

Teacher Learning through National Board Candidacy: A Comparative Case Study

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This study describes three teachers' learning experiences during National Board candidacy and explores National Board for Professional Teaching Standards (NBPTS) influences on their learning as evidenced by changes in teaching practice. National Board candidacy positively influenced all three teachers. Common areas of learning were increased respect for student individuality and improved capacity for intentional teaching. NBPTS influences were reflection and analysis of teaching practice and professional reading/preparation for the written assessment. The study identifies National Board certification as one pathway to teacher leadership. The study's findings are consistent with other studies of teacher learning experiences during National Board candidacy with one exception: The teachers in this study identified professional reading and preparation for the NBPTS written assessment as key learning influences.

The National Board for Professional Teaching Standards (NBPTS) was established in 1987. Since then, over 160,000 teachers nationwide have attempted the certification process, and more than 82,000 have become National Board certified (NBPTS, 2009). Most teachers who seek the certification consider it the best professional development they have ever experienced (Kanter, Bergee, & Unrath, 2000; Rotberg, Futrell, & Holmes, 2000), yet few studies describe candidates' learning experiences in detail. This study describes three teachers' learning experiences during National Board candidacy and explores NBPTS influences on their learning as evidenced by changes in teaching practice.

Conceptual Framework

National Board Certification

National Board certification is a voluntary process that recognizes teachers in the United States, Guam, Puerto Rico, and the U.S. Virgin Islands who demonstrate accomplished teaching practice as defined by the NBPTS. Its purpose is "to advance the quality of teaching and learning by developing professional standards for accomplished teaching" (National Board for Professional Teaching Standards [NBPTS], 2010a, p. 1). The certification is offered in 25 different subject areas and developmental levels (NBPTS, 2010b). All certificates reflect the Five Core Propositions of the NBPTS (NBPTS, 2010c):

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

Each certificate is customized by standards specific to the particular subject area and developmental level. To achieve National Board certification, a teacher must demonstrate accomplished teaching through four portfolio entries and a written assessment. Two of the portfolio entries require videotapes of actual lessons, one requires submission of graded student work, and the fourth requires documentation of ongoing professional learning and leadership (NBPTS, 2010d). Each portfolio entry requires a 12-page written description and analysis of the evidence submitted for review. The portfolio entries are usually completed over the course of one school year, with the written assessment taken sometime in late spring or early summer.

The entire certification process takes 200 to 400 clock hours, but completion does not guarantee certification. Only about half of National Board candidates are successful on their first attempt (Boyd & Reese, 2006). Fortunately, candidates can “bank” their scores for up to two years, re-submitting portfolio entries and sections of the written assessment that do not meet NBPTS standards the first time (NBPTS, 2010e).

National Board Candidacy and Teacher Learning

Teachers who experience National Board candidacy find it very demanding (Burroughs, Schwartz, & Hendricks-Lee, 2000; Chittenden & Jones, 1997; Kanter, Bergee, & Unrath, 2000; Linqunti & Peterson, 2001). In one study, 92% of National Board Certified Teachers (NBCTs) described the experience as challenging (Center for the Future of Teaching and Learning [CFTL], 2002). In particular, candidates express difficulties with analytical writing, preparation of portfolios and videotapes, finding examples of successful portfolio submissions, and locating specific materials to guide preparation for the written assessment (Rotberg, Futrell, & Holmes, 2000). One NBCT writes, "For me, it was more of an achievement in many ways than was the completion of my doctorate" (Thornton, 2001, p. 49).

Although demanding, most teachers describe National Board candidacy as outstanding professional development (Keiffer-Barone, Mulvaney, Hillman, & Parker, 1999; Linqunti & Peterson, 2001; Rotberg et al., 2000). For example, 78% of the NBCTs who described the certification process as challenging also responded that it strengthened their teaching practices (CFTL, 2002). Kanter et al. (2000) colleagues explained, "In spite of minimal support, a grueling process, and mostly intrinsic rewards, certification recipients often described the process as an absorbing, rewarding, and powerful professional experience" (p. 238).

Even when they do not earn the certification, many candidates report learning as evidenced by improved teaching practice. In particular, they identify improved skills in reflection (CFTL, 2002; Chittenden & Jones, 1997; Tracz, Sienty, Todorov, Snyder, Takashima, Pensabene, Olsen, Pauls, & Sork, 1995), analysis (CFTL, 2002; Chittenden & Jones, 1997; Lustick, 2002; & Sato, 2000), and student assessment (Bohen, 2001; CFTL, 2002; Lustick, 2002; Mitchell, 1998); increased clarity of underlying assumptions and beliefs about teaching and learning (Chittenden & Jones, 1997; Lustick, 2002; Sato, 2000); and more frequent collaboration with colleagues (Bohen, 2001; Lustick, 2002; Mitchell, 1998).

