**

- (1) 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.**
- (2) The extent to which the proposed project is likely to yield findings and products (such as information, materials, processes, or techniques) that may be used by other agencies and organizations.**
- (3) The extent to which the applicant will disseminate information about results and outcomes of the proposed project in ways that will enable others, including the public, to use the information or**

**strategies.**

**Strengths:**

(1) The proposed project is designed to build capacity and yield results extending beyond Federal funding. The applicant will increase the number of NBCTs who will be responsible for instructional leadership in their urban and rural schools (page 36). Collaborations and instructional improvement will likely be increased in schools that will have a higher concentration of NBCTs which could possibly increase student achievement.

(2) The applicant has developed a plan to provide findings and products through its evaluation process of this project (page 38). The Networked Improvement Committee (NIC) and the external evaluator have defined roles to ensure the findings and products are disseminated throughout the educational community (page 38-39). The external evaluator, AIR will measure the impact of the site partners' performance measures on cost, teacher effectiveness and student achievement (page 38). The NIC will collect and analyze findings as it relates to the staffing, logistics, and training materials required to support the National Board's work. Lastly, Carnegie will develop an online improvement science workshop for practitioners that will be disseminated to teachers and administrators. The proposal is likely to lead to possible replications from other entities as it relates to increasing support for teachers as they seek to earn advanced certification as evidenced by its clear plan to disseminate findings and products.

(3) The applicant has clearly outlined a realistic and feasible plan to disseminate information about results and outcomes regarding the proposed project in various avenues (pages 39-40). The applicant, Carnegie and AIR will disseminate the results of the proposed project through presentations at various conferences including the annual, national Teaching and Learning Conference (page 39). By currently disseminating its findings through its website, e-newsletters and blogs which currently reach 100,000 NBCTs and 35 network affiliates, the applicant clearly demonstrates its ability to reach the public (page 39).

**Weaknesses:**

(1) Although the projected results are adequate, the applicant does not provide a solid sustainability plan beyond grant funding. The applicant makes assumptions that districts and states will be willing or have the ability to absorb the costs related to program as well as have the desire to continue with the program.

(2) No weaknesses noted.

(3) No weaknesses noted.

**Reader's Score: 17**

**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 one or more of the following factors:**

**(1) The extent to which the methods of evaluation are thorough, feasible, and appropriate to the goals, objectives, and outcomes of the proposed project.**

**(2) The extent to which the evaluation includes the use of objective performance measures that are clearly related to the intended outcomes of the project and will produce quantitative and qualitative data.**

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

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

**Note: We encourage applicants to review the following technical assistance resources on evaluation: (1) WWC Procedures and Standards Handbook: <http://ies.ed.gov/ncee/wwc/references/idocviewer/doc.aspx?docid=19&tocid=1>; and (2) IES/NCEE Technical Methods papers: <http://ies.ed>.**

**Strengths:**

- (1) The applicant has demonstrated an adequate approach to ensuring that the evaluation methods are feasible and appropriate to the goals, objectives and outcomes of the proposed project. The evaluation will include a quasi-experimental design and a casual method to accommodate the different processes used by the six site partners. Research questions for the evaluation are included in the table on page 42. These questions will be used for frequent formative feedback and summative assessment of the implementation and impact of the proposed project. The questions are aligned to the logic model found on page 16.
- (2) The project will have several studies take place to measure the outcomes of the project and will produce quantitative and qualitative data (pages 46-48). Quantitative data will include demographic information, participation and attrition rates and cost of implementation. The applicant will answer research questions using Rasch analysis, teacher and student outcome analysis and a cost analysis. Qualitative data will be gathered through interviews and focus group data.
- (3) The evaluation team will provide performance feedback that will permit periodic assessment of the progress toward achieving the goals of the proposed project. The external evaluator will provide summaries of midyear findings and end of academic year findings ( page 48). The applicant is likely to be able to make adjustments as needed to support the needs of the participants and site partners with the provided reports. The evaluation team will also provide programmatic reports at the end of years 2 and 3 of the project.
- (4) The applicant has ensured that sufficient resources have been placed on the evaluation process. The proposed project will have an external evaluation team in place to provide constant feedback. The applicant has allotted approximately 10% of the total grant budget to ensure that there is an evaluation process in place. Researchers will visit each partner site twice a year to present findings and make recommendations.

**Weaknesses:**

- (1) No weaknesses noted.
- (2) No weaknesses noted.
- (3) No weaknesses noted.
- (4) No weaknesses noted.

