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ABSTRACT

This monograph presents eight cases of schools, colleges, and departments of education (SCDEs) in which faculty members are creating experiences in teacher education that are standards-based, elevate the conversation about the profession among teachers, and create more coherent wholeness in which being an educator includes membership in a distinct professional community. The papers are: "Connecting Partners in a Learning Community: "Higher Education, School Districts, and Business and Community Groups Use the National Board's Five Core Propositions to Advance the Professional Development of Experienced Teachers" (Francine M. Tompkins); "Preparing Math and Science Teachers: The NBPTS Standards and a Reflective Portfolio Process Help New Teachers Begin Their Practice Thinking Like National Board Certified Teachers" (Dan Richard Saurino); "Reforming Teacher Education: South Carolina Institutions of Higher Education and Schools Engage in Systemic Reform that Uses the NBPTS Standards and Focuses on Cultural Diversity, Technology, and Community Involvement" (Earline M. Simms); "Articulating the Teacher Development Continuum: The National Board's Standards are Used to Create a Developmental Path toward Accomplished Teaching and Enhanced Student Achievement" (Lynn Gaddis); "Creating a Culture of Accomplished Practice: Documentaries of the National Board Certified Teachers Bring Standards to Life and Foster Systematic Analysis" (Traci Bliss); "Collaborating for Teacher Development and Candidate Support: The

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Combined Efforts of Higher Education and an Urban School District Result in New Advanced Degree Programs and Growing Numbers of NBCTs" (Victoria Page Jaus); "Analyzing Classroom Practice: A New Certificate Program Helps Teachers Get Ready to Apply for National Board Certification" (Jean Linder); and "Advancing Teacher Knowledge: National Board Certified Teachers Play a Central Role in Helping Redesign a Master's Degree Program Focused on the National Board's Standards, Content Knowledge, and Integration of Technology" (Joan P. Isenberg). (Papers contain references.) (SM)

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ADVANCING TEACHER DEVELOPMENT



INSTITUTIONS OF HIGHER EDUCATION USE THE NBPTS STANDARDS TO CREATE COMMUNITIES FOR PROFESSIONAL LEARNING

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Improving the lives of children through education is the highest goal any nation can hold for itself. And yet, here in the United States, achieving a system of education from which each student graduates with the essential understandings, abilities, and habits of mind to live an enriched life full of opportunity and accomplishment remains an unfulfilled promise. For so long, our nation took its success for granted. It chose not to invest in its future. It chose, rather, to satisfy its appetite for the immediate. In time, it was no longer satisfied with the performance of the education system it had ignored.

Efforts to rectify this unfortunate circumstance clutter the landscape. Some of those attempts survive, and others have been tossed aside for a new and improved model. Some are having significant effects on teachers, teaching, children, and schools. Among the most successful efforts, I submit, is the National Board for Professional Teaching Standards (NBPTS). Formed as the result of the report of the Carnegie Foundation for Education and the Economy, *A Nation Prepared: Teachers for the 21st Century* (1986), NBPTS uses standards for accomplished teaching as the impetus for changing teaching and teachers. NBPTS is achieving its goal of creating standards to guide the profession and assessing teachers against those standards. There are now almost 10,000 National Board Certified Teachers.

With its standards and assessments system meeting expectations, NBPTS now turns attention to its mission of advancing related education reforms. One reform area that naturally follows from using standards and assessments of accomplished teaching is teacher education—especially the continuing professional development of teachers. The purpose of this monograph is to offer the first treatment of what programs in support of accomplished teaching might look like.

With increasing frequency, faculty members in schools, colleges, and departments of education (SCDEs) are designing new programs grounded in the National Board's Five Core Propositions and the accompanying standards. These programs take many forms, including:

- support programs for teachers who are candidates for National Board Certification;
- advanced degree programs that employ the NBPTS assessment strategies in coursework;
- certificate programs grounded in NBPTS processes; and
- programs of inquiry by SCDE faculty into the effects and influences of National Board Certification.

Some SCDE programs are even extending the definition implied in the NBPTS core propositions to the education of beginning teachers.

This monograph includes eight "cases" of SCDEs in which the faculty members are creating experiences in teacher education that are standards-based, that elevate the conversation about the profession among teachers, and that create a more coherent wholeness in which being an educator includes membership in a distinct professional community. The thoughtful practitioners in this community make the instructional decisions that fulfill the promise of a rewarding education for every student in the classroom.

In publishing this monograph, we are hopeful these cases will inspire others to wrestle, as members of learning communities themselves, with the creation of new programs that enhance the capacities of teachers while simultaneously advancing the profession. If this monograph elevates the quality of teacher education through the thoughtful application of standards for accomplished teaching, then its purpose is served. I believe the ideas of our colleagues in teacher education within these pages are both informative and thought provoking; I hope you find them useful to your work as you advance education reform.

Gary R. Galluzzo
Executive Vice President
National Board for Professional Teaching Standards

CONNECTING PARTNERS IN A LEARNING COMMUNITY

Higher education, school districts, and business and community groups use the National Board's Five Core Propositions to advance the professional development of experienced teachers.

Francine M. Tompkins

Chair, Professional Program in Education, and
Director, Institute for Learning Partnership

*University of Wisconsin-Green Bay
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THE JOURNEY BEGINS

The Master's of Science degree in Applied Leadership for Teaching and Learning (MSAL) at the University of Wisconsin (UW)-Green Bay enrolled its first cohort in the fall of 1998. Of course, the actual journey started long before the first graduate student set foot on our campus. Starting from the very beginning, and continuing throughout the design and implementation of the program, we have viewed our work as a collaborative venture into uncharted territory. The following quotation from a member of the first cohort captures the essence of our travels.

There is such excitement created when people who share a passion for something come together. This has certainly been my experience as I begin my journey in the Master's of [Science in] Applied Leadership for Teaching and Learning program. Together we are exploring the truth and knowledge that define our passion for teaching and learning. The excitement occurs when the usual boundaries which appear to separate us from one another are penetrated, and in that connection, a kind of magic appears. We become part of a community of learners, teachers and learners free of divisions that separate these roles. Because of that magic, I experience new ideas that can be used the next day in the classroom, as well as new questions that require more learning on my part. This is our journey! (Peggy Gay, Middle School Science Teacher, October 12, 1998)

MSAL was one of several significant outcomes that grew out of a regional partnership. In 1995, representatives from UW-Green Bay entered into a series of discussions with administrators from the Green Bay Area School District. The focus of these discussions was to explore the possibility of building a school on university property. Although this project did not materialize, the discussions continued with a focus on generating strategies for improving teaching and learning in northeast Wisconsin.

As the discussion expanded, so did the membership in this informal partnership. Administrators and faculty from UW-Green Bay and area P-12 schools, as well as representatives from local businesses and community groups, joined in the conversation. By 1996, with a grant from the Gannett Foundation and contributions from area school districts and the Green Bay Area Chamber of Commerce Partners in Education, the Institute for Learning Partnership was established. The Institute, which was soon endorsed by the UW System Board of Regents, embraced a simple mission: to improve educational opportunity for learners by providing quality teachers in all classrooms, P-16.

In late 1996, a task force was created. Its charge was to develop a quality master's degree program for area educators. At the time, UW-Green Bay offered several graduate degree options; however, most of these programs focused on moving teachers out of the classroom into other education-related areas such as school counseling, reading, or administration. In addition, several public and private institutions of higher education had moved into the region to offer master's level programs. Over the years,

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many area educators had questioned the quality of those programs, criticizing the lack of authentic curriculum and dubious rigor. Teachers and administrators complained that many of the existing degree programs did not align with their needs. In an effort to design a rigorous and meaningful professional degree program, members of the task force began to review literature and attend relevant professional conferences. Keeping in mind the mission of the Institute, the task force sought to uncover the elements that would serve to link quality teacher preparation to improved P-12 student learning.

DISCOVERIES ALONG THE ROAD

A fundamental principle that evolved from the work of the task force was the same principle that emerged from the National Commission on Teaching and America's Future (1996): the key to improving and transforming schools is to improve and transform the ongoing development of teachers. The work of the national commission was based on three assertions: (1) what teachers know and can do is the most important influence on what students learn; (2) recruiting, preparing, and retaining good teachers is the central strategy for improving our schools; and (3) school reform cannot succeed unless it focuses on creating the conditions in which teachers can teach and teach well.

At the same time, a member of the partnership discovered the National Board for Professional Teaching Standards (NBPTS) publication *What Teachers Should Know and Be Able To Do* (1989). This document detailed the NBPTS's Five Core Propositions and provided substantiation for the link between quality teaching and improved student learning.

The consensus of the members of the task force was that these five propositions could be used to guide the development of UW-Green Bay's master's curriculum. With this purpose in mind, a contact was made with the NBPTS office and a meeting was set. Several representatives of the Institute task force visited with representatives of NBPTS at their office in Southfield, Michigan. After those discussions, which included talking with a National Board Certified Teacher (NBCT), the task force was confident that the work of the National Board was substantial and of high quality. In addition, it was determined that the human and product resources of the National Board would be invaluable as UW-Green Bay progressed in developing its advanced degree program. The remainder of 1996 was used to collect additional materials and solidify the fundamental workings of the Institute for Learning Partnership.

During this time of research and development, the task force decided that the program would not be designed to prepare teachers for National Board Certification. In addition, the task force agreed that the National Board's propositions would be used not as a "template" but as a "benchmark" to help shape the curriculum (see Blackwell and Diez, 1998, for a detailed discussion of these two concepts).

In 1997 the task force, which included three UW-Green Bay faculty members in education and two area P-12 teachers, began to work in cooperation with an advisory group. More than 40 participants joined the advisory group, including UW-Green Bay faculty from education, liberal arts, and sci-

ences; business and community representatives; and administrators and teachers from the area P-12 school districts. Throughout 1997 the task force met formally with the advisory group to solicit input and share draft documents. To effectively respond to the needs of the region and continue to embrace the collaborative nature of the Institute for Learning Partnership, the task force actively sought out input into all aspects of the program, from admission criteria to scheduling of courses.

ACHIEVING A LANDMARK

In 1997, using the Five Core Propositions of the National Board, a conceptual model was created. In this initial model, proposition one was placed at the center and the remaining four propositions were arranged around this focal point. The intent of this conceptual model was to acknowledge the diverse needs of learners and recognize that student learning would be emphasized as the central proposition to guide the curriculum for quality teaching. Although this model evolved considerably during the development of the program, it did serve to focus the task force's conversation and direct its early work.

Based on the work of the task force, with valuable input from the advisory group, a clear philosophy emerged that would serve to direct all programmatic efforts. The task force agreed that the focus of MSAL would be to advance the professional development of experienced educators. As a true advanced degree program, it would not include initial or additional certification or licensure options. In addition, the intent of this program was to prepare educators to be leaders of school-based reform efforts. To this end, a thesis is required of all participants. Using an action research model of teacher inquiry, the thesis requirement allows educators to study their own practices and, as a result, create significant relevance between the curriculum of the MSAL program and their daily practice.

In an effort to match the program curriculum with its emphasis on school-based reform, two additional propositions were added to the conceptual framework: (1) teachers contribute to their profession and to the effectiveness of their organization by taking leadership roles, and (2) teachers have a deep knowledge of philosophical, historical, and contemporary educational issues and reform efforts and are able to objectively evaluate these efforts and participate in future reforms.

A fundamental principle for the development and implementation of the program emerged during the work of the task force. Because this was an endeavor that involved creating a new standards-based curriculum with authentic performance assessments, the task force wanted to acknowledge the developmental nature of the process. While the conceptual framework was established and a working outline for the curriculum was developed, it was clear that significant changes would emerge as the program progressed. The advisory group supported this principle of a developmental program design process. To be consistent with this approach, the task force decided that the first cohort to be admitted in the fall of 1998 would be small—a maximum of 10—to allow for input from the participants and ongoing curricu-

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While the idea for the master's degree technically emerged from within the Institute, and thus belonged to the regional community; it resided at UW-Green Bay from a fiscal and administrative perspective. Working within a time frame that called for enrolling the first cohort in the fall of 1998, the task force set out in earnest to design a document for university and system-wide approval.

The UW-Green Bay is part of a statewide system of colleges and universities. In the early 1990s it had obtained permission from the UW-System to plan a master's program. Due to other priorities and budgetary constraints the actual planning did not materialize. However, this initial approval for planning did set the groundwork to move ahead in a timely manner. By the fall of 1997, the task force completed a planning document and presented it to the UW-Green Bay Faculty Senate for review. The presiding chair of the graduate program in education was charged with presenting and "defending" the program documents during these proceedings. Initial apprehension about the developmental nature of the document did create disequilibrium for some faculty who were used to reviewing a finished product. While the proceedings were at times contentious, support from the chancellor and provost and our P-12 partners did not waiver.

Viewed within the operations of the Institute for Learning Partnership, the master's proposal was seen as a concrete example of an effective collaborative venture. The Faculty Senate approved the planning document in early 1998 with the stipulation that the Academic Affairs Council (AAC) provide oversight of program activities. In March 1998 the UW-System Board of Regents approved the plan and recruitment for the charter class began shortly thereafter. The provost appointed a graduate faculty in education and, working in cooperation with the AAC, this body, along with its newly elected chair, took over all responsibility for the operations of the program. (Note: The AAC recently issued a memorandum stating that it was "...very pleased with the continued progress of the program...")

In 1999, shortly after admitting the first cohort to the program, the graduate faculty hired two outside consultants. While much of the fundamental program design work had been accomplished, it was determined that additional human resources were necessary to help create a sound standards-based program. Specifically, the faculty sought out support in designing authentic performance assessments. In addition to the thesis requirement, the faculty felt it was critical to document specific learning outcomes. A goal was established to create authentic performance assessments in two areas: (1) educators' ability to reflect on their practice, using student assessment data to inform their teaching and (2) educators' attainment of leadership and reform-related knowledge and skills.

The hiring of outside consultants was intended to help faculty obtain the necessary knowledge and skills associated with the creation of standards-based performance assessments. During the first year of program development, the consultants assumed a challenging role in leading faculty through the process of moving from propositions to standards and from standards to assessment. During the second year, the faculty has taken on greater respon-

sibility in designing performance assessments, and the consultants have moved to a facilitating role. Currently our program has incorporated the reflection performance assessment and will soon pilot the leadership/reform performance assessment.

WE ARE HERE

The Master's Degree in Applied Leadership for Teaching and Learning is currently recruiting its fourth cohort for admission in the fall of 2001. The program, while fundamentally consistent with its initial design, has evolved significantly. The program is still an advanced degree program. Applicants who teach within P-12 settings must hold or be eligible for a valid teaching license in the state of Wisconsin (regular or substitute). Other certified educators, including those teaching at the two-year or technical college level or within business and other settings, are also eligible for admission.

The master's degree program is a 30-credit offering that is grounded in seven propositions (i.e., the five NBPTS propositions plus leadership and reform). The requirements are organized into three interrelated elements, which can be completed within a two-year period. Of the 30 credits, 15 credits are distributed across four core courses. Based on the recommendation of the advisory group, all courses within the core are offered on Saturdays, typically from 8 a.m. to 4 p.m. Teachers explained that the demands of their day leave them little energy for thoughtful work during the week. Given the participatory nature of the program, the teachers felt that starting fresh on Saturday would provide for a more effective learning environment. Classes are typically held twice a month throughout the 15-week semester. With an emphasis on standards and the authentic assessment of learning outcomes, the traditional "seat-time" measure per credit hour was essentially eliminated.

An additional six credits are required for thesis work. Typically, students begin to enroll for thesis credit during the summer following their first year in the program. At this time they have completed two of their four core courses. At this point in their program, many students have also completed their thesis proposal and have gained approval of their research by their committee. This approval is required before graduate students can enroll for thesis credits. Once their proposal is approved, participants in the program may enroll for thesis credits at any time.

The final nine credits are part of what is called the "area of emphasis." Currently this nine-credit option allows students to select from a wide array of electives. Since many experienced teachers have accumulated graduate credits, this option allows for flexibility while maintaining a high standard of rigor in the program.