To summarize, studies indicate that most teachers experience challenge during National Board candidacy, yet view the process as a valuable learning experience in terms of improved teaching practice. However, two studies found that learning through National Board candidacy varies from teacher to teacher. One concluded that most teachers do not engage in critical reflection during the National Board candidacy, nor do their beliefs change as a result of the experience (Gaddis, 2002). Another found that not all NBCTs exhibit outstanding, or even average, teaching practices (Pool, Ellet, Schiavone, & Carey-Lewis, 2001).

In light of these contradictions, the purpose of this study was to describe three teachers' learning experiences during National Board candidacy and explore NBPTS influences on their learning as evidenced by changes in teaching practice. The following question guided the study: How does National Board candidacy influence teacher learning experiences during the certification year?

Methods

Participants

Anne, Barbara, and Jamie (all pseudonyms) pursued National Board certification as Middle Childhood Generalists during the 2004-2005 school year. During their year of candidacy, all three teachers were employed by large, suburban school districts in Illinois. Anne and Barbara taught at different schools in the same district, and Jamie taught in another area of the state. At the time of the study, all three had 16 to 20 years of teaching experience. While Anne and Jamie had always taught fifth grade, Barbara, a fourth-grade teacher, had experience teaching kindergarten through fifth grade and had

worked as a literacy specialist. All three teachers held master's degrees, and Barbara had 48 semester hours of graduate work beyond her master's degree. All NBPTS Middle Childhood Generalist candidates in a five-county area were invited to participate in the study, and these three teachers were the first to accept.

Methodology

The study combined ethnography (Creswell, 2003; Wolcott, 2002) and comparative case study (Stake, 2000) to achieve the "thick description" characterized by ethnography (Bogdan & Biklen, 2003; Morse & Richards, 2002; Wolcott, 2002) while also providing a basis for comparison between teachers with similar backgrounds and school environments pursuing the same NBPTS certificate during the same school year (Creswell, 2003). Both ethnography and comparative case study emphasize extended observation of research participants in their natural cultural setting (Bogdan & Biklen, 2003; Creswell, 2003; Wolcott, 2002), which includes sub-cultural units such as schools and classrooms (Morse & Richards, 2002).

Data Collection and Analysis

Data collection over 12 months' time consisted of four classroom observations and seven interviews per candidate. Additional data collection included principal and student interviews and student work samples. The 60- to 90-minute classroom observations documented the teaching and learning taking place in each candidate's classroom. During each observation, descriptive notes were taken using open narrative style and later transcribed.

Interview guides were prepared at the outset of the study, and a semi-structured interview protocol was used to allow for a combination of consistency and flexibility across interviews (Kvale, 1996). Candidate interviews targeted beliefs, values, and attitudes about teaching and learning, professional practices, reflections about the classroom observations, and experiences during National Board candidacy. Student interviews captured the teaching and learning occurring in candidates' classrooms from a student perspective, and were supported with student work samples collected over two weeks' time. Principal interviews focused on principals' perceptions of candidates' professional practices as well as their perceptions of candidates' beliefs and values about teaching and learning. All interviews were audio taped and transcribed verbatim.

Strauss and Corbin (1998) define open coding as "the analytic process through which concepts are identified and their dimensions and properties are discovered in data" (p. 101). Open coding is particularly useful when exploring similarities and differences for purposes of description (Strauss & Corbin, 1998). Data related to teacher learning experiences and NBPTS influences were coded openly. Open codes were added, expanded, collapsed and/or eliminated four times during the study in an attempt to clearly describe the learning experiences of the candidates and NBPTS influences on their learning. Data related to teaching practices were coded to the components of Danielson's (1996) Framework for Teaching. These codes were used to organize the descriptions. Nvivo 2.0 qualitative research software was used for data management.

Drafts of the interview transcripts and observation notes were provided to candidates for feedback on three different occasions, and interim case summaries were written and shared with candidates at the midpoint and conclusion of the data collection. On each occasion, a separate summary was written for each candidate so that member checking could be employed without breaching confidentiality or influencing perceptions. Also, on both occasions, an integrated summary was written for preliminary analysis by the researcher, but these were not shared with the candidates. Throughout the study, candidates spontaneously provided insights through interviews and e-mail as questions and insights occurred. Both the solicited and unsolicited feedback helped ensure that the final research report authentically represented each candidate.