**Reader's Score: 20**

**Priority Questions**

**Competitive Priority 2 - Improving Efficiency (Cost-Effectiveness)**

- 1. This priority funds projects that will identify strategies for providing cost-effective, high-quality services at the State, regional, or local level by making better use of available resources. Such projects may include innovative and sustainable uses of technology, modification of school schedules and teacher compensation systems, use of open educational resources (as defined in the notice), or other strategies.**

**General:**

**Strengths:**

The applicant plans to utilize a rigorous process to determine teachers who will most likely have the ability to achieve advanced certification. Once the candidates are selected, they will be given a structured support system. In doing so, the applicant believes money will be saved by eliminating the number teachers required to retake portions of the assessment while increasing the achievement rates of educators. By increasing the number of NBCTs, the rate of attrition slows down and student achievement is likely to increase .

**Weaknesses:**

No weaknesses noted.

**Reader's Score:** 1

**Competitive Priority 3 - Promoting Science, Technology, Engineering, & Math**

1. This priority funds projects that address one or both of the following priority areas:

(a) Increasing the opportunities for high-quality preparation of, or professional development for, teachers of STEM subjects.

(b) Increasing the number of individuals from groups traditionally underrepresented in STEM, including minorities, individuals with disabilities, and women, who are teachers of STEM subjects and have increased opportunities for high-quality preparation or professional development.

In addition, applicants must describe how they plan to measure the impact the proposed project activities have on teacher effectiveness. Applicants must determine teacher effectiveness through a rigorous, transparent, and fair evaluation in which performance is differentiated using multiple measures of effectiveness and based in significant part on student growth (as defined in this notice).

**General:**

**Strengths:**

The applicant seeks to increase the number of NBCTs in STEM subjects and expand the opportunity for these teachers to serve as instructional leaders. By the end of the grant period, the applicant plans to have approximately 3,600 teachers receive NBC of which approximately 975 of them will receive NBC teachers or instructional leaders with STEM disciplines.

**Weaknesses:**

The Washington initiative seeks to increase the number of minorities in STEM subject areas by establishing NBCT Ambassadors program. However, the proposal lacks specificity as to how it will encourage traditionally underrepresented groups to participate in STEM certification.

**Reader's Score:** 2

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**Status:** Submitted  
**Last Updated:** 05/28/2013 10:35 AM

Status: Submitted

Last Updated: 05/24/2013 04:28 PM

## Technical Review Coversheet

**Applicant:** National Board for Professional Teaching Standards (U367D130002)

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

	Points Possible	Points Scored
<b>Questions</b>		
<b>Selection Criteria</b>		
<b>Significance</b>		
1. Significance	20	19
<b>Sub Total</b>	20	19
<b>Selection Criteria</b>		
<b>Quality of the Project Design and Services</b>		
1. Project Design & Service	25	20
<b>Quality of the Management Plan and Personnel</b>		
1. Management & Personnel	15	11
<b>Sub Total</b>	40	31
<b>Selection Criteria</b>		
<b>Sustainability</b>		
1. Sustainability	20	17
<b>Quality of the Project Evaluation</b>		
1. Project Evaluation	20	19
<b>Sub Total</b>	40	36
<b>Priority Questions</b>		
<b>Competitive Priority 2</b>		
<b>Improving Efficiency (Cost-Effectiveness)</b>		
1. Improving Efficiency	1	1
<b>Sub Total</b>	1	1
<b>Competitive Priority 3</b>		
<b>Promoting Science, Technology, Engineering, &amp; Math</b>		
1. Promoting STEM	3	2
<b>Sub Total</b>	3	2
<b>Total</b>	104	89

# Technical Review Form

Panel #5 - Panel 5 - 1: 84.367D

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

Applicant: National Board for Professional Teaching Standards (U367D130002)

## Questions

### Selection Criteria - Significance

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

- (1) The significance of the proposed project on a national level (as defined in this notice).
- (2) The potential contribution of the proposed project to the development and advancement of teacher and school leadership theory, knowledge, and practices.
- (3) The importance or magnitude of the results or outcomes likely to be attained by the proposed project, especially improvements in teaching and student achievement.

### Strengths:

Beyond simply extending an already proven model for enhancing teacher practice (4-7), the great significance of the applicant's proposal is its scope: in addition to reaching 3500 teachers, it also intends to work at and with education agencies at the large urban district and state levels, increasing the likelihood that it will impact things like labor-management relations (9) and instructional leadership (9) efforts. Indeed, one of the great strengths of the proposal is the way in which it attends to the latter: a major goal of the proposal is developing the capacity of and preparing participating teachers for instructional leadership roles, which is likely to have a school-level impact on instructional improvement work. The fact that the program design is differentiated for each partner's needs and existing priorities should lead to several exemplars, as well as some ways for others to replicate the model. A significant portion of the recruited participants will be STEM educators (12).