A VIEW OF THE ROAD AHEAD

The next major destination in this journey is to evaluate the program and assess its impact on the learners who work with graduates of UW-Green Bay. It is anticipated that the next part of our journey will provide us with another opportunity to partner with the National Board. Based on the most recent findings published in the premier issue of the NBPTS newsletter *The Professional Standard* (Fall 2000), it is possible to assess the link between program impact on quality teaching and student achievement. This is an exciting and integral part of our journey and will be the ultimate determinant of its success.

In addition, our faculty is continuing its work to design content-focused areas of emphasis. This initiative has already begun as we have asked others to travel with us on our road to quality education. We have added a new member to our graduate committee: a representative from the mathematics department. Discussions are ongoing with faculty in music and history as well. Within the next year we hope to begin to recruit cohorts from specific content areas and design formal areas of emphasis that incorporate curriculum and authentic assessments grounded in the professional standards of their respective disciplines.

We are also working on ways to continue the concept of community that has become the hallmark of our program. After students graduate from UW-Green Bay's MSAL program, we want to ensure that they will continue to be leaders for effective and meaningful educational reform efforts. Discussions have started around the idea of initiating a Leadership Academy within the Institute for Learning Partnership. Expanding the current partnership to more formally include National Board Certified Teachers, graduates of the UW-Green Bay MSAL program, and our local Chamber of Commerce Golden Apple Award recipients with linkages to our undergraduate teacher education programs would certainly be consistent with the goal of the NBPTS to "...change and refine teacher practice and help raise student achievement." (Castor, 2000, p 2).

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PREPARING MATH AND SCIENCE TEACHERS

The NBPTS standards and a reflective portfolio process help new teachers begin their practice thinking like National Board Certified Teachers.

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The teacher preparation program at Virginia Tech's Northern Virginia Graduate Center (NVGC) creates and applies pedagogical knowledge and emphasizes strong content knowledge in the preparation of teachers in mathematics and science. Graduate licensure programs in grades 6 through 12 are offered in mathematics, earth science, biology, chemistry, and physics. The licensure programs include coursework in curriculum and instruction, social foundations of education, adolescent development, instructional technology, methods of teaching in the content areas, educational research, special education, reading in the content areas, and cognate disciplines.

Students are required to complete two full semesters of student teaching, one semester at a middle school and one semester at a high school. As a form of master's thesis, students are also required to produce a professional portfolio using the guidelines of the National Board for Professional Teaching Standards (NBPTS). All licensure programs are fully accredited by the National Council for Accreditation of Teacher Education (NCATE) and the Virginia Department of Education.

Virginia Tech's NVGC teacher preparation programs are committed to the concept of teacher inquiry in education courses and field experiences in the schools. Teacher inquiry is premised on the belief that prospective teachers learn about teaching and learning when they have the opportunity to intentionally investigate and reflect on their own practices. Through dialogue and collaboration with peers, cooperating teachers, school personnel, and university faculty, prospective teachers generate questions and collect data related to pedagogical issues that emerge from their own teaching practices. As prospective teachers reflect on school experiences, the potential for learning about diverse cultures and communities, gender differences, social issues, and different approaches to curricula and pedagogy is enhanced.

THE REFLECTIVE PORTFOLIO PROCESS

To facilitate the reflective process and to document the process of teacher inquiry, the NVGC program has replaced the traditional master's thesis with a professional portfolio. The five required sections of an NVGC professional portfolio are aligned directly with the Five Core Propositions of NBPTS:

1. Teachers are committed to students and their learning.
2. Teachers know the subjects they teach and how to teach those subjects to students.
3. Teachers are responsible for managing and monitoring student learning.
4. Teachers think systematically about their practice and learn from experience.
5. Teachers are members of learning communities.

As prospective teachers reflect on school experiences, the potential for learning about diverse cultures and communities, gender differences, social issues, and different approaches to curricula and pedagogy is enhanced.

To assist in the preparation of the professional portfolio, three workshops are provided for the students. A National Board Certified Teacher (NBCT) is invited to help lead each three-hour workshop.

To assist in the preparation of the professional portfolio, three workshops are provided for the students. A National Board Certified Teacher (NBCT) is invited to help lead each three-hour workshop. The first workshop is conducted during the student's first course, a curriculum and instruction class, and introduces the concept and process of National Board Certification and the standards that govern it. In addition, the tenets of the professional portfolio are discussed and plans are made to gather data during the first student teaching assignment. The portfolio is intended to be a "mini-version" of the portfolio required for National Board Certification and to familiarize students with the process of preparing such a portfolio. The NBCT helping to lead the workshop is also invited to speak about individual experiences during the certification process, the benefits of National Board Certification, and changes in his/her career as a result of becoming an NBCT.

The second portfolio workshop is conducted after the student's first full-time student teaching assignment has been completed and student teaching data in the form of field notes, lesson plans, and related classroom assignments have been gathered. Again, an NBCT is invited to facilitate the workshop, and participants work on writing introductions for the five sections of the portfolio before the student teaching data is disseminated. At this point, the remaining NBPTS standards are introduced for each content area to help in sorting the data and writing narration for the data portions of the portfolio. Within the five sections of their portfolio, our mathematics students who choose the Adolescence and Young Adulthood/Mathematics standards for National Board Certification would be responsible for covering the 11 NBPTS standards within the five sections of their portfolio:

1. Commitment to Students and Their Learning
2. Knowledge of Students
3. Knowledge of Mathematics
4. Knowledge of Teaching Practice
5. The Art of Teaching
6. Learning Environment
7. Reasoning and Thinking Mathematically
8. Assessment
9. Reflection and Growth
10. Families and Communities
11. Contributing to the Professional Community

In the three years that we have required the portfolios, NBCTs have been helpful in giving examples of how the various standards are covered in the portfolio and in stimulating the reflective process involved. By the end of the second workshop, the students have a good grasp of what is expected from the portfolio, understand the use of data within the portfolio, and know what additional data might be needed.

Students are also required to produce a 20-minute videotape of their teaching, including portions of a lesson introduction, a lecture/discussion, a student-centered activity, and a summary/conclusion of a lesson. Students typically videotape several lessons and edit them down to one 20-minute tape including the four sections. Time in the workshop is devoted to the editing process, and equipment is provided as necessary.

The final portfolio workshop is conducted after the students have completed their second full-time student teaching assignment. An NBCT is invited to facilitate the workshop, for which the main agenda is writing summaries and conclusions for the five sections of the portfolio. Reflective discussions are also purposefully initiated. Because the final workshop occurs close to graduation for the students, reflections include discussions about how much the students have improved as teachers by using the NBPTS standards during their student teaching and how their current level of proficiency is demonstrated in their portfolios. In addition, students reflect about how they can continue to improve professionally within the constraints of full-time teaching.

Personal examples from the NBCTs have also been helpful in the reflective process. Several weeks after the final workshop, the students present their portfolios to a board of professors and invited teaching professionals. During the presentation, students reflect aloud about the professional portfolio process and their current level of proficiency in meeting NBPTS standards. Students frequently express how much the portfolio has helped them realize how far they have progressed as teachers and how they are committed to continued professional development.

Students who do an exceptional job in the preparation and presentation of their portfolios are invited to join an ongoing collaborative group action research project being conducted at Virginia Tech. (See Saurino & Saurino, 1996; Saurino, 1998; and Saurino et al., 2000, for more information about collaborative group action research.) In the research project, graduates from the NVGC Teacher Preparation Program are invited to join the research group during their first three years of teaching. In their fourth year of teaching, the program graduates are coached by professors and NBCTs as they complete the portfolio and assessment center exercises comprising the National Board Certification process.

The goal of the research project is not only to facilitate the preparation of portfolios and increase the number of Virginia Tech graduates who become NBCTs, but also to significantly increase the number of Virginia Tech graduates who achieve National Board Certification on the first attempt. The researchers and graduates meet each semester in three-hour workshops similar to the workshops included in the teacher preparation program, complete with invited NBCTs. The project is currently completing its first year with 12 teachers beginning the process of preparing portfolios for National Board Certification.

Students frequently express how much the portfolio has helped them realize how far they have progressed as teachers and how they are committed to continued professional development.

USING NBPTS STANDARDS IN COURSE DESIGN AND STUDENT TEACHING

Over the last three years of developing the NVGC Teacher Preparation Program at Virginia Tech, there has been an increased effort to include NBPTS standards in the instructional process and syllabi of the courses included in the program. Professors have found it beneficial to associate what they are teaching within their individual courses with the larger view of the national organization. NBPTS standards can be found in the syllabi of courses in curriculum and instruction, methods, advanced methods, adolescent development, educational research, and history of science. The National Board's standards will be added to other courses in future years.

The NBPTS standards are also used in student teaching observations and evaluations. Virginia Tech provides four student-teacher supervisors for each 30-student cohort. To help maintain consistency among the supervisors in their observation reports and evaluations of student teaching, NBPTS standards are included in the forms created for use by the observers. For example, mathematics student teacher observation forms include the first eight NBPTS mathematics standards listed previously. Therefore, the concepts included in the standards are taught and discussed in various courses, then observed and evaluated in actual classroom student teaching environments.

In addition, the NCATE standards used for the continuing accreditation of the NVGC Teacher Preparation Program are in alignment with the NBPTS standards. Accreditation was a catalyst in the decision to include the NBPTS standards into the NVGC program at Virginia Tech during the early development stages. During the process of developing the NVGC program, NBCTs were consulted, NBPTS portfolio development materials were purchased, Virginia Tech professors attended NBPTS portfolio-development training seminars, and our faculty made personal contacts with the NBPTS office.

A major factor in the decision to include NBPTS standards in the program was the personal and material support provided by NBPTS. National Board personnel answer questions, provide training, and produce materials making the inclusion of the standards practical. Our staff has been pleasantly surprised at the extent to which NBCTs have been willing and available to bring their expertise and personal experiences to workshops and seminars and help students, even on an individual basis, in the development of their professional portfolios.

Finally, the impact that the NBPTS standards have had on the NVGC program is notable. Feedback from principals and other evaluators of Virginia Tech graduates in the schools in which they were hired has been positive, especially compared to earlier teacher preparation programs. School administrators have been especially impressed with the consistent quality of NVGC graduates and their mastery of fundamental pedagogical techniques and strategies.

Near the end of the first year of the current NVGC program, a series of video-teleconferencing sessions between the teacher preparation cohort in Northern Virginia and a similar cohort from the Virginia Tech main campus in Blacksburg was conducted. In addition to the obvious differences of location, professors involved noted substantial differences in pedagogical understanding. Some of the differences could be attributed to the process of portfolio preparation and the inclusion of the NBPTS standards into coursework and student teaching observation and evaluation. As a result, our main campus has adopted similar formats including the NBPTS standards, especially in the production of portfolios, which are now required to be completed in electronic format and are viewable on the Virginia Tech website (<http://www.tandl.vt.edu/TESH/TESHPortfolioGuide.html>).

The NVGC Teacher Preparation Program at Virginia Tech expects increased use of the NBPTS standards in the future, and an increase in the number of NVGC program graduates who become NBCTs. The NBPTS standards and the portfolio process involved in becoming an NBCT can be key factors in the ongoing professional development of teachers, which is the major goal of the NVGC Teacher Preparation Program at Virginia Tech.

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REFORMING TEACHER EDUCATION

South Carolina institutions of higher education and schools engage in systemic reform that uses the NBPTS standards and focuses on cultural diversity, technology, and community involvement.

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In response to national education initiatives and new school mandates at the state level, K-12 schools, colleges, and universities in the Orangeburg, S.C., area are partnering through a broad-based consortium to enhance student learning by supporting their teachers. The Community Higher Education Council (CHEC) and Local Education Agencies (LEA) Partnership for Reforming Teacher Education in South Carolina is a five-year, \$6.7 million grant project funded by the U.S. Department of Education to help teachers achieve proficiency in proven educational strategies and to pursue continuing education and National Board Certification. Hallmarks of the partnership are enhanced teacher education programs with an emphasis on performing effectively in a culturally and ethnically diverse society, using technology to improve teaching, and becoming involved in the community through service learning.

CHEC brings together three institutions of higher learning: South Carolina State University (SCSU), a historically Black, public, senior comprehensive teaching, land-grant university with an enrollment of 5,000 students; Claflin University (CU), a historically Black, private, broadly based, liberal arts four-year institution serving 1,500 students; and Orangeburg-Calhoun Technical College (OC-Tech), one of South Carolina's 16 state-supported, two-year technical colleges. Both SCSU's and CU's teacher education programs are accredited by the National Association for the Accreditation of Teacher Education (NCATE).

In addition to these three institutions of higher education (IHEs), the partnership is also comprised of six local education agencies (LEAs) that collectively administer 48 schools with 2,106 professionals serving 28,711 students in grades K-12. The LEAs are: Calhoun County School District, Marion School District 3, Orangeburg Consolidated School District 3, Orangeburg Consolidated School District 4, Orangeburg Consolidated School District 5, and Sumter School 17.

PARTNERSHIP GOALS

The partnership's major goal is to develop a model for reforming teacher education by drawing on the unique strengths of each partner. Activities designed to achieve this goal are guided by the vision and principles of the Holmes Group (1989), now known as the Holmes Partnership, in which SCSU holds membership. The project is also guided by the initiatives in the Science and Mathematics Teacher Education Collaborative Program, which addresses the broad systemic work needed by teacher educators, scientists, and schools (National Science Foundation, 1997). Thus, the partnership works closely with the 13 Math and Science Hubs, funded by the National Science Foundation and strategically located throughout the state of South Carolina. One of the 13 hubs is located on the campus of SCSU and is readily accessible to faculty and students at OC-Tech, CU, and partner LEAs.

Hallmarks of the partnership are enhanced teacher education programs with an emphasis on performing effectively in a culturally and ethnically diverse society, using technology to improve teaching, and becoming involved in the community through service learning.

Through a collaborative relationship, the CHEC partnership conducts an array of activities designed to achieve the following objectives:

1. Enhance the teacher preparation programs at CU and SCSU by revising all teacher education curricula and aligning them with Interstate New Teacher Assessment and Support Consortium (INTASC) standards; NCATE's professional standards for the accreditation of schools, colleges, and departments of education; and the propositions, standards, and assessment processes of the National Board for Professional Teaching Standards (NBPTS).
2. Expand and enhance the preclinical and clinical experiences of preservice teachers at SCSU and CU.
3. Establish a network of Professional Development Schools (PDSs) in each of the partner LEAs.
4. Provide needs-specific professional development for K-12 classroom teachers and university faculty in arts, humanities, sciences, and education.
5. Expand the Beginning Teacher Assistance Program (B-TAP) established at SCSU to include three years of follow-up and support for all beginning teachers employed in partner LEAs.
6. Develop the skills of preservice and in-service teachers and university faculty in using technology as a tool for improving instruction and its delivery at all levels.
7. Improve LEAs' student academic performance and graduation rates through collaboration and cooperation across academic disciplines and student services.
8. Support National Board Certification for classroom teachers in partner LEAs.
9. Establish centers for effective parenting to meet the needs of parents.
10. Improve the leadership skills of teachers, principals, and superintendents through the establishment and implementation of the Institute for Effective Leadership.

ALIGNMENT OF MASTER'S PROGRAMS WITH NBPTS STANDARDS

SCSU offers master of education degree programs in elementary, early childhood, secondary, and special education. The curriculum for each program has been modified and aligned using as a guide the National Board's Five Core Propositions and the education unit's organizing theme: "The educator as reflective decision-maker and effective performer in an ethnically and culturally diverse society." Arts and sciences and education faculty have defined a distinct set of characteristics that graduates from each of the advanced degree programs will have. Among these characteristics is the ability to demonstrate knowledge and understanding of each of the National Board's standards in their areas of certification as well as proficiency in the standards at the highest level.

In realigning the curriculum of each of the advanced degrees, the faculty determined what skills, knowledge, dispositions, and "habits of mind" each candidate must have to demonstrate mastery. The faculty also developed a matrix to illustrate which courses introduce and reinforce these skills and hold students responsible for demonstrating proficiency. Course syllabi are being restructured to address the National Board's standards.

Rather than enrolling in single courses, cohorts enroll in a block of courses, usually three or four, taught by an interdisciplinary team of arts, sciences, and education faculty. A typical block of courses taught as an interdisciplinary seminar for which students receive 12 semester credits includes: Research in Education, Curriculum Development in K-12 Schools, Advanced Teaching Methods, and Learning Theories. The interdisciplinary team plans together to provide coherence in the content taught. Students are assessed and graded using their portfolios, which include artifacts designed to demonstrate their understanding of and proficiency with the NBPTS standards that frame the outcomes for the courses.