Findings

Anne

Despite the fact that she had a very challenging class during her certification year, Anne valued the NBPTS model of accomplished teaching. “It kept me focused on what I needed to do to provide quality education under difficult circumstances,” she explained. “It kept coming up and saying, ‘We don’t really care what you’re going through. This is what you’re expected to do in this profession.’”

Anne reported learning a great deal through professional reading, but she felt she learned most through ongoing reflection and analysis of her teaching practice. “It was difficult because it made you think about decisions you were making in your classroom instead of just showing up and saying, ‘Okay, let’s start on this chapter today,’” she recalled. “Sometimes, I would read the descriptions of accomplished teaching and think, ‘Whew! I’m doing this!’ Other times, I would realize, ‘I don’t do that as often as I should.’”

Overall, Anne identified three areas of learning during National Board candidacy: accommodating students’ needs and interests, clearer focus on instructional goals, and improved assessment of student learning.

Students’ Needs and Interests. Through National Board candidacy, Anne learned to validate her students’ needs and interests. “I know this class better inside and out than any class I’ve ever had”, she commented near the end of the school year. “I realized through National Boards that I cannot force my style on these kids. I had to adjust to them. My teaching is structured differently now, smaller steps, clearer and fewer directions, and more focus on learning objectives. It’s convergent even though I’m a divergent thinker. The National Board has helped me clarify the way I think.”

Anne also learned to gather student feedback at the conclusion of lessons and units. She noted, “The National Board taught me to take the time to ask students, ‘What caused you problems? What was confusing?’ Hearing their input helps me with my own reflection. I no longer just close my folder and say, ‘Okay, we’ll do this again next year’. I look through it and ask, ‘Did I assess my objectives? How did the kids feel about the steps? What was challenging and what wasn’t? What made them think?’”

Focus on Instructional Goals. A second area of learning for Anne was clearer focus on instructional goals. She explained, “During class discussions, I used to ask questions out of the air, but now I make a direct connection to the learning objectives.” One strategy she learned was displaying instructional goals visually for herself and her students. For example, prior to small group discussions following a science experiment, she gave each group a large-print list of vocabulary words. “They used the lists as they talked in small groups, and I used one when I questioned them. I would have never thought of doing that before,” she explained.

In addition, Anne learned to readjust when appropriate. During a science unit about light, Anne’s students used shoe boxes to create electrified haunted houses that demonstrated reflection, refraction, and diffraction. “The students loved it,” Anne recalled, “But in the middle of the project I realized that it was too heavy on the creative part and too light on the science concepts.” In her next science unit, which required students to design, build, and test sound mufflers to soften the noisy bell in the hallway outside their classroom, she closely aligned the project and its assessment with the unit’s instructional goals while still maintaining a high level of creativity.

Assessment of Student Learning. Improved assessment of individual learning through group projects was a third area of learning for Anne. At the conclusion of the science unit on sound, she asked individuals to explain how and why they would change the design of their mufflers to improve their results. “They couldn’t just say, ‘I would add more newspaper,’” Anne explained. “They had to explain how adding more newspaper would cause a change. Examining their choices was the only way I could know for sure they had learned the important concepts about sound. Before, I might have just said, ‘What

would you have done differently? Well, that sounds great. Next! I've learned that you have to make the assessment apply directly to the learning goal.”

Anne also learned to reframe assessment as a diagnostic tool through deeper understanding of miscue analysis. “If a student doesn't know his math facts, it may have something to do with the way he thinks he should complete the process, or how he sees the numbers, or how he thinks he is supposed to write the answers. You have to diagnose the problem accurately before you can correct it,” she explained. “Now, I ask myself, ‘How am I going to teach this?’ I don't just open the book and jump in.”

Anne's principal reiterated Anne's commitment to creating meaningful learning experiences for her students. “Students, parents, and colleagues listen to her,” she noted. “Anne integrates so much. When she teaches, it's a complete look at things, not just learning facts in isolation. I have many parents who request Anne as a teacher because they believe that their children will have a positive learning experience in her classroom.”

Barbara

Early in her certification year, Barbara felt the National Board experience was reinforcing her professional knowledge but not teaching her anything new. Only as she progressed through the certification requirements did she come to recognize the experience as a valuable means of learning. She reflected at the end of the school year, “I was learning all along, but not in the way I typically recognize professional development. It wasn't until I started studying for the written assessment that it began feeling like professional development to me.” Barbara reported learning most through professional reading in preparation for the written assessment.