### Weaknesses:

The applicant makes some assumptions about the likely significance of its work that it does not directly attend to in its program design. For instance, the applicant notes that the "creation or improvement of instructional leadership roles at partner sites will improve school-based professional learning," (12), a change theory that may result from the professional development modes (i.e., the NIC) used in the program design but is not assured without continued support. The idea of supporting multiple or many participants at a single site (12) is a promising way of creating a "critical mass" necessary to change the professional and professional learning culture of schools; however, it is only acknowledged in the proposal, no plans are provided to address it.

Reader's Score: 19

### Selection Criteria - Quality of the Project Design and Services

1. The Secretary considers the quality of the design and services of the proposed project. In determining the quality of the design and services of the proposed project, the Secretary considers:

- (1) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified, aligned, and measurable.
- (2) The extent to which the proposed project is part of a comprehensive effort to improve teaching and learning and support rigorous academic standards for students.
- (3) The extent to which the training or professional development services to be provided by the

**proposed project will be of sufficient quality, intensity, and duration to lead to improvements in practice among the recipients of those services.**

**Strengths:**

The applicant provides a clear logic model to describe the relationship between goals, activities, and intended outcomes (17); it also identifies the measures it will use to assess progress towards these goals (18). The key strength of the program design, however, is what it calls its “partnerships”: working in conjunction with the districts and states involved, it is supporting site-specific programming and processes, rather than imposing a singular design on its sites; many of the proposed sites have already begun to design and/or implement their proposed supports. Indeed, as the chart on page 19 of the application makes clear, extensive planning on how to pursue the project goals has been conducted with each site, including how to develop a STEM recruitment strategy. The Network Improvement Community concept (24) will enable the applicant to connect practices and practitioners across sites, and should contribute to the overall findings of the project.

**Weaknesses:**

The intended outcomes for the project remain vague (i.e., “increased teacher effectiveness”), and the applicant never quite defines how its intentions for its district and state partners fit in with the logic model—they appear to be goals, but are slotted outside of the logic model (17). While it is clear the main impetus of the project design is to empower stakeholder agency, what is never made clear is the applicant’s role in doing so: how they help sites develop and implement their comprehensive strategy is never fully articulated. To give but one example, the applicant calls upon the research base to describe the kind of professional development it intends to support in/at its sites; however, when it comes to describing such supports, all it offers is that it will be “encouraging the use of models of best practice in those services, and engaging site partners in focused continuous improvement” (24), with no clarity as to how it will do so. Finally, while a national cross-site community should help the applicant and its sites address implementation challenges, it is surprising that the applicant is not supporting networked communities at the site level—this would have been precisely the sort of system-wide support that would encourage the agency the applicant seeks.

**Reader's Score: 20**

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

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

- (1) The qualifications, including relevant training and experience, of the project director, key project personnel, and project consultants or subcontractors.**
- (2) 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.**
- (3) The extent to which the time commitments of the project director and other key project personnel are appropriate and adequate to meet the objectives of the proposed project.**
- (4) The extent to which the proposed management plan includes sufficient and reasonable resources to effectively carry out the proposed project, including the project evaluation.**

**Strengths:**

The applicant has proposed a sufficient number of staff roles for the project, including at least three who will be supporting the work full-time (32); the applicant has also arranged for support from high-quality advisors, including Anthony Byrk. The applicant’s management plan and timeline (33-34) provides an adequate, if broad, overview, naming the specific events, times, and authors generally. The applicant has gone to great lengths in its budget narrative to identify all expense types and estimates (see section e). The evaluation plan has been adequately funded.

**Weaknesses:**

The applicant intends to distribute an equal set of monies to participant sites, even though each site has different demands and have already developing their own site-specific practices. The management plan does not assign specific owners to tasks, and many of the activities lists are either too vague or not connected enough to the program goals to have significant value (33-34). The qualifications of the key personnel, including the project director, were not fully described, particularly in terms of their experience on projects of this magnitude.