NBCTS' ROLE IN THE PARTNERSHIP

NBCTS play three significant roles in the development and implementation of the program. They serve as members of an informal advisory panel for restructuring graduate teacher education, as mentors for candidates pursuing National Board Certification, and as seminar instructors.

Advisory Panel Members

NBCTS are particularly helpful as an advisory panel that gives input on how the advanced master's program for licensed teachers can be improved. They have recommended that the professional education core of courses in the master's degree curriculum be restructured with the common elements in all of the NBPTS standards forming the outcomes on which candidates will be assessed. They have recommended that the curriculum include a mission statement that clearly articulates the role for which degree recipients will be prepared to assume and that the program provide appropriate experiences related to that role. For example, such roles might include "teacher as instructional leader."

In addition, the NBCTS have recommended that the curriculum ledger sheet include a clear and unambiguous description of how a candidate's performance will be assessed, using such authentic assessment techniques as the portfolio. They have recommended that master's degree candidates be admitted to the program as cohorts to form a strong network and support system for one another. Finally, they have recommended changing the current delivery system of advanced degree courses. They suggest that courses be delivered via technology platforms, including compressed video, satellite, and Internet. If courses require a classroom component, NBCTS suggest that students meet at a selected school in the partner LEAs.

Rather than enrolling in single courses, cohorts enroll in a block of courses, usually three or four, taught by an interdisciplinary team of arts, sciences, and education faculty.

Mentors guide candidates through critiques of artifacts they have prepared as documentation of their understanding of the National Board's standards.

Mentors for Candidates

NBCTs serve as mentors for candidates pursuing National Board Certification. These accomplished teachers provide candidates with exercises that inspire the self-confidence and courage to seek the goal of achieving certification. The mentors walk the candidates through the process of understanding the National Board's standards and providing documentation/evidence of that understanding.

Mentors guide candidates through critiques of artifacts they have prepared as documentation of their understanding of the National Board's standards. Such artifacts include reflection papers, sample lesson plans and videotapes of teaching episodes, one-on-one and small and large group interaction with children from diverse backgrounds, involvement in civic and community activities, interaction with parents, and involvement in such professional activities as attending and presenting at workshops and conferences.

Designers and Instructors of Courses

Three NBCTs have designed a special topics course, Education 699: Reflective Writing for Accomplished Teachers. This course is currently being taught by these NBCTs to teachers who will be admitted in May 2001 to the program as new cohorts seeking a master's degree and National Board Certification. The course emphasizes describing specific lessons previously taught by aspiring candidates for National Board Certification and reflecting upon what was effective and why it was effective and what the teacher could do to enhance the lessons.

Participants in these classes agree on the meeting place and time. The classes are entered into the SCSU's schedule of professional development courses offered by the Office of Extended Studies. Some classes meet at the end of the school day, while others meet on Saturday. Tuition for the courses and compensation for the NBCTs' services are paid by the partnership.

CATALYSTS FOR THE ALIGNMENT AND PROGRAM DEVELOPMENT PROCESS

Three factors influenced the CHEC/LEA Partnership to align its teacher education programs with standards and to undertake the program development process described in this chapter. Among these were actions by the South Carolina General Assembly in 1996, implementation of the South Carolina Commission on Higher Education's (CHE) policy on approval and authorization to offer the master's degree, and actions by the South Carolina Board of Education in 1996.

Performance-based Funding

During the 1996 legislative session, the South Carolina General Assembly ratified Act 359, commonly referred to as "Performance-based Funding." The act established a decidedly new way of holding South Carolina's public institutions accountable and funding them accordingly. It requires the state's coordinating board for higher education, the South

Carolina Commission on Higher Education (CHE), to measure annually each public institution's performance on nine critical success factors and 37 performance indicators, which were phased in over a three-year period. The critical success factors are: (1) mission focus, (2) quality of faculty, (3) classroom quality, (4) cooperation and collaboration, (5) administrative efficiency, (6) entrance requirements, (7) graduate's achievement, (8) user-friendliness of the institution, and (9) research funding for teacher education reform.

While the partnership viewed each of these success factors as critical, the consensus was that program alignment and development should be designed to impact positively the teaching and learning environment of K-12 students. Of these nine factors, the partnership agreed that factors 2, 3, 4, 6, 7, and 9 were most pertinent to the success of the program.

National Standards for Advanced Degree Programs

CHE has established a policy that requires all state-assisted IHEs with master's of education degree programs to align their curricula with the National Board's standards as a condition for approval and continued authorization to offer them to the public.

Recommendations for Improving the Teaching Profession

In August 1995, the South Carolina Board of Education appointed the Teacher Licensure Steering Committee to review the system used to prepare and certify personnel for K-12 public schools in South Carolina and to make recommendations for improvement. The committee's recommendations were compiled in the document *At the Crossroads: Teacher Licensure in South Carolina* (1996). Broad-based input was provided by many sectors represented by individuals who served on 25 task forces that reviewed the document and offered suggestions for its improvement. The final document contains 21 recommendations, 10 of which served as catalysts for the alignment and program development process described in this paper. Each of these recommendations provides a basis for the activities designed by the partnership.

Recommendation 2. *All teacher education programs should be nationally accredited by 2005.* Both SCSU and CU are NCATE-accredited, and the partnership is turning its attention to the NCATE 2000 Standards, aligning both programs to those new standards.

Recommendation 3. *The effectiveness of teacher education programs should be annually reported to the Teacher Licensure Commissioner and be widely circulated throughout South Carolina.* SCSU has submitted required data on its program since 1995 and has submitted its State Report Card to the U.S. Department of Education as required by all recipients of the Teacher Quality Enhancement Grants. (The 2000 Report may be viewed at www.che400.state.sc.us.)

Recommendation 5. *All candidates for licensure should complete a basic course of study and experiences in professional education and demonstrate competency in the profession of teaching.* The partnership has defined what CU's and SCSU's teacher education graduates will know and be able to do upon completion of

...beginning teachers are offered tuition-free graduate courses designed to enhance their teaching skills. They are also exposed to the NBPTS standards for accomplished teaching and encouraged to seek National Board Certification when they are eligible.

their respective programs. Preservice teachers must meet each of the objectives based on INTASC's and NCATE's standards at a level expected of an entry-level professional prior to graduation.

Recommendation 6. *The clinical, supervised field-based experiences of all candidates for initial teacher licensure should be expanded.* The partnership is expanding its preclinical experiences from 150 to 300 clock hours, which will include a service learning component.

Recommendation 7. *The practice of requiring applicants for licensure to pass the National Teacher Examinations (PRAXIS) for Professional Knowledge and Subject Area Specialty should be continued.* Preservice teachers must make the required test score on the PRAXIS-II Series prior to graduation. The partnership provides a support system to ensure students' success.

Recommendation 14. *A special induction program for all beginning teachers should be developed.* The partnership's Beginning Teacher Assistance Program (B-TAP) provides three years of support to beginning teachers who remain in the partner LEAs. The support includes a mentoring team comprised of a master teacher, the principal, a faculty member from arts and sciences and education, and a peer teacher or "buddy." Additionally, beginning teachers are offered tuition-free graduate courses designed to enhance their teaching skills. They are also exposed to the NBPTS standards for accomplished teaching and encouraged to seek National Board Certification when they are eligible.

Recommendation 15. *A core of mentor teachers able to support new teachers should be developed.* Thirty-four supported teachers have become NBCTs and are serving as mentors in partner schools.

Recommendation 16. *The provision of systematic, regular and intense teacher and leader development that is directly related to improving professional performance should be required.* The partnership established the Center for Effective Leadership, which serves teachers, principals, and superintendents.

Recommendation 17. *A consistent, ongoing and rigorous assessment system should be developed to evaluate teacher and leader effectiveness that is directly related to student performance.* The partnership is designing a system for assessing the effectiveness of teachers and principals that is directly related to the performance of their students on state-mandated measures.

Recommendation 20. *Educators working in South Carolina should be encouraged and supported to apply for National Board Certification.* The partnership is committed to assisting 120 partner teachers to obtain National Board Certification.

DESIGNING AND DEVELOPING THE PROGRAM

In designing and developing its program, the CHEC partnership conducted a needs assessment of all clients to be served: K-12 students, parents, teachers, administrators, preservice teachers, and university faculty. Based on the responses from the needs assessment, the partnership developed a program to work toward these outcomes:

Outcome A-1. The Partnership will have an effective, inclusive, and responsible governance and decision-making structure that gives partners reasonable assurance that the project's goals will be achieved.

Outcome A-2. Project activities will be planned and implemented by a qualified management team that will achieve project objectives.

Outcome B-1. Twelve Professional Development Schools that meet the NCATE Professional Development School standards will be established, staffed, and equipped.

Outcome B-2. A preclinical model that strengthens preservice teachers' preparation through the addition of service learning activities requiring 300 clock hours of preclinical experiences and a portfolio showing the use of community resources in academic instruction will be a required component of the teacher education programs at SCSU and CU.

Outcome B-3. Increased presence of parents in partner schools and involvement in their children's learning will be obvious.

Outcome B-4. A more culturally diverse class of nontraditional students pursuing the Master of Arts degree in Teaching (MAT) will be matriculating at SCSU.

Outcome B-5. Sixty candidates identified and admitted to the Master of Education (M.Ed.) degree program at SCSU will seek National Board Certification.

Outcome B-6. All preservice teacher education graduates will be proficient in using computer technology in delivering instruction to K-12 students.

Outcome B-7. Academic achievement and citizenship of all partner LEA students will be improved.

Outcome B-8. At the end of Project Year 1, at least 80 percent of preservice teachers graduating from SCSU and CU will meet all requirements for state licensure.

Outcome B-9. Tenure of new teachers in partner LEAs will increase by 10 percent each year over the previous year.

Outcome B-10. One hundred K-12 teachers will be empowered to create appropriate environments for effective teaching and learning, clinical instruction, and professional socialization of new and veteran teachers, and to promote teachers as leaders.

Outcome B-11. The curricula for the bachelor's and MAT degrees in teacher education will be aligned with INTASC and NCATE standards.

Outcome B-12. The curricula for the master's degree programs in early childhood education, elementary education, special education, and secondary education will be aligned with the National Board's Five Core Propositions and content area standards.

KEY RESOURCES IN DEVELOPING AND SUSTAINING THE PROGRAM

Resources, financial and human, are key to developing and sustaining the program. The CHEC/LEA Partnership received notification of funding from the U.S Department of Education's Title II Teacher Quality Enhancement Grants Program for \$6.7 million over five years. The partnership will provide matching funds in cash and in-kind totaling \$13.2 million. In addition to using the funds to pay project personnel salaries and support travel for professional development, grant funds are used to pay tuition, fees, and related educational expenses for 125 partner K-12 teachers pursuing the M.Ed degree in five cohorts and 22 nontraditional students seeking the MAT degree at SCSU. The grant also provides the MAT participants with a monthly stipend of \$775. In addition, application fees and retake fees are paid for M.Ed. degree candidates who are also seeking National Board Certification.

The partnership employs NBCTs who teach classes and conduct workshops and sponsors leadership institutes for principals and superintendents. Moreover, the program supports centers for effective parenting in each of the partner LEAs. An extensive and comprehensive tutoring program for at-risk K-12 students is funded; students from the Honors Program at SCSU, CU, and OC-Tech serve as tutors.

With emphasis on excellent teaching in K-18, the program is drawing on its in-kind human capital provided by committed faculty members from the three IHEs. Faculty members from arts and sciences at OC-Tech are providing technology training workshops for K-12 classroom teachers. Faculty members at CU and SCSU are engaged in structured professional development activities designed specifically to enhance their skills to use technology in instruction delivery and modeling its use for preservice teachers. To this end, several professors are requiring their preservice teachers to develop electronic portfolios. An increasing number of technology-proficient teacher education faculty are modeling their use of technology for reluctant and less proficient colleagues.

EVIDENCE OF PROGRAM IMPACT

Evidence of the positive impact that the program has had on partners is extensive. Scores of K-12 students tutored by university students show improvement on their basic skills tests over the previous year by 10 to 40 percent. The number of students taking advanced placement courses for college credit increased in each of the partner LEAs. Faculty taught these courses from arts, sciences, and education from each of the partner IHEs. One hundred twenty-five in-service teachers enrolled in SCSU's M.Ed. degree program; 67 will receive their degrees in May 2001. In November 2000, 34 master's degree candidates who also pursued National Board Certification were notified of their success. Prior to this accomplishment, there was only one NBCT in the partner LEAs.

One hundred twenty-five new bachelor degree recipients have taken teaching positions in the partner LEAs and are licensed in their areas of assignment. Twenty-two MAT degree program participants are spending 20 hours per week in partner LEA schools and working as teaching interns under the supervision of master teachers.

FUTURE DIRECTIONS FOR THE PROGRAM

One of the most critical challenges that the partnership faces is aligning the practices and procedures of its 12 PDSs with NCATE's Professional Development School standards. This effort will require a cadre of accomplished teachers to lead the change reform efforts in those schools. These NBCTs will be provided support for professional development of skills needed to accomplish this goal. Additionally, principals in PDSs must have the skills in empowering teachers to be leaders in their schools. Thus, a cohort of 12 principals will be supported in pursuing a doctorate that will prepare them to be principals or vice principals for K-16 education reform. These principals will be equally as competent in working with IHE arts, sciences, and education faculty and students as they would be working with K-12 teachers and students.

One hundred twenty-five new bachelor degree recipients have taken teaching positions in the partner LEAs and are licensed in their areas of assignment.

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ARTICULATING THE TEACHER DEVELOPMENT CONTINUUM

The National Board's standards are used to create programs that form a developmental path toward accomplished teaching and enhanced student achievement.

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The single most important action to improve schools and student learning is to strengthen teaching. Illinois State University has taken a strong leadership role in promoting accomplished teaching for Illinois teachers. This leadership is commensurate with its focus, mandated by the Illinois Board of Higher Education, to cooperate with other colleges and universities to provide statewide leadership to Illinois schools. To this end, Illinois State University is committed to supporting teachers throughout their careers to move toward seeking and earning National Board Certification. The design of the Illinois State University program with the National Board for Professional Teaching Standards (NBPTS) includes levels of preparation, participation, and partnerships in improving teaching through the NBPTS standards and processes.

CATALYSTS FOR CHANGE

The National Commission on Excellence in Education (1983), the Carnegie Forum on Education and the Economy (1986), and the Holmes Group (1986) agreed that teacher quality is key to improving learning opportunities for all students. Ferguson's study of 1,000 schools showed that "every additional dollar spent on more highly qualified teachers netted greater improvements in student achievement than did any other use of school resources" (1991, p. 6). Darling-Hammond (1996) stated, "Studies show that teachers' ability, experience, and education are clearly associated with increases in student achievement. Spending additional resources on teacher professional development is the most productive investment schools can make to raise student achievement" (pp. 5-6). The NBPTS certification process recognizes accomplished teachers. Research by NBPTS (2000) shows that "National Board Certified Teachers (NBCTs), recognized by NBPTS as accomplished teachers, scored higher on all thirteen measures of teaching expertise than did teachers who sought but did not attain Board certification" (p. 3).

The United States Department of Education (1999) recommended that each state design a licensing model that will better ensure teacher quality. One component of the model includes voluntary, advanced licensure that provides teachers with opportunities to analyze their practice against high and rigorous standards, such as those established by the NBPTS. Many states have done so.

In February 2000, Illinois implemented a three-tiered licensing system with National Board Certification as the only means to achieve the highest certification of Illinois Master Teacher. Concurrently, the National Council for Accreditation of Teacher Education (NCATE) developed standards for accreditation for teacher education programs aligned to Interstate New Teacher Assessment and Support Consortium (INTASC) and NBPTS standards. States, including Illinois, developed state standards and accountability systems for licensing criteria for beginning teachers. Illinois State University revised teacher education undergraduate and graduate programs to align to INTASC and NBPTS standards and processes.

Although there is agreement among researchers and policy makers that meeting NBPTS standards ensures teacher quality, currently only 0.4 percent of the teachers in the nation and 0.1 percent of Illinois teachers have

The single most important action to improve schools and student learning is to strengthen teaching.