Like Anne, Barbara identified the NBPTS model of accomplished teaching as a valuable tool for reflection and analysis. However, for Barbara, the model served as a tool for reinforcement and refinement. “With the portfolio, it was not so much trying new strategies as it was learning to reflect on what I'm already doing,” she explained. “As I'm planning the portfolio entries, I'm reading, and when I'm reviewing what I've done and writing my analysis, I'm re-checking my professional books, making sure my goals and objectives are matching up, and reviewing what to look for as I analyze my students' work. It's making me reflect so that I do the things I know are right, even when it's easier to do the older, simpler method.”

Most of all, Barbara appreciated the relevance of the National Board process. She explained, “There's an element of open-ended creativity that allows you to go in the direction you want, and it applies to what you're doing right now in your classroom. It's not some separate project over here. It's the type of professional development I like, something that I'm in charge of, that I know I need to make myself a better teacher, and where I can read books and try different strategies as opposed to going to a meeting and sitting there quietly while everybody in the room is getting the same thing.”

Refined Teaching Practice. Barbara made several refinements to her teaching practice during National Board candidacy: integrating math and science instruction, using student conversations as a learning tool, and changing her focus from curriculum coverage to greater consideration of students' needs, interests, and learning styles. She also learned to use miscue analysis as a diagnostic assessment tool, and increased her use of technology. In addition to refining her teaching practice, Barbara reported one major area of learning during National Board candidacy: altering her beliefs about effective writing instruction.

Beliefs about Effective Writing Instruction. By far, Barbara's most significant area of learning involved a shift in her beliefs about effective writing instruction. Against her better judgment, she taught two genres of writing within a four-week time period to abide by NBPTS requirements for Portfolio Entry 1. “We were doing a fictional narrative that was connected to a reading we had completed about the book *Stone Fox* by John Reynolds Gardiner,” she recalls. “At the same time, we were doing a social studies unit about westward expansion and traveling across the continent in a covered wagon, so students were

writing in social studies as well. I was worried because we completed both writings within a really short amount of time, but as it turned out, their writing was really good.”

Barbara allowed students to write within two different genres because it was required for Portfolio Entry 1, yet doing so went against her belief that students should immerse in one genre for an extended time period. Adding to her uneasiness, she assigned the writing topics instead of her usual practice of encouraging students to self-select topics since this was also required for Portfolio Entry 1. When students were successful on both counts, Barbara’s beliefs about effective writing instruction were challenged.

“I look at the writing they did and it’s much better than when I just keep harping on process, style, and all that,” Barbara reflected. “I keep going back to the research that writers write best about things they know, but I learned through this experience that that’s not always true. They wrote this great Chapter 11 for *Stone Fox*, and they’d only read the book one time so they weren’t as familiar with it as they would have been with a life experience, yet they did a great job. So I’m seeing that they can write about other things. It doesn’t have to be direct, personal experiences. They can get it. It was the same way with the covered wagon essay, so they do know enough to write about a topic that I assign. I guess the learning in class made it possible for them to do the writing. I’m thinking about changing some of my thinking because of this.”

Not surprisingly, Barbara’s principal described her as a lifelong learner. “Barbara is very much a part of our school’s learning community,” she stated. She never wants to sit back and be uninvolved. She is one who will always join the book studies and discussion groups even though I often think that she probably already knows everything we’re going to discuss. She’s always willing to join, and she always has much to contribute.”

Jamie

Although Jamie believed she grew professionally during National Board candidacy, she had difficulty articulating her learning. “It didn’t really improve my teaching like I thought it would,” she reflected. She anticipated that the NBPTS model of accomplished teaching would positively influence her professional decisions, yet she questioned the value of her learning outcomes compared to the time and effort she invested. “Like any endeavor, you go in with high expectations that you’ll benefit enormously. I’m not saying I didn’t learn and grow. I just haven’t found this to be as enlightening as I hoped,” she shared.

Like Barbara, Jamie felt she learned the most through the written assessment. “I liked studying for it,” she reflected. “I especially found it fun to review topics in social studies and science that I don’t normally teach.” Overall, Jamie reported learning “little things” through National Board candidacy: increased awareness of the complexity of teaching and learning and the value of content area integration.