**Reader's Score:** 11

**Selection Criteria - Sustainability**

**1. The Secretary considers the adequacy of resources to continue the proposed project after the grant period ends. In determining the adequacy of resources and the potential for utility of the proposed project's activities and products by other organizations, the Secretary considers:**

- (1) 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.**
- (2) The extent to which the proposed project is likely to yield findings and products (such as information, materials, processes, or techniques) that may be used by other agencies and organizations.**
- (3) The extent to which the applicant will disseminate information about results and outcomes of the proposed project in ways that will enable others, including the public, to use the information or strategies.**

**Strengths:**

The applicant is enabling sites to self-define and self-govern their programming, a move that will yield several approaches and exemplars for practice, not to mention encourage the site partners to continue their own work past the funding period; it will also provide collective implementation knowledge from these efforts, in the form of artifacts and guides (38), that should be of great interest to the field. The proposed project will train a significant number of instructional leaders (37), thereby increasing the opportunities for those participating in the project to later meaningfully impact other teachers. The applicant intends to share publically the professional development materials it creates (38); additionally, it lists several ways it, its site partners, and other participating institutions (i.e., the evaluator) will leverage existing communication channels to disseminate what is learned (39).

**Weaknesses:**

Much of the applicant's sustainability plan rests on the assumption that those directly affected by the proposed project will spread what they learn "virally"—i.e., the size of its proposed training group will have "the readiness to share [what they learned] widely" (36), and that "the cross-site connections made through the NIC process will support additional collaboration beyond the grant period" (37). While such dissemination is entirely possible, it cannot be assumed to be a given across all schools and sites without an intentional plan for doing so, which the applicant does not provide. Additionally, while the applicant lists several ways it will utilize its web tools to promote findings, these approaches seem to only be directed at those who are familiar with or involved in the applicant's programming; there is little detail on how the applicant will increase the awareness of the significantly larger body of education professionals not familiar with the work.

**Reader's Score:** 17

**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 one or more of the following factors:**

- (1) The extent to which the methods of evaluation are thorough, feasible, and appropriate to the goals,**

objectives, and outcomes of the proposed project.

(2) The extent to which the evaluation includes the use of objective performance measures that are clearly related to the intended outcomes of the project and will produce quantitative and qualitative data.

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

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

**Note:** We encourage applicants to review the following technical assistance resources on evaluation: (1) WWC Procedures and Standards Handbook: <http://ies.ed.gov/ncee/wwc/references/idocviewer/doc.aspx?docid=19&tocid=1>; and (2) IES/NCEE Technical Methods papers: [http://ies.ed.gov/ncee/tech\\_methods/](http://ies.ed.gov/ncee/tech_methods/).

#### **Strengths:**

The applicant has proposed a robust evaluation plan that mirrors its logic model and goals (42); they intend to collect a significant amount of both perception and performance data (43), and all sites in their program design are involved in the evaluation. Three research designs are proposed (44-45), and the applicant describes in great detail in statistical modeling plans. There is a clear management plan for evaluation (47-48), and the selected evaluator is an industry leader in educational research.

#### **Weaknesses:**

The applicant has not yet clarified what it will measure on its survey instruments (44); details on its qualitative data collection and analysis are scant (48) when compared to discussion of the quantitative approaches.

**Reader's Score:** 19

#### **Priority Questions**

##### **Competitive Priority 2 - Improving Efficiency (Cost-Effectiveness)**

1. This priority funds projects that will identify strategies for providing cost-effective, high-quality services at the State, regional, or local level by making better use of available resources. Such projects may include innovative and sustainable uses of technology, modification of school schedules and teacher compensation systems, use of open educational resources (as defined in the notice), or other strategies.

#### **General:**

The applicant provides evidence that its credentialing program results in per-pupil and human resources cost reductions.

**Reader's Score:** 1

##### **Competitive Priority 3 - Promoting Science, Technology, Engineering, & Math**

1. This priority funds projects that address one or both of the following priority areas:

(a) Increasing the opportunities for high-quality preparation of, or professional development for, teachers of STEM subjects.

(b) Increasing the number of individuals from groups traditionally underrepresented in STEM, including minorities, individuals with disabilities, and women, who are teachers of STEM subjects and have increased opportunities for high-quality preparation or professional development.

**In addition, applicants must describe how they plan to measure the impact the proposed project activities have on teacher effectiveness. Applicants must determine teacher effectiveness through a rigorous, transparent, and fair evaluation in which performance is differentiated using multiple measures of effectiveness and based in significant part on student growth (as defined in this notice).**

**General:**

The applicant intends to recruit and develop a significant number of STEM teachers; supports will be site-specific. It does not, however, explain how it will recruit underrepresented teacher populations.

**Reader's Score: 2**

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