The aim of the Illinois State University NBPTS program is to improve teaching and learning throughout teachers' careers by supporting their professional development toward meeting the NBPTS standards.

achieved National Board Certification. Three reasons for minimal participation at this time may be that teachers are unaware of the benefits of National Board certification, the nature of the process, and available support systems. The Rotberg, Futrell, and Holmes study (2000) found that "teachers faced significant problems with the assessment because they had inadequate information about its scope and requirements" (p. 381) prior to entering the candidacy year. Even if aware of support networks, many candidates could not collaborate as they completed the rigorous portfolio and assessment center components of the NBPTS process because of "wide variations in the quantity and quality of support activities" (p. 381). All teachers did not have access to support systems because of distance, time, and money.

EIGHT COMPONENTS OF THE ILLINOIS STATE UNIVERSITY NBPTS PROGRAM

The aim of the Illinois State University NBPTS program is to improve teaching and learning throughout teachers' careers by supporting their professional development toward meeting the NBPTS standards. The program consists of eight components of support that range from building awareness of NBPTS to reforming schools through teacher professionalism (see Table 1).

School Partnerships

Over the past three years, members of the Illinois State University NBPTS steering committee and NBCTs conducted informational sessions and recruited candidates for National Board Certification through school districts. However, the vision of the program is to improve student learning and the level of teaching at school sites. Concurrently, Illinois State University teacher education programs partner with school districts through professional development schools, field-based clinical experience collaborations, professional development services, and school-based master's degree programs. Current discussions are addressing strategies to link the NBPTS standards and processes through a long-range professional development continuum of preservice, new, and experienced teachers in these existing programs.

Participation in the Process

Master's Degree. In 1998, ISU faculty on the Curriculum and Instruction Master's Cadre met with the newly formed Illinois State University NBPTS steering committee and NBCTs to revise the Master of Science in Curriculum and Instruction degree. The 36-hour curriculum now offers teachers required professional courses, specialization and elective courses, and a choice of professional research experiences to complete the program. The five program goals are based on the Five Core Propositions of NBPTS, and teachers have the option of completing the National Board Certification process as a culminating experience. This program is currently offered on campus and at school district sites.

Mentorship Course. Illinois State University supports candidates for National Board Certification through a series of courses. A total of 40 candidates for National Board Certification have participated in these courses on

TABLE 1 ILLINOIS STATE UNIVERSITY NBPTS CANDIDATE SUPPORT SYSTEM

Level	Support System	Participants	Features
8	Partnerships with schools	PDS schools, teacher education students, National Board Certified Teachers	<ul style="list-style-type: none"> • NBCTs mentor preservice teachers, teachers, and NBPTS candidates • NBCTs teach undergraduate courses
7	Master's program with NBPTS mentoring	Open to all candidates* enrolling at ISU	<ul style="list-style-type: none"> • MS in Curriculum and Instruction • 36-semester-hour program on-site • 3-year program leading to National Board Certification including mentorship • Mentorship workshops and classes • Entry review and feedback • NBPTS information online • Chat room
6	Mentorship course	Open to all candidates*	<ul style="list-style-type: none"> • Yearlong course on site • Mentorship workshops • Entry review and feedback • NBPTS information online • Chat room
5	Online course for graduate credit	Open to all candidates* enrolling at ISU	<ul style="list-style-type: none"> • Presentations to guide entry development • Entry review and feedback • NBPTS information online • Chat room
4	Drop-in support	Open to all candidates*	<ul style="list-style-type: none"> • Bimonthly work sessions. • NBPTS information online • Chat room
3	Online information and support	Open to all candidates* and teachers interested in National Board Certification	<ul style="list-style-type: none"> • NBPTS information online • Chat room
2	Precandidacy support	Open to school partnership teachers who may or may not commit to candidacy	<ul style="list-style-type: none"> • Yearlong course on site • Bimonthly workshops • 3 hours graduate credit
1	Awareness building	Open to all supporters of NBPTS	<ul style="list-style-type: none"> • NBPTS awareness sessions • Conferences • Brochures and materials

*A candidate is defined as a teacher seeking National Board Certification in its entirety or retaking one or more entries.

the ISU campus since 1998. In 2000-2001, 70 candidates from the Chicago area enrolled in a site-based mentorship course as part of a district-wide National Board Certification initiative called the Chicago Public Schools Professionals Honored with Distinction Program (see Table 2).

Six school groups with four or more candidates for National Board Certification from each school participated in the Chicago mentorship course. The instructors met weekly with cohorts of 20 candidates. Participants examined the NBPTS standards, the portfolio entries, and assessment center exercises and collaborated with other current candidates and NBCTs. Additional sessions

Name	\$ Amount	Year	Partners	Activity
National Board Resource Center	\$100,000	1999-2001	NBPTS The Pew Charitable Trusts	Develop opportunities for teachers and university faculty to engage in NBPTS standards-based teacher development
Higher Education Cooperative Act (HECA)	\$27,000	1999-2000	Pekin School District #108 Illinois Central College	Develop an interactive and NBPTS informational web site
The Illinois Professional Learning Partnerships (IPLP)	\$70,000 \$65,000	2000 2001	Chicago Public Schools ISU faculty NBCTs	Develop mentorship strategies for NBPTS precandidates and candidates
The Chicago Pullman Three-Year NBPTS Support Program	\$58,000	2000-2001	Chicago United MacArthur Foundation McDougal Foundation Field Foundation Chicago Public Schools	Deliver professional development experiences based on the NBPTS process
ISU/Chicago Public Schools NBPTS Candidate Support Program	\$100,000	2000-2001	Chicago Public Education Fund	Deliver NBPTS candidate support to 60 Chicago teachers and serve on advisory board
NBCT Recognition	\$1,000	2000	State Farm Insurance Company Regional Office	Host a recognition reception for newly named NBCTs in the area

offered candidates the choice to receive individual and certificate-specific learning opportunities with NBCTs and Illinois State University faculty. During the first year, no NBCTs lived in the area so Illinois State University contracted NBCTs from 80 miles away to travel to campus. Later, NBCTs from the cohort worked with the candidates. NBPTS-published materials and their application to the candidate's practice formed the basis for discussions about NBPTS standards, subject matter content, child development, instructional practices, effective teaching methods, curriculum development, assessment, analytical and reflective writing, and technology. Practitioners had opportunities to present and receive feedback on draft written commentaries, videotapes of small and large group lessons, and student work that showed evidence of progress in meeting the NBPTS standards and criteria.

Online Course Credit. As cohort programs developed and the steering committee continued to work with the Illinois State Board of Education Design Team (a committee of representatives from 20 state educational organizations), it became obvious that not all Illinois teachers had access to support programs. Additionally, candidates for National Board Certification could not easily be mentored by NBCTs in subject-area specialties due to distance and the scarcity of NBCTs. During the past three years, materials, support strategies, and partnerships with NBCTs have been developed. These resources will be incorporated into an online course to be delivered during the next certification cycle.

Drop-in Support. Because candidates approach the National Board Certification process in different ways and require information and support beyond class time, a series of drop-in support sessions were arranged. Schedules and meeting locations were designated so candidates could choose to meet with NBCTs and Illinois State University faculty for additional support individually or in small groups. Other candidates seeking to achieve National Board Certification did not want to participate in a formal course so these drop-in sessions accommodated their desire for flexibility while still enabling them to become members of a cohort.

Preparation

Online Information and Support. NBPTS maintains a web site presenting information about the process and national actions and contacts. However, there was no website in Illinois with which to share information and link support programs within the state. Since 1999, Illinois State University has contacted universities, school districts, the State Board of Education, Regional Offices of Education, NBCTs, and businesses to compile and display information about NBPTS in Illinois. In addition, resource links, chat rooms, and bulletin boards will be added for the next NBPTS certification cycle.

Precandidacy Support. Because of the lack of awareness and understanding of the NBPTS process, the steering committee, NBCTs, and faculty developed a variety of methods to prepare teachers to meet the NBPTS standards. In summer 2000, 10 teacher education faculty members throughout the university collaborated with 15 NBCTs to explore the NBPTS standards and assessment tasks with the purpose of designing mentorship strategies and resources in content and pedagogy for preservice, beginning, and experienced teachers (see Table 2). In the second phase, the faculty members and NBCTs mentored precandidates and candidates through the campus and Chicago cohorts.

Six NBCTs developed agendas and materials for a 16-hour professional development experience based on the Five Core Propositions and delivered it to 35 teachers in two area school districts and the Regional Office of Education (see Appendix A). The mentorship strategies were implemented in a three-credit hour, yearlong course on reflective teaching with 20 teachers from two schools in the Chicago area to prepare them for candidacy in the next NBPTS cycle (see Table 2).

Awareness Building. Building awareness of NBPTS among Illinois State University faculty and administrators is an ongoing process through existing programs and structures. The NBPTS steering committee collaborated with Illinois State University faculty on the Performance-based Assessment Task Force to develop a comprehensive assessment system for undergraduates. Information shared about the NBPTS standards and process supported the recommendations to align the INTASC and NBPTS standards to the guiding conceptual framework of the Illinois State University teacher education program, "The Democratic Ideal." Ongoing collaboration with department chairs; directors of programs such as clinical practice, student teaching, and degree programs; and leaders of programs in Chicago and school partnerships are beginning to show the appropriate connections to NBPTS.

Illinois State University reached beyond its own campus to build awareness. Since 1998, Illinois State University hosted five meetings of the Illinois NBPTS University Alliance. Twice a year, representatives from 20 teacher education programs met to share strategies and programs aligned to the NBPTS standards. Members aligned graduate programs, offered support to candidates and precandidates, recruited teachers, conducted awareness sessions, and partnered with school districts. The alliance will develop distance-learning experiences for candidates in isolated certificate areas in the next NBPTS certification cycle.

Illinois State University disseminated information to teachers, principals, superintendents, board members, teacher educators, and the public. NBCTs developed agendas and a PowerPoint presentation for one- and two-hour presentations, which was disseminated to all 21 NBCTs from previous Illinois State University cohorts. The NBCTs partnered with the Regional Office of Education to arrange presentation schedules, flyers, and brochures and school district credit for teacher participants. The coordinator met with school teams to facilitate the development of plans to build awareness of the NBPTS standards and process, support candidates, and develop opportunities for teacher leadership.

KEY STEPS AND RESOURCES IN DEVELOPING THE PROGRAM

From 1997 through the present, Dean Sally Pancrazio served on the Illinois State Board of Education Design Team as an advisor to advance National Board Certification in Illinois. Dr. Pancrazio designated Dr. Kay Moss, Assistant Chair of the Curriculum and Instruction Department; Dr. Michelle Mueller and Kathleen Clesson, laboratory school teachers; and Lynn Gaddis, member of the Illinois State Board of Education Design Team, to serve as a steering committee to develop a comprehensive program to advance NBPTS to a variety of audiences. It was critical that the team attended the 1998 and 1999 NCATE/NBPTS Partnership For Graduate Programs conferences, NBPTS Facilitators' Institutes, and NBPTS 1998-2000 Academies. Subsequently, Kathleen Clesson and Lynn Gaddis achieved National Board Certification, and Kathleen Clesson served as an NBPTS scorer. This ongoing collaboration and training resulted in the design and revisions to components of the program.

The College of Education appropriated an initial 1998-1999 budget to develop awareness sessions, support for a candidate cohort, revisions to the master's degree, a partnership with the Regional Office of Education, and an alliance of universities. In the following year, a coordinator and clerical staff were added to coordinate the development and implementation of the components of the expanding program. It was important to identify existing components of the teacher education program and professional development services that may be appropriately linked to the NBPTS standards through a series of meetings with faculty, administrators, and school partners. In all areas of support, NBCTs served a key role.

An important resource for implementing the program was the 1999 designation by NBPTS of Illinois State University as one of five universities in the nation that would serve as a National Board Resource Center. The other four resource centers include Stanford University, Bank Street College of Education, Florida A&M University, and the University of Texas at El Paso. The annual

grant of \$50,000 in 1999 and 2000 supported the work in meeting the charge to each institution to develop and implement programs to align the NBPTS standards and process through professional development experiences, technological support systems, and recruitment and support of minority candidates. In addition, the Illinois State University steering committee wrote and received grants to support specific activities in the program (see Table 2).

PROGRAM IMPACT

Twenty-one of 26 candidates in the first two cohorts achieved National Board Certification. Of these NBCTs, all volunteered to mentor, advise, or develop components of the Illinois State University NBPTS program and those within their own schools and districts. Partnerships among Illinois State University, the Regional Office of Education, foundations, businesses, and school districts have resulted in increased enrollments in precandidacy and candidacy cohorts both on campus and in Chicago. The Illinois NBPTS University Alliance has grown from four institutions to 20 with more teacher education programs developing and implementing a variety of support programs aligned to the NBPTS standards. Illinois universities have increased the number of Illinois NBPTS candidates participating in cohorts. As a result, school partners, Illinois State University faculty, and other universities have received an increasing number of requests for information about how the NBPTS standards and process may support teachers to improve practice.

FUTURE DIRECTIONS FOR THE PROGRAM

If quality teachers increase student learning and NBCTs outperform teachers who do not achieve certification, the goal for teacher professional development should be to achieve National Board Certification. However, future directions of this program will go beyond just increasing the number of NBCTs toward a vision whereby accomplished teachers influence preservice, new, and experienced teachers "along a developmental path that continues through the professional career of the teacher" (Blackwell & Diez, 1999, p. 2). Key to effective professional development is that it occurs within the context of the real work within the school. Rosenholtz in her book, *Teachers' Workplace* (1991), shows that the organization of the workplace of teachers is key to improving schools. The NBPTS standards should be embedded in each component of a comprehensive and systematic program of professional growth opportunities at school sites. To move in that direction, the steering committee will reorganize to include NBCTs, faculty, and school, business, and Regional Office of Education partners to embed NBPTS standards in professional development within the school culture. In the immediate future, Illinois State University will continue to support cohort groups of precandidates and candidates and develop professional development opportunities for NBCTs as awareness and support systems grow within schools. The focus of the program will move toward developing the leadership capacity of NBCTs to improve the quality of teachers at all levels of the continuum through existing and newly developed school partnerships within undergraduate, graduate, and continuing education programs.

The Illinois NBPTS University Alliance has grown from four institutions to 20 with more teacher education programs developing and implementing a variety of support programs aligned to the NBPTS standards.

NBPTS PROFESSIONAL DEVELOPMENT EXPERIENCE

Preparation Year

Course Description: We will be looking at the application of National Board Standards to help evaluate and enhance your teaching. The use of the National Board Standards will give us a common language to speak and write using your students' work and classroom experiences. Through in-class discussions with colleagues, you will be collaboratively looking at and reflecting on your own personal teaching style. This is a class for:

- ▶ those of you who are thinking about applying for National Board Certification,
- ▶ those of you who know someone going through National Board Certification and want to help, or
- ▶ those of you who may never go through National Board Certification but want to learn more about your own teaching.

These sessions will require in-class discussions and no outside homework. Each week we will present an optional reflective activity that you may choose to use to expand your thinking about your own practice and students.

Session	Topic
1	Overview Five Core Propositions
2	Relating Standards to the Five Core Propositions CP 1: Teachers are committed to students and to their learning.
3	Linking the Standards to Your Practice CP 2: Teachers know the subjects they teach and how to teach those subjects to students.
4	Three Types of Writing: Descriptive, Analytical, and Reflective CP 4: Teachers think systematically about their practice and learn from experience.
5	Writing about Student Work CP 3: Teachers are responsible for managing and monitoring student learning.
6	Writing about a Videotaped Lesson CP 1-4: All of the core propositions interspersed.
7	Entries 5 & 6 CP 5: Teachers are members of learning communities.
8	Developing Support Planning Ahead Time Management Technology

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CREATING A CULTURE OF ACCOMPLISHED PRACTICE

Documentaries of National Board Certified Teachers bring standards to life and foster systematic analysis.

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The concept of a standards-based professional continuum as put forth by the National Council for Accreditation of Teacher Education (NCATE) and the National Commission on Teaching and America's Future (1996) in *What Matters Most* envisions a profession that proactively embraces performance standards. More than vital yardsticks for accreditation, standards can inspire a professional culture in which habits of mind are developed through shared beliefs and perceived norms of behavior. The teaching practices of National Board Certified Teachers (NBCTs) represent a high level of standards-based accomplishment, but to be valuable grist for collaborative inquiry and problem solving, they must be translated into curriculum that shows rather than tells. Such curriculum animates a culture striving toward standards.