Complexity of Teaching and Learning. Through completion of her portfolio entries, Jamie reported increased awareness of the complexity of teaching and learning. She explained, “As I watched the videotapes for [Portfolio] Entries 2 and 3, I had to analyze every comment students made. It makes you aware of all the decisions you’re making and the feedback you’re giving all the time, things that you usually don’t even think twice about. Before, I would have just said, ‘We did this assignment and this is what we were working on,’ but there is so much more depth to teaching than that. Teachers do a lot more than they think they do.” Jamie also learned that students’ individual needs add to the complexity. “Everybody’s a little bit different, and until you really sit down and conference with students or examine their work, you don’t always think of the differences,” she commented.

Content Area Integration. Like Barbara, Jamie planned to continue the integration of math, science, and technology after trying it during completion of the NBPTS portfolio. She recalled, “We did a science lesson, and we tied in graphing and used the computer too. When we were finished, the kids asked, ‘What are we doing for math today?’ and I said, ‘That was our math.’ It seemed to go over well

with the students since they felt like they didn't even have a math lesson. I thought, 'I should do more of this.' Integrating data analysis and graphics into science makes sense. It's in our district-adopted math series quite a bit, and I could skip some of the practice exercises and integrate it into our science experiments instead. To me, it's a small change, but it makes a lot more sense to do it that way." Jamie also planned to integrate writing into other subject areas after trying it during National Board candidacy.

Jamie's student-centered attitude did not go unnoticed by her students. Joe commented, "She makes it fun to be at school. We can do something totally boring, and somehow she'll make it fun." Similarly, Cathren shared, "It's not just learn, learn, learn. We do lots of fun things like experiments in science and reenactments in social studies. I think the most fun I've ever had at school is in [Jamie's] class."

Discussion

Modification, the act of adjusting skills, strategies, or beliefs to more closely align with the NBPTS model of accomplished teaching, was the most common type of learning for all three teachers during National Board candidacy. Two other studies report similar findings. A study of ten Michigan science teachers found little evidence of change in teaching beliefs or practices as a result of the National Board candidacy although "certain details of their practice may have been 'tweaked' or 'adjusted' to be more in line with the standards of accomplished teaching" (Lustick, 2002, p. 18). Similarly, candidates in a three-year NBPTS cohort reported that the certification process clarified and affirmed their already-existing beliefs, philosophies, and assumptions about teaching and learning but did not change their teaching practices. "In essence, they were saying there were no major changes in everyday practice, but rather important modifications in how they understood what they did and why" (Chittenden & Jones, 1997, p. 14).

Teacher Learning during National Board Candidacy

Though their learning varied, all three teachers in this study reported learning through National Board candidacy. Two common areas of learning were increased respect for student individuality and improved capacity for intentional teaching.

Respect for Student Individuality. During National Board candidacy, increased respect for student individuality was the main area of learning shared by Anne, Barbara, and Jamie. All three teachers demonstrated respect for student needs and interests by gathering information about their students and using it to differentiate instruction and assessments.

Anne demonstrated changes in teaching practice such as checking students' background knowledge prior to instruction, designing instruction with students' learning styles in mind, and seeking student feedback following instruction. A particular strength was her ability to engage students in creative, open-ended projects such as the electrified haunted houses and the sound mufflers for the noisy hallway bell. At the conclusion of her certification year, Anne's commitment to student individuality became evident through her intention to partially prepare units of study during the summer and complete them only after identifying her new students' prior knowledge, areas of interest, and related instructional needs.

Already adept at individualizing instruction, Barbara, came to prioritize the needs of her students over straightforward coverage of the curriculum. One example occurred when she consented to her students' desire to write different endings to the novel *Stone Fox*. In addition, Barbara continued improving her student-centered approach by encouraging more student conversation around content-related topics and engaging students in performance-based projects including reading and writing workshop.

Prior to National Board candidacy, Jamie was adept at making accommodations for students identified as learning disabled, gifted, and English Language Learner (ELL). However, she was less experienced at differentiating instruction for the wide range of academic abilities among the general population of students in her classroom. Through analysis of student work during completion of her NBPTS portfolio, Jamie developed greater awareness of the differences in student learning processes and the importance of taking those differences into account when planning instruction. Some tools she used included math pretests and individualized spelling tests.

Increased respect for student individuality through gathering information about students and using it to differentiate instruction and assessments is a common outcome of National Board candidacy. A California study found that 55% of NBCTs identified recognizing student differences as an improvement to their teaching practice following certification (CFTL, 2002). Similarly, one in three Arizona NBCTs described their teaching as hands-on or student-centered, and one in four reported teaching to individual student learning styles (Vandevoort, Amrein-Beardsley, & Berliner, 2004). In the same study, 68% of NBCTs stressed the importance of variety in assessing student learning, and 93% valued student work samples and teacher-made assessments over norm-referenced or criterion-referenced tests (Vandevoort et al., 2004). National Board candidacy influences teachers' respect for student individuality in two specific ways: Teachers learn how to more closely monitor individual learning, and they learn how to document evidence of learning (Mitchell, 1998).