The story I am about to tell recounts how this culture is developing at Idaho State University, summarizes the theoretical framework illuminating the path, and illustrates how reflective practice can be catalyzed through the visual exemplification of standards. Constituting the core of our culture is a critical mass of NBCTs who have eagerly assumed new roles and responsibilities for both teacher education and development. A series of award-winning documentary cases of NBCTs augments this process.

FOSTERING NATIONAL BOARD CERTIFICATION

In 1997, Idaho had one NBCT. Today, with 207, we rank among the top 10 states in total number of NBCTs. That is, 1.6 percent of the state's teaching population has achieved National Board Certification. By strategic design and through osmosis, this pool of professional expertise fosters the evolution of a culture imbued with accomplished teaching.

Idaho State University has long embraced a standards-based teacher education program with a curriculum mirroring a unified conceptual framework. With this underpinning, it was a logical next step for faculty to pursue the "culture of accomplished practice" concept in 1997.¹ Our journey together in pursuit of this ideal has been about supporting, promoting, and integrating the knowledge, skills, and habits of mind demonstrated by NBCTs. Fortuitously, extensive resources essential to the journey were provided in state by the J. A. & Kathryn Albertson Foundation, the mission of which is the improvement of Idaho K-12 education. The Foundation sponsorship enabled Idaho State University to launch a comprehensive candidate support program that included teachers from the most rural to the most urban districts. Pleased with the results of the pilot support program (a 61 percent achievement rate), the foundation eagerly transported the model statewide. It accomplished this goal by drawing on the expertise of Idaho State University faculty to provide in-depth training and curriculum for candidate support teams in every region of the state. This approach demonstrates the foundation's theme of capacity building, and the power and sustainability of the pilot model is reflected in an Idaho achievement rate of 68 percent for the last two years. With close to 100 NBCTs and several dozen candidates within the regions served by Idaho State University, we have a wealth of expertise for professional partnerships.

Standards can inspire a professional culture in which habits of mind are developed through shared beliefs and perceived norms of behavior.

¹For more information on the Idaho NBPTS Initiative, please visit the website at <http://www.nbpts.org>.

"Our courses really gain credibility with the students when NBCTs use their current experience to explain and demonstrate how theory applies in practice."

With this burgeoning group of accomplished teachers, our college created new roles to ensure strategic use of their expertise as copartners in teacher education. As tenured Idaho State University faculty continue to mentor candidates for National Board Certification through special graduate courses, NBCTs have assumed roles as full-time teachers-in-residence and part-time adjunct instructors. From the professors' perspective, these teachers bring a richness and currency to our curriculum as instructors for undergraduate introductory courses. A beginning assistant professor who team-teaches with the teachers-in-residence explains how their wisdom and experience validates the theories undergirding our program: "Our courses really gain credibility with the students when NBCTs use their current experience to explain and demonstrate how theory applies in practice." NBCT expertise often translates into invaluable modifications to syllabi and course content illustrating our partnership philosophy. In addition, 31 of our current cooperating teachers are either NBCTs or 2001 candidates. Over the last three semesters, they supervised 44 of our preservice students in field placements. The dean of the College of Education is eager to increase the number of students working directly with NBCTs by 50 percent each year. Therefore, although a work in progress, our expansive culture of accomplished practice amalgamates and synergizes a reformed vision for the contribution of the teachers' professional expertise.

STANDARDS LIVE

The nexus galvanizing standards-based thinking and propelling this culture is the revealing visual documentation of NBCTs in their everyday contexts. The Albertson Foundation, in providing extensive resources for candidates, also knew that teachers and administrators in any location and at any stage of development deserve immediate access to what the practices of accomplished teachers look like. Consequently, they funded all aspects of producing documentary cases of NBCTs in an elaborate project titled Idaho Classrooms of Accomplished Teachers (ICAT).² Together, we envisioned how movies of accomplished practice would contribute to improved professional development and student learning throughout Idaho.

The ICAT curriculum consists of a series of eight digitally produced video documentaries. Shorthand for the documentaries is *docucase*, because the form of representation combines a *cinéma vérité*³ approach to filmmaking with case method teaching. The curriculum includes the book *Accomplished Practice: A Guide for Discussion Leaders* with: (a) extensive standards-based questions; (b) detailed cross-references to Idaho student achievement standards; and (c) a teacher development approach emphasizing National Board for Professional Teaching Standards (NBPTS) core propositions four and five (1989): "Teachers think systematically about their practice" (p. 6) and "are members of learning communities" (p. 7). Each docucase, approximately 22 minutes long, presents a condensed, unrehearsed lesson of an NBCT. The

²For more information on the ICAT project, please visit the website at <http://www.icateducation.com>.

³*Cinéma vérité* means camera truth and is used to describe documentaries that strive for immediacy, spontaneity, and authenticity (Konisberg, 1997, p. 57).

docucase Standard Version is pure documentary and is followed by the Annotated Version, which includes multimedia inserts to illuminate standards-based teaching practices and key issues for reflective analysis.

I selected the nine subjects of the documentaries from the first cadre of Idaho teachers to achieve certification. My goal in the selection process was to capture diverse teaching contexts and a broad range of grade levels and subjects taught. Three of the featured teachers are from among the most rural districts in Idaho wherein the vast majority of students are eligible for free lunch programs.

The idea for a visual repertoire of standards-based teaching cases came from my work as one of the members of the Interstate New Teacher Assessment and Support Consortium (INTASC) standards drafting committee in the early 1990s. With the profession propelled toward standards-based programs, I continued to ask myself how standards would come alive for those just entering the profession. In light of this question, the idea of creating visual, nondiscursive representations of accomplished teaching became a goal.

Inspired by Colbert, Trimble, and Desberg (1996) and their commitment to the authentic in case teaching, the potential for enhanced authenticity guided my interest in creating visual cases. I soon learned that digital video enabled me to capture critical details of color, sound, and movement, thereby conveying the obvious and more subtle aspects of a teaching context. As Eisner (1994a) says, "The complexities and significant qualities of educational life can be made vivid" (p. 381).

The conceptual framework guiding my work focuses on forms of representation: their effect on experience and the making of meaning (Dewey, 1934; Eisner 1994a, 1994b). According to Eisner (1994b), film, or in this instance video, as a form of representation can foster the replication of the surface features of an event while also capturing the deeper and more expressive characteristics involved. Herein lies the key to making standards come alive (Bliss and Mazur, 1995). What is perceived in a documentary of accomplished teaching should be sufficiently expressive so as to create a "felt experience." Eisner (1994b) tells us how such an experience relates to cognition: "to make insight born of feeling possible" (p. 55). Challenged by this possibility, I became confident that documentaries with the capacity for initiating a felt experience would invigorate thinking about good teaching practices.

A HUB FOR DOCUMENTARY PRODUCTION

Producing the docucases within a university context afforded both the ambience and flexibility to maintain focus on the conceptual framework while simultaneously engaging in the creative and practical components of filmmaking. Another major advantage of keeping the work in-house was a total cost of about 20 percent of the commercial rate. The production team included faculty from the mass communications, business, and physics departments in addition to dedicated graduate students in the College of Education. Their pronounced appreciation for the quality of teaching displayed by the NBCTs we filmed permeated our joint endeavor. The Idaho State University Media Services Center provided expertise in digital video production and continuous access to state-of-the-art equipment. This access ensured my vigilant, if not obsessive, control

When standards-based practices are visually accessible and perceived holistically, the experience may accelerate reflective practice.

over all aspects of planning, directing, editing, and post-production processes. I had supported the featured NBCTs in an Idaho State University graduate course while they were candidates for National Board Certification; I knew the risk involved when they opened their classrooms to my film crew because there would be no retakes. This risk-taking generosity typified their commitment to the profession; I strived to repay them with truthful and authentic representations of their work.

To produce each documentary (standard and annotated version) required, on average, the equivalent of four individuals with appropriate skill sets working full-time for three months. This estimate does not include the time nine NBCTs gave to planning and post-production conferencing. Because most of the videos capture a full day or more of teaching condensed into 22 minutes, each teacher verified the authenticity of what had been documented *after* the editing process. Each also wrote a reflective piece for inclusion in the discussion leader guide. Overall, the university demonstrated its suitability as a hub for digital video production. Nonetheless, the complex technical lessons I learned predict a more streamlined process for similar endeavors.

Once the documentaries were completed, I embarked on creating a cadre of discussion leaders who would be well prepared to facilitate meaningful docucase analysis. Eight NBCTs are among the 12 educators comprising the group of Certified Discussion Leaders. Each eagerly volunteered for more than 50 hours of training, energized by a deep commitment to collaborative learning communities focused on standards-based practice.

Although leading case discussions embodies a new experience for these teachers, they are now confident in their roles as consultants. The use of their skills is forthcoming from those Idaho school districts that have chosen to incorporate ICAT into peer assistance and support programs. One of the two largest districts in the state made the decision to integrate the ICAT curriculum with their cognitive coaching model for beginning teacher support.⁴

ICAT IN THE CLASSROOM

When standards-based practices are visually accessible and perceived holistically, the experience may accelerate reflective practice. According to Dewey (1934), "to perceive a beholder must create his own experience" (p. 54). Explaining this perceptual process he goes on to say, "there is comprehension in its literal signification—that is, a gathering together of details and particulars physically scattered into an experienced whole." ICAT offers this type of perceptual opportunity. Focusing initially on what Van-Manen (1977) considers the first stage of reflection—recognizing skills and strategies used in a classroom context and analyzing their effects—the following example illustrates ICAT's potential for stimulating such thinking.

Imagine, for example, a preservice foundations course taken prior to student teaching that uses Fenstermacher and Soltis's (1998) *Approaches to Teaching* or some similar text as an organizing framework for analyzing pedagogical approaches. As novices struggle with the approach entitled

⁴All school districts and educational institutions in the state of Idaho receive a complimentary set of curriculum materials including the publication, *Accomplished Practice: A Guide for Discussion Leaders*.

liberationist, they are simultaneously intrigued and frustrated. The idea of teachers embracing their content expertise as a process of continuous inquiry challenges some traditional conceptions of teaching. Amidst their struggle, assume the class members view a documentary of an NBCT's ninth-grade field trip to a famous fossil bed. They observe how the teacher asks probing questions of the park ranger, and they witness how she uses her extensive knowledge of earth science for spontaneous scaffolding of student learning. The liberationist concept gains concrete meaning; students initiate insightful connections between this framework and accomplished practice. The instructor guides them in collective inquiry about the elements of the NBCT's planning, the underlying assumptions, and alternative courses of action as set forth in INTASC Principles seven and nine. Through an immediate shared experience of a docucase, the entire class achieves dynamic collective reflection.

This illustration captures a recurring event in the Idaho State University undergraduate teacher education curriculum. What do students in the course *Inquiry, Thinking, and Knowing* report about the experience? The analysis of anonymous surveys from 126 students in three sections of the course (each with a different instructor) revealed an interesting combination of expected and unexpected outcomes. The quantitative data show that when instructors introduce the docucases as an integral part of the course, 92 percent of the students rated the experience of viewing and then analyzing NBCTs' practice within the range of "valuable" to "very valuable" for their development as teachers (with the vast majority citing "very valuable"). An unexpected finding emerged from our students' open-ended comments: 59 percent of the 126 students across all sections spontaneously commented on student learning. Typical responses include:

- "I was better able to understand how the learning environment affects the students, making them more or less likely to learn."
- "She keeps students excited, thinking, and motivated about what they are learning."
- "I didn't realize eighth-graders could be so well-behaved and so motivated to learn."

What propels preservice teachers to these kinds of unprompted insights about student learning and behavior? The combination of the visual modality, the real-life presence of NBCTs in their everyday contexts, and the multimedia annotations offers powerful curriculum. It provides one example of Dewey's (1999) concept about the value of perception for comprehension. Because the level of understanding students displayed in their self-reports usually appears later in our program, this development augers well for the strengthening of reflective thinking. Van Manen's (1977) concept of the second stage of reflection includes the effects of classroom practice on student learning. Can ICAT docucase analyses in the early stage of teacher preparation offer valuable groundwork for developing this mode of thinking?

Now imagine a similar but more sophisticated process of video analysis in a Master in Curriculum Leadership program designed around the NBPTS Core Propositions. In one course, *Systematic Analysis of Practice*, practitioners investigate the docucases, drawing on a broad array of theoretic-

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...the analysis of practice occurs in a shared forum of professional dialogue and problem solving, with a focus on making participants' expertise explicit.

cal frameworks. By analyzing what the teacher did and the assumptions underlying the actions, consequences, and alternatives, they are engaging in what Schon (1983) calls "reflection on action." While using their perceptions to critique, dialogue, debate, make inferences, and hypothesize consequences, they remain focused on such teaching standards as instruction and professional responsibilities. As such, they are prepared to plan relevant and timely applications to their own practice (i.e., reflection for future action).

The docucases seem well suited to strengthening the reflective attitudes of open-mindedness and responsibility as described by Dewey (1998) precisely because the teaching stories make no explicit claims to best practice. Rather, the myriad accomplished teaching practices to be mined catalyze the exploration into what constitutes one's own continuously developing practice. By fostering a reflective rather than a mimetic response, the curriculum contributes to analytical dialogue, focused collegiality, and professional judgment that comprise a true learning community as envisioned in NBPTS core proposition five (1999).

ICAT IN THE FIELD

ICAT docucases also show promise for providing compelling professional development opportunities. While much has been said about the importance of learning communities (Ball and Cohen, 1998; Gusky, 1994; McLaughlin and Talbert, 1993), many professional development opportunities have yet to embrace this concept. ICAT offers planned collegial inquiry (Darling-Hammond, 1998), in which there is no external expert with the best ideas or programs. Rather, the analysis of practice occurs in a shared forum of professional dialogue and problem solving, with a focus on making participants' expertise explicit. Like a team of architects designing a new building by drawing upon an existing design, teachers engage in collaborative, guided inquiry about the practices of NBCTs. The fact that the design (e.g., the featured NBCTs' lesson) inspires and challenges, but does not define, engenders confidence for innovation. Field test data from our professional development sites in which novice and experienced teachers analyze ICAT videos together reveals important attitudes: teacher self-reports include finding this process respectful and affirming because of opportunities to draw upon each other's expertise for envisioning enhanced teaching and learning. In one workshop, eight of the nine teachers involved responded that "learning from the ideas and insights of their colleagues was of great value" and in the follow-up session shared examples of how they had taken teaching ideas seen on a docucase and creatively made them their own.

ICAT'S FUTURE

The Docucase Collection

I mentioned my initial goal of featuring NBCTs who represent an array of teaching contexts. However, diversity in both the student and teacher populations featured in the ICAT videos is almost nonexistent. This

situation reflects a highly homogeneous state population. The series will have greater illuminative worth and applicability with the addition of docucases situated in school settings comprised of more diverse student and teacher populations. As I continue developing the docucase collection, this is my highest priority.

Dissemination

Designed to be catalysts for self-initiated action, consistent with what Dewey (1998) describes as "intellectual responsibility," an ICAT docucase viewing should be followed by facilitated discussion that focuses on problem solving and reflection about what has been, and can be, related to performance standards. Effective discussion leadership⁵ is the glue integrating the experience. Teacher educators familiar with case method teaching will find the docucases easy to use as a curriculum supplement. For others, our goal is to provide discussion leader training so that the analysis of practice is systematic and inclusive of the other components of a true learning community. Ideally, more NBCTs and other teacher leaders will seek to become discussion leaders in their own districts so ICAT and/or similar curriculum infuse professional development with teacher expertise and sustained collaboration.

EVALUATION AND BEYOND

An extensive external evaluation of ICAT begins in 2002, including both teacher education and district professional development programs, identifying contexts in which ICAT has been sufficiently infused to produce meaningful data. The effects on reflective practice, structured problem solving, and student learning offer major areas of focus. Meanwhile, we continue to collect data related to the core propositions four (Teachers think systematically about their practice...) and five (...are members of learning communities") as ICAT's potential for integrating these propositions begins to emerge.

Within this partnership culture of accomplished practice, the enduring question remains ripe: How does an authentic visual form of representation create new meanings? For example, I am intrigued by the fact that regardless of how often I use the terms *documentary* or *docucase* with my beginning teachers, they continue to refer to ICAT videos as movies. They also insist on such show-time rituals as close together seating, no ancillary noise, and a totally darkened room. Not to discount the importance of standards, perhaps the true strength of these movies is the *passion for the possible*⁶ stirred in beginning teachers.

⁵Discussion leadership strategies are summarized in the ICAT *Accomplished Practice: A Guide for Discussion Leaders*. Many other publications, including several from the Harvard Business School, focus on this topic as well.

⁶Shulman and Sykes (1983) describe the concept of the possible in case teaching: "The well-crafted case instantiates the possible, not only documenting that it can be done, but also laying out at least one detailed example of how it was organized, developed, and pursued" (p. 495).

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COLLABORATING FOR TEACHER DEVELOPMENT AND CANDIDATE SUPPORT

The combined efforts of higher education and an urban school district result in new advanced degree programs and growing numbers of NBCTs.

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Educational partnerships often reap exponential benefits, as the relationship between The University of North Carolina (UNC) at Charlotte, the Charlotte-Mecklenburg Schools and the National Board of Professional Teaching Standards (NBPTS) demonstrates. National Board standards have guided extensive revisions of UNC's advanced master's degree programs and its participation in the three-year Charlotte Collaborative Project. At the same time, UNC-Charlotte faculty have been instrumental in recruiting and supporting candidates for National Board Certification and in serving on NBPTS national committees.

HISTORY

The University of North Carolina at Charlotte has long-standing and significant connections with NBPTS. In the 1980s when the Carnegie Task Force on Teaching as a Profession recommended the establishment of NBPTS, Dr. E. K. Fretwell, then Chancellor of UNC-Charlotte, served as a member of the original planning group. In addition, James B. Hunt, Jr., then governor of North Carolina, served as chair of the NBPTS Board of Directors and led the effort to formulate and implement standards-based reform in the state and nation.

The first direct university faculty involvement with the efforts of the National Board came in 1994 when UNC-Charlotte teamed with Charlotte-Mecklenburg Schools on one of the first candidate support and awareness projects in the nation. This Collaborative Assistance Project, headed by a former university faculty member, involved 15 local National Board Certified Teachers (NBCTs) and other university and school personnel. Taken together, this combination of state, university, and school system activity provided a rich beginning for the NBPTS initiatives at UNC-Charlotte.

Since then, UNC-Charlotte's involvement with NBPTS has expanded in many directions, including revision of advanced master's degrees, participation in the three-year Charlotte Collaborative Project, recruitment and support of candidates, faculty service on NBPTS national committees and other local efforts, and widespread advocacy for the work of the National Board.

REVISED ADVANCED MASTER'S DEGREES

In 1999 the College of Education at UNC-Charlotte undertook the revision of 11 master's degree programs to address advanced competencies for in-service teachers. These revised advanced master's degrees were standards-based, meaning that they extended the Interstate New Teacher Assessment and Support Consortium (INTASC) standards for competent beginning teachers and incorporated the NBPTS Five Core Propositions and standards for accomplished teachers.

While the master's comprehensive program portfolio is different in both purpose and design from that prepared by candidates for National Board Certification, nonetheless an alignment exists between these two portfolio projects that is beneficial to all master's students, including those who are also candidates for certification.

A team made up of faculty members and an NBCT created the first design of the advanced master's degree in elementary education. This design became a model for other master's degree programs, not only within the College of Education but also for the other 16 campuses in the UNC system. Courses were redesigned or created, and a comprehensive portfolio project was operationalized. Faculty and NBCTs worked together to align and incorporate National Board standards into coursework, field experiences, and portfolio development. While the master's comprehensive program portfolio is different in both purpose and design from that prepared by candidates for National Board Certification, nonetheless an alignment exists between these two portfolio projects that is beneficial to all master's students, including those who are also candidates for certification (see Appendix A).

CHARLOTTE COLLABORATIVE PROJECT

Another catalyst for National Board initiatives at UNC-Charlotte was the 1998 funding of the three-year Charlotte Collaborative Project by the John S. and James L. Knight Foundation. Currently in its final year, this project is a joint effort among the Charlotte-Mecklenburg Schools, Johnson C. Smith University, UNC-Charlotte, and the National Board. Charlotte-Mecklenburg Schools is a large urban school system with more than 100,000 students, and it ranks second in the nation for the number of NBCTs. Johnson C. Smith University, a historically Black university with 1,500 students, offers undergraduate degrees, including several teacher preparation programs. UNC-Charlotte, a regional university of more than 17,000 students, was reclassified recently from comprehensive to doctoral status and offers 13 undergraduate and graduate programs in the College of Education.

These three institutional partners, in cooperation with NBPTS, have worked to meet the four goals of the Charlotte Collaborative Project: standards-based professional development at both the undergraduate and graduate levels, recruitment of and support for candidates for National Board Certification, public awareness and recognition, and policy advocacy.

Collaborative Goal 1—Professional Development. UNC-Charlotte uses its conceptual framework for preparing excellent professionals as the basis for standards-based teacher education. The INTASC standards for beginning teachers and the NBPTS core propositions and standards also inform this work.

At the undergraduate level, the INTASC standards have been infused into coursework and student teacher assessment. In addition, the use of videotaping, reflective writing, and portfolio development in both coursework and student teaching has been refined and aligned with the National Board Certification process and the standards-based North Carolina beginning teacher induction program. In addition, NBCTs work directly with the undergraduate Teaching Fellows program and serve as mentors during the sophomore year.

As noted previously, all master's degree programs are aligned with National Board standards, and the comprehensive program portfolio requirement is aligned with National Board processes.

An additional component of enhancing professional development is the College of Education's focus on fostering leadership roles for teachers. NBCTs are actively recruited to serve as cooperating teachers and mentors for undergraduates. Even before the Charlotte Collaborative Project was fully underway, an NBCT was recruited for a full-time clinical faculty position. This person taught methods courses and supervised elementary education student teachers. Several other NBCTs teach classes on an adjunct basis in the elementary and special education programs. Finally, through a separate federally-funded project, two other NBCTs have joined the faculty as teachers-in-residence who work with cooperating teachers and mentors for beginning teachers. The teachers-in-residence also collaborate with graduate and undergraduate faculty on standards alignment, portfolio development, and reflective teaching, and they serve on faculty search committees and program planning groups. All of the NBCTs who assume leadership roles in the daily work of the college have contributed immeasurably to faculty awareness of and involvement in NBPTS initiatives.

Collaborative Goal 2—Candidate Recruitment and Support. The Charlotte Collaborative Project has focused its main efforts on candidate support, and the project staff in Charlotte-Mecklenburg Schools has developed a candidate support system that promises to become a model for other school systems.

At the same time, the College of Education has initiated efforts to promote the value of National Board Certification and to recruit and support candidates for National Board Certification in all 13 of its constituent school systems. Each fall the college conducts precandidacy sessions for cooperating teachers and distributes National Board Certification application packets. NBCTs lead these sessions and remain on call for follow-up information and support. The college also provided funding for one university faculty member and three NBCTs from a neighboring school system to attend National Board Institutes. This team then trained and mentored other NBCTs to serve as coaches for candidates and to field-test materials being developed by the Charlotte Collaborative Project.

Collaborative Goal 3—Public Awareness and Recognition. For the last two years UNC-Charlotte has joined the Charlotte Collaborative Project and a regional education consortium in cosponsoring a major celebration to recognize teachers in the region who have achieved National Board Certification. In 2000, more than 200 teachers were honored, including 97 from Charlotte-Mecklenburg Schools. In 2001, almost 300 teachers were recognized, with 107 from Charlotte-Mecklenburg Schools. In addition to a welcome and remarks from the chancellor of UNC-Charlotte and the dean of the College of Education, representatives from the National Board, the North Carolina governor's office, the regional school superintendents' council, and NBCTs take part in the program. Teachers receive NBCT pins and a special certificate to honor their accomplished teaching and professional status. To enhance public awareness throughout the region, local dignitaries are invited to this reception, and the event receives local media coverage.

Collaborative Goal 4—Policy Advocacy. The College of Education is a visible supporter of the National Board for Professional Teaching Standards, and

many of the activities noted previously serve to extend and reinforce policies already in place. For example, the North Carolina State Board of Education, which is responsible for P-16 education in the state, adopted the National Board's Five Core Propositions and advocated incorporation of the standards into higher education. This action led to changes in the master's degree programs. At the university level, funds are made available for activities in support of National Board initiatives, and preference is given to NBCTs for the clinical faculty positions and for service as cooperating teachers and clinical instructors.

Policies and activities such as these are partly responsible for UNC-Charlotte's visibility on the national level as an advocate for NBPTS. Four faculty members from the College of Education and the College of Arts and Sciences serve on three different National Board standards development committees, and another faculty member serves on the Next Generation Assessment committee for science. A sixth member of the faculty has served as an invited consultant for several National Board activities.

Other Initiatives and Activities. The Charlotte Collaborative Project has sparked initiatives and opportunities in support of the National Board far beyond those envisioned by the proposal writers. Likewise, the revision of the master's degree programs has caused faculty to educate themselves and become involved in National Board efforts in ways that few could have foreseen. The College of Education supports faculty involvement with the National Board and has committed financial resources to the Charlotte Collaborative Project and to broader National Board efforts.

Three years ago the level of faculty awareness about the National Board for Professional Teaching Standards was limited, and direct faculty

TABLE 1 UNC-CHARLOTTE FACULTY INVOLVEMENT IN SUPPORT OF NBPTS IN 1998-2001

Activity (Many faculty reported more than one activity)	Total Faculty = 70 Respondents = 33 or 47%
1. Direct individual or group support for candidates	15
2. Collaboration with NBCT on scholarly activities	13
3. Advocacy, awareness, or recognition activities	13
4. Discussion of NBPTS in class	11
5. Representation and application of NBPTS matters in national and state professional settings	10
6. Arranging support for candidates	7
7. Conference presentations based on NBPTS	6
8. Alignment of course activities	6
9. Occasional consultations with candidates	5
10. Member of National Board Standards Development Committees	4
11. Writing letters for candidates to document professional involvement	4
12. Member of Next Generation Assessment committee	1

Note: This report does not include other activities related to implementing the revised advanced master's degrees to align with NBPTS. Many faculty were involved in these program changes.

involvement was rare. As presented in Table 1, of the 70 current full-time faculty members in the College of Education, a number of whom are not affiliated with teacher preparation, 47 percent report specific activities in support of National Board Certification.

In addition to examples already cited, faculty report other initiatives and activities that illustrate their growing involvement in NBPTS efforts. One faculty member focused her dissertation study on a support group for 10 candidates for National Board Certification, most of whom had completed the undergraduate teacher preparation program at UNC-Charlotte. After the study was complete, this faculty member continued a support group for several candidates who had banked their scores. Now in the third year, this group is exploring ways to become coaches for new candidates.

One faculty member has gained deeper knowledge of the National Board by attending both the Third Annual NBCT Meeting in 1999 and the National Board Academy in 2000.

Four faculty members designed and implemented a three-day program in which six NBCTs received training to serve as adjunct university supervisors for student teachers.

Three faculty members have been selected to conduct an independent program evaluation of the Charlotte Collaborative Project.

It is difficult to imagine what the current program of the College of Education would be like or what the future could be without considering the mutual impact and involvement of UNC-Charlotte and the National Board. In a few years time, the National Board's Five Core Propositions, standards, and processes have been reaffirmed and inculcated into program development and implementation, faculty development, and scholarly activity.

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**The University of North Carolina at Charlotte Department of Reading and Elementary Education
Master's Degree in Elementary Education (M. Ed.)***

Relationship of Coursework and Portfolio Requirements to National Board Standards

PHASE I: DEVELOPING PERSPECTIVES (13 HOURS)

Course Number	Course Title	Early Childhood Generalist (ages 3 - 8)		Middle Childhood Generalist (ages 7 - 12)		UNCC Basic Portfolio Requirements**
		NB Standard	Entry	NB Standard	Entry	Exemplar Evidence/Reflection
ELED 6101	Applied Theory Human Development/Learning	I, II	N/A	I	N/A	<ul style="list-style-type: none"> • Cross-cultural experiences • Changes in educational philosophy • Learning from professional conferences • Growth in use of assessment measures and data • Self-evaluation using video • Self-reflections on all entries
RSCH 6101	Educational Research Methods	VI	N/A	X	N/A	
ELED 6111	Critical Issues in Elementary Education	(all)	N/A	(all)	N/A	
ELED 6220	Integrating the Elementary Program	I, II, III, IV, V	1	I, II, III, IV, V, VI, VII, VIII	1	
ELED 6691A	Seminar/Professional & Leadership Development	VI, VIII	5	VI, VIII, X, XI	5	

PHASE II: CONTENT AND PEDAGOGY (13 HOURS)

EDUC 6254	Individual Instruction for Diverse Learners	I, II, IV, V, VI	2	I, II, III, IV, V, VI, VII, VIII	1, 2	<ul style="list-style-type: none"> • Growth in pedagogy • Growth in beliefs and practices for responding to classroom diversity • Data-based classroom instructional improvement project • Self-evaluation using video • Self-reflections on all entries
ELED 6221	Teaching/Learning K-6 Science	I, II, III, IV, V	4	I, II, III, V, VI, VII, VIII	2	
ELED 6241	Teaching/Learning K-6 Social Studies	I, II, III, IV, V	1	I, II, III, V, VI, VII, VIII	1	
ELED 6252	Teaching/Learning K-6 Math	I, II, III, IV, V	N/A	I, II, III, V, VI, VII, VIII	4	
READ 6250	Language Development & Reading	I, II, III, IV, V	2	I, II, III, V, VI, VII, VIII	1	
ELED 6691B	Seminar/Professional & Leadership Development	VI, VIII	5	X, XI	5	

*This degree program is for experienced teachers.

**All candidates complete a basic portfolio project and then choose between a culminating Master's Research Project or a Master's Comprehensive Portfolio Project.

Relationship of Coursework and Portfolio Requirements to National Board Standards

PHASE II ELECTIVES: CATEGORIES (6 HOURS)

Assessment and Research	V	1,2	VIII	1	<ul style="list-style-type: none"> • Growth in content knowledge • Growth in use of assessment measures and data • Data-based educational improvement project beyond classroom • Growth in use of technology • Self-reflections on all entries
English Content for Elementary School	I, II, III, IV, V	2	I, II, III, IV, V, VI, VII, VIII	1	
Math Content for Elementary School	I, II, III, IV, V	N/A	I, II, III, IV, V, VI, VII, VIII	4	
Social Studies Content for Elementary School	I, II, III, IV, V	1	I, II, III, IV, V, VI, VII, VIII	1	
Science Content for Elementary School	I, II, III, IV, V	N/A	I, II, III, IV, V, VI, VII, VIII	N/A	
Development and Diverse Learners	I, II, IV	3	III, IV, VII	3	
Pedagogy for Elementary School	(all)	N/A	(all)	N/A	
Teacher Leadership	VI, VIII	5	X, XI	5	
Technology	N/A	N/A	N/A	N/A	

PHASE III: COLLABORATIVE LEADERSHIP (4 HOURS)

ELED 6474	Advanced Practice/ Teaching, Learning, Leadership Development	VI, VIII	5	X, XI	5	<ul style="list-style-type: none"> • Professional team, committee participation and contributions • Growth in leadership and collaboration • Self-reflections on all entries
ELED 6991C	Seminar/Professional Leadership Development	VI, VIII	N/A	X, XI	N/A	

BEST COPY AVAILABLE

*This degree program is for experienced teachers.

**All candidates complete a basic portfolio project and then choose between a culminating Master's Research Project or a Master's Comprehensive Portfolio Project.