Intentional Teaching. Teaching intentionally through clear instructional goals and diagnostic assessments was the second area of learning shared by all three teachers. While Barbara made sure her instructional goals aligned with student assignments during portfolio analysis and Jamie increased her awareness of the complexity of teaching, Anne's growth regarding intentional teaching through clearer goal setting was most notable. When she realized that she did not always adhere to her instructional goals, she developed strategies for maintaining instructional focus and found that it dramatically improved her teaching effectiveness as well as the quality of her students' learning.

Intentional teaching through instructional goal setting is well documented as a learning outcome of National Board candidacy. Teachers who have experienced National Board candidacy are more likely to align instruction with state learning standards (NBPTS, 2001a), focus on student outcomes (Bohen, 2001), and rely on data as evidence of student learning (Lustick, 2002). In one study, 65% of California NBCTs named the ability to clearly articulate student learning goals as a way National Board candidacy had improved their teaching (CFTL, 2002). National Board candidates in another study reported being challenged to become less intuitive and more reflective and analytic when making instructional decisions and assessing their instructional effectiveness (Chittenden & Jones, 1997).

Teaching with intentionality also involves the use of diagnostic assessments to guide instruction. Jamie reported conferencing individually with her students to better gauge their understanding while Anne and Barbara learned to use miscue analysis routinely as a source of instructional direction. Both Anne and Barbara named miscue analysis as their greatest area of learning in regard to teaching intentionally through diagnostic assessments.

Intentional teaching through improved assessment practices is also a common learning outcome of National Board candidacy. One nationwide study found that 89% of National Board candidates felt they had improved their ability to evaluate student learning as a result of their certification experience (NBPTS, 2001a). In another study, 78% of California NBCTs reported that the certification improved their ability to articulate learning goals to students and assess student learning (CFTL, 2002).

NBPTS Influences on Teacher Learning

All three teachers in this study were influenced positively by National Board candidacy. Their learning experiences were influenced by two NBPTS requirements: reflection and analysis of teaching practice and professional reading/preparation for the written assessment.

Reflection and Analysis of Teaching Practice. Because they were required to closely and continually examine their teaching practices during their certification year, all three teachers reported modifying their beliefs and behaviors to more closely align with the National Board standards. Barbara and Jamie integrated math and science instruction and modified their thinking about teaching writing, while Anne developed new strategies to maintain focus on instructional goals.

Anne and Barbara noted that the NBPTS model of accomplished teaching served as a valuable tool for reflection during completion of the NBPTS portfolio. Both teachers shared that they studied the descriptions closely, made frequent comparisons to their own teaching, and modified their teaching practices when they discovered a discrepancy. In the year following their candidacy, both Anne and Barbara reported spending more time diagnosing student needs, planning individualized instruction, and analyzing their teaching effectiveness afterward.

The majority of teachers who have experienced National Board candidacy report improved skills in reflection and analysis (Bohen, 2001; CFTL, 2002; Chittenden & Jones, 1997; Lustick, 2002; Sato, 2000; Tracz, Sienty, Todorov, Snyder, Takashima, Pensabene, Olsen, Pauls, & Sork, 1995). Like Anne and Barbara, teachers in one study shared that showcasing their professional efforts and accomplishments through the NBPTS portfolio caused them to closely examine the value of each activity in light of the National Board standards (Chittenden & Jones, 1997). Similarly, an Oklahoma NBCT reasoned that the NBPTS descriptions of accomplished teaching are a powerful support to teacher learning during National Board candidacy because they provide “a deep and rich guideline or framework in which they can model their classroom” (Moseley & Rains, 2002, p. 47).

Moreover, teachers credit National Board candidacy with helping them to clarify their beliefs about teaching and learning. Two different studies report that the NBPTS certification experience enabled teachers to better articulate their personal teaching philosophies as well as the underlying assumptions and beliefs that influence their instructional decisions (Chittenden & Jones, 1997; Sato, 2000).

Professional Reading/Preparation for the Written Assessment. All three teachers read widely during their certification year, including NBPTS literature, professional books, textbooks, and journal articles. They did this because they felt the need to expand their knowledge base and justify their teaching practices. Similarly, all three enjoyed preparing for the written assessment since they valued the understanding they gained through the process. In particular, Anne and Barbara learned a great deal about the practice of miscue analysis, and Jamie expanded her content knowledge in the subject areas of science and social studies.