ANALYZING CLASSROOM PRACTICE

*A new certificate program helps teachers get ready to apply
for National Board Certification.*

Jean Linder

Executive Director, SunCoast Area Teacher Training Honors Program

*University of South Florida
Tampa, Florida*

The SunCoast Area Teacher Training Honors Program (SCATT) at the University of South Florida (USF) enthusiastically embraces the mission of the National Board for Professional Teaching Standards (NBPTS). In so doing, we faculty members involved in the program believe that a logical extension of the SCATT "Mission in Excellence" is to commit to providing substantial support to teachers in the region who plan to seek National Board Certification. As a product of that commitment, a 12-credit hour graduate certificate program was developed and piloted in 2000. The program is distinctive in at least three ways:

1. It is designed for teachers who have not yet begun the application process for National Board Certification. Teachers begin the certificate program in the spring, participate in a series of intensive summer sessions, and complete the certificate program as they begin their NBPTS portfolio development mid-fall. The certificate program extends the period of preparation for candidacy by approximately six months, while teachers reflect and study during that time with a cohort of others who are also entering the National Board Certification process.
2. It is affiliated with the notable preservice honors program called the SunCoast Area Teacher Training Honors Program. Preservice SCATT students learn about the National Board Certification process, and candidacy is recommended as an eventual goal.
3. It results in a graduate certificate, currently awarded by the dean of the College of Education and the executive director of the SCATT Honors Program. When the pilot has been refined and appropriate reviews have been completed, it is intended that the certificate will be awarded in conjunction with the dean of the Graduate School.

BACKGROUND OF THE CERTIFICATE PROGRAM

The SCATT Program is currently in its 20th year of providing exemplary programs to its graduates and to teachers in the west central region of Florida. The SCATT program is truly unique, located only at the University of South Florida. It was founded by former dean of the College of Education, Dr. William Katzenmeyer, for the purpose of attracting and retaining the best and the brightest in education. More than 7,000 graduates have benefited from the workshops, field trips, mini-conferences, and internship seminars offered to its members. SCATT is supported, in large part, by an allocation from the Florida legislature.

At the core of the program is its preservice teacher training. Major distinctions of the SCATT program include:

- It is free to student members, and membership is voluntary. Originally students were admitted to SCATT on the basis of test scores and GPAs; over time we have learned that we were missing a number of potential student members. Some had lower GPAs

Preservice SCATT students learn about the National Board Certification process, and candidacy is recommended as an eventual goal.

because they have been unhappy in other majors, and some do not score as high on the ACT, SAT, or GRE because they are returning to school after other careers. Frequently those students are highly motivated and have outstanding attitudes and commitment to teaching. They are truly the students who will go above and beyond. We now admit students fairly and openly (admission to our college already requires higher standards than admission to the university), with the understanding that to graduate with SCATT credentials, they must participate and achieve a GPA of 3.2 on a four-point scale by graduation. To articulate the admission policy simply, we are much more interested in how our students perform now and in the future than in obstacles they have faced previously.

- It requires that students participate in programming above and beyond their coursework. Prior to their culminating internship experience, students select from a menu of program options and attend a minimum of three "events" per semester to remain active members.
- Interns participate in 100 percent of culminating seminars totaling more than two weeks of training during their full-time internship semester.
- Content of events is research-based, and students participate for the knowledge, the sense of identity with the program, and the opportunity to be the best teachers they can be, rather than for academic credit.

Soon after the preservice program was developed, it became apparent that to ensure the best quality of internship experience, it was desirable to train clinical cooperating teachers who would be exposed to much of the same knowledge and skills as the preservice interns. SCATT Clinical Teacher Training, a graduate course, was developed. The result was that interns who were placed with SCATT Clinical Teachers shared a common knowledge base and often an instant rapport with participants, enriching the experience for all.

The SCATT program is well known and respected throughout the region, and its graduates are highly recruited. Many educators in positions of leadership in area schools are graduates as well. SCATT has now expanded its program offerings to support experienced teachers who seek National Board Certification.

PROFESSIONAL PRACTICE PROGRAM STRUCTURE

The program structure is intense, with sessions being held from 8:30 a.m. to 4:30 p.m. on four Saturdays throughout the spring, three weeks in June, and for three more Saturdays in the fall term. The content of the program is non-linear in nature, with several major strands running throughout. Major strands include:

- Coaching, which includes extensive verbal skills and questioning strategies training, with numerous opportunities to apply those skills
- Making quality instructional decisions, which includes topics such as brain-compatible teaching and learning, motivation, teaching through learning channels, integrated curricular design, the needs of divergent student learners, and multiple teaching strategies, among others
- Authentic assessment of student work
- Teachers as professionals, involving ethics, working with families, being a member of professional communities and learned societies, and standards-based reflective practice
- Orientation to National Board Certification processes, including familiarity with one's own standards area; technical skills such as reflective writing, videotaping, and developing standards-based rubrics; and preparation for assessment center activities

An example of one strand that is introduced early and appears repeatedly through the program is coaching and related verbal and questioning skills. Building over months, the culminating assignment/activity requires precandidates to make videotapes of their classes, similar to those presentations that would be submitted as portfolio entries. They are to develop rubrics based on their standards and draft the reflective writing pieces that would accompany the tapes. The rubrics are used by the precandidates themselves to evaluate whether they have adequately demonstrated the standards for their own entries. The rubrics are also reviewed by colleagues and used as part of the coaching process. Precandidates bring these artifacts to a session near the end of the program, when they are divided into "like" groups to view each others' tapes, read each others' reflections, and coach each other based primarily on whether the standards were clearly addressed.

Sharing reflections on one's own teaching and coaching colleagues can be a high-risk activity. The feedback we received in our extensive evaluations suggests that this assignment probably would not be as effective if we had tried to schedule it early in the program. As participants spend time together, trust develops, friendships blossom, and participants become more and more willing to share feelings and discuss issues openly. Precandidates are genuinely "pulling" for each other and therefore are willing to engage deeply in the process of coaching each other for success.

The National Board's standards are introduced on the first day during orientation and are used throughout the program in a variety of different activities. They are read and reread. Rubrics are developed. The various standards function as basic texts for the program. Other texts are also used, and many are recommended for background reading. A bibliographical summary is listed in Appendix A.

Precandidates are genuinely "pulling" for each other and therefore are willing to engage deeply in the process of coaching each other for success.

We believe that the program participants are the best source of feedback for future planning, so we asked that they thoughtfully complete an extensive open-ended questionnaire.

PROGRAM FACULTY

The program was planned by the executive director of the SCATT Program with extensive input and assistance from a number of colleagues and associates. A coplanner and cofacilitator for many of the sessions was a 1999 National Board Certified Teacher (NBCT) from the Pasco County Public Schools in Florida. Several Hillsborough County, Florida, NBCTs participated, sharing their personal experiences with preparing the portfolio and preparing for the assessment center activities. Another NBCT who had been trained as an assessor provided information about how she was trained and how the entries were scored and weighted. Still another NBCT from Manatee County, Florida, shared a videotape she had made of a teaching and learning sequence that had not been submitted as part of a portfolio entry.

Several members of the College of Education faculty were invited to facilitate sessions in which they had particular expertise. Those areas included reflective writing, authentic assessment, ethics, and verbal skills training. Technical assistance was provided by SCATT staff and by the head of the technical support unit within the college. Always present at the sessions and involved with the planning were members of the SCATT staff (see Appendix A). Steve Barkley, a longtime consultant for SCATT, also contributed significantly. Several faculty from various departments in the College of Education have attended the Facilitators' Institutes offered by NBPTS. The executive director of SCATT attended two of those for the expressed purposes of becoming familiar with NBPTS and developing this program.

RESOURCES AND SUSTAINING THE PROGRAM

The resources for developing and sustaining the program come from several sources. The most important is a commitment by the SCATT staff to support teachers from the region who are seeking National Board Certification. The dean of the College of Education provided money to compensate faculty for teaching graduate courses and has made a commitment to do so again in 2001-2002. A tuition waiver provided by the state of Florida supports the tuition for the three graduate credit hours classified as clinical training. Finally, we were delighted to receive some scholarship money from retired teachers in a nearby district. That money was used to provide tuition assistance for candidates. The revenue sources to sustain the program remain steady at this time.

IMPACT AND FUTURE DIRECTIONS BASED ON CANDIDATE FEEDBACK

At the culminating session in the fall of 2000, SCATT staff members spent more than two hours focused on receiving candid and anonymous feedback from program participants. We believe that the program participants are the

best source of feedback for future planning, so we asked that they thoughtfully complete an extensive open-ended questionnaire. We provided a written and oral review of the program content and sequence. We reminded participants of the names of all of the program faculty and guest presenters. We allowed an hour and a half for them to respond, and most of them used all of the time allocated. The evaluations were anonymous, yet a number of them were signed. The results were extremely gratifying! They did make some suggestions, which we are incorporating into our planning for this year. It was rewarding that many offered to help us in the summer of 2001, and all agreed to assist with the distribution of information about the program. We agreed to get in touch, scheduled a lunch meeting for the spring term, and exchanged phone numbers and e-mail addresses. (Copies of the evaluation summary are available upon request.)

Finally, the Certificate of Professional Practice Program was offered on a Satisfactory/Unsatisfactory basis only, by special request to the dean of the Graduate School. One reason for that grading method is that we wanted to remove any notion that we were endorsing particular candidates by awarding an A grade to persons more likely to achieve National Board Certification than others. All of the precandidates were already highly motivated and eager to participate. They were keenly aware that they were entering a public process. We wanted to create an atmosphere of support, as opposed to one of judgment.

We concluded our program with a celebration. We do not expect to measure our impact by the percentage of our participants who achieve. In fact, as we concluded the formal program with the presentation of certificates, and something of a feast, we all felt we had achieved a great deal. Precandidates already felt validated. It has been truly gratifying to work with teachers of the quality and commitment of those who choose to seek National Board Certification. We look forward to having that opportunity again this year.

Certificate of Professional Practice Primary Program Faculty		
Name	Title	Affiliation
Freda Abercrombie	NBCT	Pasco County Schools
Steve Barkley	Executive Vice President	Performance Learning Systems, Inc.
Dr. Patricia Daniel	Associate Professor	Secondary Education, USF
Dianne Penny Hahn	NBCT	Hillsborough County Schools
Dr. James King	Professor of Reading	Childhood Education, USF
Dr. Jean Linder	Executive Director	SunCoast Area Teacher Training Honors Program
Dr. Barry Morris	Visiting Instructor	Childhood Education, USF
Dr. Jenifer Schneider	Assistant Professor	Childhood Education, USF
Scott Seifreit	Acting Director, Technology Services & Resources	College of Education, USF
Stephen Shoe	SCATT Activities Coordinator	SCATT Activities Coordinator
Dr. Joyce Swarzman	Former SCATT Director, Head	Independent Day School, USF

Primary Texts for the Certificate of Professional Practice

Extensive bibliographies of outside readings, articles, information about learned societies, and other texts were used and/or suggested for additional reading. Primary texts included:

The National Board standards appropriate for the individual precandidates.

Barkley, S. G. (2000). *Making quality instructional decisions*. Emerson, NJ: Performance Learning Systems, Inc. A text created for this program.

Belitzky, A., and Neilsen, L. (1995). *Clinical educators guide for the state of Florida*. Tallahassee, FL: Division of Human Resources, State of Florida.

Hasenstab, J. K., et al. (2000). *Consultation skills for mentors and beginning teachers*. Emerson, NJ: Performance Learning Systems, Inc.

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ADVANCING TEACHER KNOWLEDGE

National Board Certified Teachers play a central role in helping redesign a master's degree program focused on the National Board's standards, content knowledge, and integration of technology

Joan P. Isenberg

Director, Advanced Studies in Teaching and Learning
Graduate School of Education

*George Mason University
Fairfax, Virginia*



NOTE: The author wishes to recognize Gary Galluzzo, Dean of the Graduate School of Education from 1997 to 2000 for his visionary ideas that appear throughout this chapter and for his support in launching this initiative. Credit is also due the ASTL Faculty (Drs. Given, Haley, Jacob, and Wood) who conceptualized the design and evaluation of GMU's program.

The conditions associated with the creation of master's degree programs for teachers who want to remain in the classroom have changed over the years. New education standards set by national, state, and local regulatory agencies, new emphases on teaching content, and new knowledge about teachers as learners have brought about new professional expectations for practicing teachers. This necessitates that education schools reconceptualize their models of continuing education for teachers offered through master's programs.

Highly visible reports, such as *What Matters Most: Teaching For America's Future* from the National Commission on Teaching and America's Future (1996) and *Teacher Quality: A Report on the Preparation and Quality of Public School Teachers* (1999), have anticipated a critical shortage of qualified P-12 teachers. This reality has propelled education schools to turn their focus to professional development for teachers rather "than on continuing education, or license renewal" (Galluzzo, 1999, p. 8) in order to retain a cadre of highly qualified teachers (Darling-Hammond & Cobb, 1996; Murray, 1996; National Center for Education Statistics, 1999).

This chapter describes George Mason University's (GMU) master's program in Advanced Studies in Teaching and Learning (ASTL) and its alignment with the National Board's Five Core Propositions, the role of National Board Certified Teachers (NBCTs) in that initiative, evidence of the program's impact, and future directions of the program.

PROGRAM DESCRIPTION

GMU's program, a 30-hour master's degree program in Advanced Studies in Teaching and Learning (ASTL) for P-12 teachers, consists of an Education Core (CORE) and an Emphasis Area of choice. The ASTL program is structured as a multi-dimensional concentration within a broad degree program labeled Master of Education in Curriculum and Instruction. The 12-credit hour CORE consists of a yearlong sequence of learning experiences divided into five modules. These hours can be used either as part of a degree program along with an 18-credit hour area of emphasis in one specific area or as a stand-alone certificate in Educational Studies that will prepare teachers to sit for National Board Certification. The ASTL mission is to develop competent, knowledgeable, reflective, and caring professionals who enable all children's learning by working collaboratively with colleagues, families, and communities. To accomplish this mission, the degree program has two purposes: (1) to develop teacher leaders who practice teaching skills aligned with the five National Board's Five Core Propositions, and (2) to develop teacher expertise in a content area of choice.

The modules in the ASTL CORE, all of which are based on the National Board's Core Propositions, offer an innovative configuration of coursework and scheduling designed to provide teachers with the critical knowledge, skills, and dispositions necessary for high-quality teaching. In the CORE, all teachers are expected to examine their practice, provide evi-

The modules in the ASTL CORE, all of which are based on the National Board's Core Propositions, offer an innovative configuration of coursework and scheduling designed to provide teachers with the critical knowledge, skills, and dispositions necessary for high-quality teaching.

dence of student learning, design and assess their teaching and learning, develop a knowledge and understanding of culture and education, and think about themselves as educational change agents. Active engagement in the CORE should increase teachers' desire to seek National Board Certification through the kinds of tasks and activities assigned to them as they pursue their degree. A cohort of no more than 25 students is admitted annually to the CORE beginning in July. Table 1 lists and describes the courses in the CORE.

The CORE is an intensive program of professional development that focuses on substantive analytical thinking and writing around the National Board's five propositions. It features cohort-based learning, innovative scheduling, courses taught by National Board Certified Teachers, alignment with the National Board's propositions and standards, and extensive use of technology. To illustrate, summer scheduling involves 60 hours of coursework with associated projects, which teachers work on in their own classrooms throughout the fall semester. As a result, the teachers' classrooms serve as their laboratories for conducting action research on their own practice and on documenting student learning. These features align well with what is known about reinventing master's degrees for experienced teachers, such as a commitment to quality, coherent program requirements, a participatory culture, and interactive teaching and learning (Blackwell & Diez, 1998; Lytle, 2000; Tom, 1999).

Emphasis areas are based on the needs and interests of teachers and appropriate professional standards. Courses in each area have been developed by the university faculty and are intended to develop teachers' expertise in an area. Currently, ASTL has eight approved emphasis areas. Only the early childhood emphasis area is fully aligned with NBPTS standards at the

TABLE 1 **EDUCATION CORE COURSES**

Course (Credit Hours)	Description
How Students Learn (3)	Studies learning and learner-centered teaching based on research and theory from different disciplines.
Inquiry into Practice (2)	Provides experiences using research skills in order to foster systematic and thoughtful inquiry into classroom practice.
Education and Culture (3)	Focuses on acquiring cultural, social, and language-related perspectives on educational processes; learning skills in analyzing educational settings; and expanding strategies to address puzzlements in one's own practice.
Designing and Assessing Teaching and Learning (3)	Explores the design and development of curricular, pedagogical, and assessment strategies that are effectively responsive to the needs and interests of students.
Educational Change (2)	Explores the influences on educational change at the classroom, school, community, state, and national levels.

time of this writing although faculty in other emphasis areas are working on aligning their areas with appropriate National Board standards. Table 2 lists and describes the approved areas of emphasis and their benefits.