Although it is well established that depth and breadth of content knowledge strengthen teaching effectiveness (Porter, Garet, Desimone, & Birman, 2003; Quick, Holtzman, & Chaney, 2009), no studies identify professional reading or preparation for the written assessment as NBPTS influences on teacher learning. Although both provide valuable opportunity for candidates to review subject area content, engage in professional reading, and apply knowledge of teaching and learning in actual and hypothetical situations, it appears that reflection and analysis is a more powerful – or at least more memorable – learning influence for most teachers. More research is needed in this area.

To summarize, NBPTS influences on the three teachers in this study were positive. Though their learning experiences varied, all three teachers reported learning through National Board candidacy. In the end, Anne and Barbara achieved National Board certification, but Jamie did not. Fortunately, she persisted in her efforts and earned the certification on her second attempt.

A Pathway to Teacher Leadership. Danielson (2006) describes teacher leaders as professional educators whose authority is earned, not given. Their work extends beyond their own students, yet they have no formal title or position; their leadership is voluntary. Several scholars advocate teacher leaders as integral to successful educational reform (Barth, 2001; Danielson, 2006; Lieberman & Miller, 1999), and some identify NBCTs as particularly well prepared for teacher leadership roles (Center for Teaching Quality, 2008; Frank, Sykes, & Anagnostopoulos, 2008).

After earning National Board certification, both Anne and Barbara reported an increased sense of professional duty. As a newly-certified NBCT, Barbara collaborated more with grade level colleagues, and fellow teachers approached her more often for guidance and ideas. Her principal shared, “She has been able to influence others by modeling instructional strategies. They see her doing things in her classroom, and they ask, ‘Wow. What is it that you’re doing?’ She’s able to move strategies forward in our school that way.”

While Barbara increased her peer leadership schoolwide, Anne embraced instructional leadership within her classroom. She did not continue on most schoolwide committees and took a break from professional reading, but maintained close alignment with the National Board standards. She shared, “I feel this overwhelming responsibility to be the best teacher I can be. They handed this certification to me because they believe I’m qualified. Now, I’d better prove them right!”

Several studies identify increased professional authority as a positive outcome for teachers who achieve National Board certification. In a nationwide study of NBCT art teachers, 69% identified the most significant rewards of certification as affirmed teaching practices, improved self-esteem, and increased credibility among peers (Kanter et al., 2000). Other NBCTs report greater commitment to professional growth (Bohen, 2002), improved teaching confidence (CFTL, 2002), and increased prestige (Bohen, 2002; NBPTS, 2001a).

However, the influence of the NBPTS on teacher leadership does not necessarily occur following candidacy. Even though Jamie did not earn National Board certification on her first attempt, she demonstrated leadership through collaboration and role modeling during her candidacy year. Her principal shared, “She leads her colleagues in paying attention to the standards and assessments. They see her commitment and follow along. [Because of this], Jamie’s grade level team works very well together in getting their kids ready for standards-based assessments.” Research shows that, like Anne, Barbara, and Jamie, teachers who pursue National Board certification tend to have at least ten years of teaching experience (Pyke & Lynch, 2005), hold a master’s degree (Vandevoort et al., 2004), frequently engage in professional development (Vandevoort et al., 2004), and tend to seek professional challenges (CFTL, 2002).

It seems that teacher leaders are attracted to the challenge and learning opportunity available through National Board candidacy. However, teachers who have actually earned the certification are more likely to be perceived as leaders (Pool et al., 2001). A survey of Chicago Public School teachers reported that 50% of NBCTs hold school leadership positions, compared to 32% of other teachers (Hart, Spote, Ponisciak, Stevens, & Cambronne, 2008). In fact, research shows that more leadership opportunities are offered to NBCTs than non-NBCTs, which can sustain their desire to continue teaching (Mitchell, 1998; NBPTS, 2001b).

Many NBCTs are interested in accepting leadership roles and responsibilities, and National Board certification is one pathway to teacher leadership. In addition to providing challenging, practice-based learning experiences for teachers, increased opportunity for teacher leadership is another positive influence of the NBPTS.

Conclusion

This study describes three teachers’ learning experiences during National Board candidacy and explores NBPTS influences on their learning as evidenced by changes in teaching practice. It also identifies National Board certification as one pathway to teacher leadership.

The study is limited by its small sample size and reliance on teacher self reports, making generalizations inappropriate. Even so, its “thick description” provides valuable insight for teachers, administrators, and others who strive to better understand teacher learning experiences through National Board candidacy and how the NBPTS influences teacher learning.