ALIGNMENT WITH NBPTS STANDARDS

The CORE is framed around the National Board's Five Core Propositions supplemented by three additional principles the program faculty added to meet the needs of professional educators in Northern Virginia. The CORE's sequenced learning experiences are modeled, in part, upon the National Board's exercises and assessments. The curriculum, informed by research on the profession of teaching (Blackwell & Diez, 1998; Sockett; 1994), is designed to connect teachers' professional development with their work in their own classrooms. Appendix A is the framework for the CORE. It identifies desired student outcomes, learning modules and experiences, expected student products, and related National Board tasks, activities, and assessments.

Two significant initiatives coalesced to help align GMU's program with the National Board's propositions: (1) involvement in a consortium with other universities interested in redesigning their advanced master's programs and (2) piloting two graduate-level support courses for candidates currently seeking National Board Certification. With regard to the first initiative, GMU is a charter member of a regional partnership committed to a continuum of teacher preparation and professional development (NCTAF, 1997). As a result of this involvement, GMU's Graduate School of Education (GSE) agreed to introduce, develop, and implement an advanced degree program

TABLE 2 EMPHASIS AREAS	
Strand	Description
Literacy	18 hours of coursework leading to Virginia Reading Specialist License
Mathematics, History, and Science	18 hours of subject area coursework related to Virginia's Standards of Learning
Early Childhood Education	18 hours of coursework aligned directly with the Early Childhood/Generalist standards of the National Board
Instructional Technology	18 hours of coursework designed to prepare technology leaders at the classroom, grade, or building level
Alternative Education	18 hours of coursework leading to certification for work in Alternative Education Settings
Library Media	18 hours of coursework leading to a master's degree or 24 hours of coursework leading to Endorsement as a Virginia Library Media Specialist

We...solicited input from NBCTs through focus groups for course content and sequence and written and oral feedback on our framework and all course syllabi. NBCTs played a key role in the development of the CORE and the Early Childhood Emphasis Area.

to include the National Board's core propositions as benchmarks. Moreover, GMU incorporated the Board's propositions as part of its Master Plan for 1996-1998 and in 1997 adopted them as its conceptual framework for the revision of the advanced (post-licensure) degree. Discussions involving GSE faculty and local NBCTs explored the need for development of a Teacher Leadership Certificate program based on the National Board's propositions and standards as well as the possible piloting of related coursework with candidates for National Board Certification in 1998-1999.

With regard to the second initiative, parallel to the development of the ASTL degree program, GMU piloted two 3-credit, graduate-level courses to support candidates' efforts with portfolio preparation and the assessment center process. The goal of this initiative was to support current candidates for National Board Certification while simultaneously learning what NBPTS assessment elements and experiences might work best in university coursework. The courses were developed by two NBCTs and the director of ASTL and were taught by NBCTs with the director's support. A doctoral student documented the process as part of her dissertation. Throughout the alignment process, NBCTs played a central role.

GSE has a long history of active support for NBCTs and involvement in NBPTS-related activities. This context, plus our earlier conversations with NBCTs certified early in the process about the need for an NBPTS presence within GSE's advanced degree programs, led us to seek input early on from NBCTs to help redesign the degree program. We therefore solicited input from NBCTs through focus groups for course content and sequence and written and oral feedback on our framework and all course syllabi. NBCTs played a key role in the development of the CORE and the Early Childhood Emphasis Area. For their work, they were paid a consulting fee from the dean's discretionary fund.

KEY STEPS IN DESIGNING AND DEVELOPING THE PROGRAM

What is now known as George Mason University's Master's Degree Program in Advanced Studies in Teaching and Learning (ASTL) began in May 1998 but was influenced by key degree decisions made in 1987. At that time, GSE redesigned its initial licensure programs to be delivered at the graduate level. With an additional six credits of coursework, initial licensure students could earn a master's degree. Moreover, GSE's master's degree programs for practicing teachers had not been updated since their inception and were attracting small numbers of teachers. Thus, GSE faculty were open to designing a stronger and more informed program for practicing teachers.

For the redesign, GSE and College of Arts and Sciences (CAS) faculty along with NBCTs voluntarily joined together to create an advanced master's degree framed around the NBPTS propositions. United by our common interest in developing teachers' leadership capacities and helping to strengthen their content knowledge, we began the redesign. Initial meetings focused on developing a shared vision, conceptualizing the content and structure of the CORE, developing new syllabi framed around the National Board's propositions, and preparing a full program proposal to be reviewed by all school and university-wide curriculum approval bodies.

From the beginning of this initiative, the ASTL faculty read literature on teacher learning, advanced master's degrees, and the ever-changing nature of education reform (Blackwell & Diez, 1998; NCTAF, 1997; Putnam & Borko, 2000; Tom, 1999). Our readings, dialogue, individual knowledge, and experience helped to redesign a degree program that has integrity and enriches the advanced preparation of P-12 teachers. Such a program already fit within the GSE mission and priorities.

CATALYSTS FOR THE ALIGNMENT AND PROGRAM DEVELOPMENT PROCESS

Two major catalysts provoked the redesigned master's degree. These were: (1) the Dean of the Graduate School of Education, Gary Galluzzo, a leading figure in teacher education, and (2) the climate of increased standards for P-12 teachers that required a different kind of professional development for teachers and ultimately for their students' learning. In 1997, Dean Galluzzo proposed a new advanced master's degree program using the National Board's Five Core Propositions as the framework. The dean proposed an Education Core that would enable teachers to prepare for National Board Certification through active participation in a professional learning community. The remaining degree hours would be in an area of specialization, either an arts and science cognate or an education discipline, which would deepen teachers' expertise in one area and enable them to participate in their schools in more ways.

The dean's proposal came amid a rapidly increasing demand for higher standards for students and for teachers and the need to support teachers as they realigned their teaching to Virginia's new state standards. Recognizing the need for professional development through emphasis areas and holding a deep commitment to the National Board's principles, the climate at GMU was right for redesigning its existing advanced master's degree. With few alternatives for P-12 teachers to engage in meaningful and relevant advanced coursework, Dean Galluzzo's original concept sought to combine a content area focus along with the National Board's propositions to link teachers' need for content to meaningful advanced professional development. Through continuous dialogue among the GSE and the CAS deans and selected CAS department chairs, CAS faculty agreed to become involved in the preparation of teachers.

KEY RESOURCES IN DEVELOPING AND SUSTAINING THE PROGRAM

The resources provided for GMU's ASTL program are many and varied. First, in March 1998, GSE advertised internally for a director to lead the initiative. The person in this position was charged with leadership for the redesign, implementation, and delivery of a new degree program that was committed to the National Board's propositions. The director position was a nine-month appointment, with one course reallocation and a stipend for summer employment. Based on the workload of this position, the director now holds a 12-month instructional faculty position.

A second, critical resource to the degree was a highly visible dean who promoted ASTL in the field with superintendents and key school personnel as well as with CAS deans and department chairs. This visibility stimulated interest at the highest levels of school district support personnel.

Other resources included funding for faculty to be trained at National Board Facilitators' Institutes so they could understand what is expected of candidates for National Board Certification. GSE also provided a \$500 stipend for NBCTs who serve as adjunct faculty in a degree program to validate their expert knowledge as teaching faculty. In addition, GSE developed an enrollment-based variable pricing policy for outreach to attract cohorts of teachers from within specific school divisions. GSE also offered tuition reduction for one 3-credit graduate-level support course in the pilot year.

EVIDENCE OF PROGRAM IMPACT

Evidence of how well GMU is meeting its goals is being gathered through multiple sources. During the pilot year, we collected formative data from instructors and students across the program through questionnaires and focus groups that provided information on the content, pacing, assignments, and relevance of the core experiences for each of the students. Faculty also provided input regarding course adjustments such as the number and quality of the assignments. This formative process led to changes in the second year and to the realization of the need for a more systematic means of evaluating the ASTL program.

At the end of the pilot year, GMU hired an outside consultant to help the ASTL faculty develop a program evaluation model in which students and faculty provide the same quantitative and qualitative input on every course in the CORE. Students evaluate their opportunity to learn specific objectives across courses, comment on the relevance of assignments and on instructor feedback, and make recommendations for course improvement. All instructors evaluate the opportunity for their students to learn the course objectives, and comment on the formative evaluation measures they use and how they use them to make changes in their courses.

Another source of evaluation data is anecdotal. Such data from students in the program indicate that the program is having an impact on their thinking. By the end of the year, most teachers in the cohort have increased their ability to think like an NBCT. They think more critically, synthesize and evaluate their arguments more clearly, analyze their own teaching in terms of the impact on students' actual work samples, and look differently at learning in general. They also are much more aware of the quality of evidence they need to become an NBCT. To illustrate, here are comments from practicing teachers.

Teacher A: "It certainly expanded my thinking as a reflective practitioner. I am constantly asking myself questions when I plan and assess instruction. What are the key ideas? How does this touch students' lives beyond school?"

The CORE gave me confidence in myself as a professional and inspired me to pursue answers to many questions. The experience lit up my life!"

Teacher B: "After 15 years of teaching in the field of Special Education, I returned to a university setting to learn anew. This coursework and the collegial aspect of the cohort have enabled me to incorporate new strategies and solidify my educational beliefs."

Teacher C: "Now I look at my students differently. I am less likely to make quick judgments about ability and performance. I am more willing to consider multiple possibilities. The friendships and professional relationships that I developed in this cohort are very deep."

FUTURE DIRECTIONS FOR THE PROGRAM

The ASTL degree program started with a vision to change professional development for experienced P-12 teachers. The faculty is challenged by the realities of maintaining program integrity and fidelity with National Board principles at a time of increasing demand to deliver ASTL in many off-campus locations. Our monthly meetings continue to focus on program development and management issues. In addition, we have committed ourselves to making our work public through presentations, written documents, and journal articles. The faculty is excited about ASTL because we are convinced that it responds with integrity to the educational reform challenges. As faculty, we are concerned with the effectiveness of the ASTL program and have focused our efforts in this arena. Our teaching, research, and program evaluation will continue to center on a search for the salient attributes of the program that enable our graduates to seek and achieve National Board Certification.

Clearly, the ASTL program must experiment with new forms of professional development for practicing teachers that incorporate research validating that NBCTs have a greater influence on student learning than non-NBCTs. Excellence in teaching is the focus of ASTL's future agenda.

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GEORGE MASON UNIVERSITY
Graduate School of Education Master's Degree Program in Advanced Studies in Teaching and Learning
 Framework of Education Core Aligned with NBPTS Propositions

Principles & Candidate Outcomes	Courses		NBPTS- related Assessment Activities
Teachers are committed to students and their learning.	EDUC 613: How Students Learn <i>Learning Experiences</i> - Understand student learning by observing and following a student over time.	<i>Products</i> - Individual case studies - Critical journal responses	1. Analytical and reflective writing. 2. Critical reading from multiple perspectives. 3. "Unpacking" theory into practice.
Teachers know the subjects they teach and how to teach those subjects to students.	EDUC 614: Designing & Assessing Teaching & Learning <i>Learning Experiences</i> - Analyze student work & teaching practice.	<i>Products</i> - Teaching portfolio containing written commentaries on one's teaching accompanied by a video analysis of teaching practice and a sample of student work - Rubric/Performance Assessment Checklist	1. Adapting and planning instruction for all learners. 2. Writing to prompts. 3. Analyzing student work samples.
Teachers are responsible for managing and monitoring student learning.	EDUC 613: How Students Learn <i>Learning Experiences</i> - Develop skills for inquiry assessments that chronicle student learning. EDUC 614: Designing & Assessing Teaching & Learning <i>Learning Experiences</i> - Analyze one's practice through videotaped classroom interactions. - Provide feedback to students. - Develop a teaching portfolio.	<i>Product</i> - In-depth study of one student over time including recommendations for extending student learning <i>Products</i> - Teaching portfolio - Work sampling analysis	1. Analyzing student work samples. 2. Providing feedback to students. 3. Adapting all instruction and recommending future lessons in specific learning areas. 4. Reflecting on practice.
Teachers think systematically about their practice and learn from experience.	EDUC 612: Inquiry into Practice <i>Learning Experiences</i> - Identify and evaluate multiple perspectives & evidence on a research topic. - Design research related to one's practice. EDUC 606: Education and Culture <i>Learning Experiences</i> - Discuss how different perspectives inform practice. - Interpret and apply information from publications to one's practice. - Design, conduct, and report action research. - Address cultural issues using CIP web site.	<i>Product</i> - Teacher/action research proposal <i>Product</i> - Teacher/action research (using peer support groups)	1. Evaluating multiple perspectives on a research topic. 2. "Unpacking" and defending a scholarly position and reflecting on how it might inform classroom practice. 3. Applying findings and recommendations from scholarly articles to own practice. 4. Using action research as a form of scholarly research.
Teachers are members of learning communities.	EDUC 613: How Students Learn <i>Learning Experiences</i> - Examine learning theories in groups. EDUC 606: Education and Culture <i>Learning Experiences</i> - Design, conduct, and report action research. - Collect and analyze data from parents of community as appropriate. - Collaborate in peer research support group. EDUC 615: Educational Change <i>Learning Experiences</i> - Engage in critical writing (e.g., position statements) and dialogue (e.g., peer workshops).	<i>Product</i> - Cooperative learning "jigsaw" groups <i>Product</i> - Teacher/action research report <i>Products</i> - Group project - Portfolio of documented accomplishments	Portfolio of accomplishments of work with families, colleagues, and organizations outside the classroom.
Teachers account for the needs of culturally, linguistically, and cognitively diverse learners.	EDUC 613: How Students Learn <i>Learning Experiences</i> - Address diversity issues influencing learning. EDUC 606: Education and Culture <i>Learning Experiences</i> - Address cultural issues impacting teaching & learning.	<i>Product</i> - All assignments <i>Products</i> - Case analyses; teacher/action research report	Analysis of student work with attention to identifying misconceptions and extending student understanding.

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Framework of Education Core Aligned with NBPTS Propositions

Principles & Candidate Outcomes	Courses		NBPTS-related Assessment Activities
<p>Teachers are change agents, teacher leaders, and partners with colleagues.</p>	<p>EDUC 613: How Students Learn <i>Learning Experience</i> - Explore role as a change agent on student learning. <i>Product</i> - Integrative case study</p> <p>EDUC 612: Inquiry into Practice <i>Learning Experience</i> - Assume role as a change agent in the classroom. <i>Product</i> - Action research proposal</p> <p>EDUC 606: Education and Culture <i>Learning Experience</i> - Explore roles as educational change agent both past and present. <i>Product</i> - Action research</p>	<p>EDUC 614: Designing & Assessing...Learning <i>Product</i> - Integrative teaching portfolio</p> <p>EDUC 615: Educational Change <i>Learning Experiences</i> - Analyze influences of change at classroom, school, state and national levels. - Explore roles as educational change agent, both past and present. <i>Products</i> - Portfolio of accomplishments - Team-project/analyzing influences on educational change - Pair-project examining the use of an educational innovation - Self-assessment</p>	<p>1. Critical writing addressing interpretive summaries of contributions to the teaching profession. 2. Documented accomplishments in the school and community arenas.</p>
<p>Teachers use technology to facilitate student learning and their own professional development.</p>	<p>EDUC 613: How Students Learn <i>Learning Experiences</i> - Produce APA word-processed documents. - Use e-mail and e-mail discussion groups. - Understand web and browser. - Access paper reserves. - Practice basic library searching.</p> <p>EDUC 612: Inquiry into Practice <i>Learning Experiences</i> - Send attachments. - Participate in Townhall (or other BB). - Access and search the web. - Bookmark web sites.</p>	<p>EDUC 606: Education and Culture <i>Learning Experiences</i> - Participate in Townhall. - Use CIP web site. - Access electronic reserves. - Engage in advanced library searching.</p> <p>EDUC 614: Designing and Assessing... Learning <i>Learning Experience</i> - Make PowerPoint presentations.</p> <p>EDUC 615: Educational Change <i>Learning Experience</i> - Use external listservs.</p>	<p>Incorporates all NBPTS Assessment activities via online and virtual learning communities.</p>

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