Though their learning experiences varied, the NBPTS positively influenced all three teachers in the study as evidenced by changes in teaching practice. Shared areas of learning were increased respect for student individuality and improved capacity for intentional teaching. NBPTS influences were reflection and analysis of teaching practice and professional reading/preparation for the written assessment. Only the last finding is inconsistent with other studies of teacher learning experiences during National Board candidacy, which indicate reflection and analysis as a more powerful influence than professional reading/preparation for the NBPTS written assessment. More research is needed in this area.

References

- Barth, R. (2001). Teacher leader. *Phi Delta Kappan*, 82(6), 443-449.
- Bogdan, R. C. & Biklen, S. K. (2003). *Qualitative research for education: An introduction to theories and methods* (4th ed.). Boston: Allyn and Bacon.
- Bohen, D. B. (2001). Strengthening teaching through national certification. *Educational Leadership*, 58(8), 50-53.
- Boyd, W. & Reese, J. (2006). Great expectations: The impact of the National Board for Professional Teaching Standards. *Education Next*, 6(2). Retrieved August 10, 2009 from <http://www.hoover.org/publications/ednext/3210536.html>
- Burroughs, R., Schwartz, T., & Hendricks-Lee, M. (2000). Communities of practice and discourse communities: Negotiating boundaries in NBPTS certification. *Teachers College Record*, 102(2), 344-374.
- Center for the Future of Teaching and Learning. (2002). *California teachers' perceptions of National Board certification: Individual benefits substantial, system benefits yet to be realized*. Santa Cruz, CA: Author.
- Center for Teaching Quality (2008). *Measuring what matters: The effects of National Board certification on advancing 21st century teaching and learning*. Hillsborough, NC: Author.
- Chittenden, E. & Jones, J. (1997). *An observational study of National Board candidates as they progress through the certification process*. Paper presented at the Annual Meeting of the American Educational Research Association. (ERIC Document Reproduction Service No. ED412257)
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Danielson, C. (1996). *Enhancing professional practice: A framework for teaching*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Danielson, C. (2006). *Teacher leadership that strengthens professional practice*. Alexandria, VA: ASCD.
- Frank, K., Sykes, G., Anagnostopoulos, D., Cannata, M., Chard, L., Krause, A., & McCrory, R. (2008). Does National Board certification affect the number of colleagues a teacher helps with instructional matters? *Educational Evaluation and Policy Analysis*, 30(1), 3-30.
- Gaddis, L. (2002). Candidate decision making through the development of the National Board for Professional Teaching Standards portfolio (Doctoral dissertation, Illinois State University, 2002). *Dissertation Abstracts International*, 63, 09A.
- Hart, H.; Spote, S., Ponisciak, S., Stevens, W., & Cambronne, A. (2008). *Teacher and principal leadership in Chicago: Ongoing analyses of preparation programs*. Chicago, IL: Consortium on Chicago School Research. (ERIC Document Reproduction Service No. ED504248)

- Kanter, L., Bergee, M., & Unrath, K. (2000). National Board certification in art and its potential impact on graduate programming in art education. *Arts and Learning Research Journal*, 16(1), 226-239.
- Keiffer-Barone, S., Mulvaney, S., Hillman, C., & Parker, M. (1999). *Toward a professional development community: A descriptive study of the experiences of National Board candidates*. Cincinnati, OH: Paper presented at the Annual Spring Conference of the National Council of Teachers of English. (ERIC Document Reproduction Service No. ED447498)
- Kvale, S. (1996). *InterViews: An introduction to qualitative research interviewing*. Thousand Oaks, CA: Sage.
- Lieberman, A. & Miller, L. (1999). *Teachers: Transforming their world and their work*. Alexandria, VA: ASCD.
- Linquanti, R. & Peterson, J. (2001). *An enormous untapped potential: A study of the feasibility of using National Board for Professional Teaching Standards certification to improve low-performing schools*. (ERIC Document Reproduction Service No. ED462385)
- Lustick, D. (2002). *National board certification as professional development: A study that identifies a framework and findings of teachers learning to manage complexity, uncertainty, and community*. New Orleans, LA: Paper presented at the Annual Meeting of the American Educational Research Association. (ERIC Document Reproduction Service No. ED465727)
- Mitchell, R. D. (1998). World class teachers. *The American School Board Journal*, 185(9), 27-29.
- Morse, J. M. & Richards, L. (2002). *Readme first for a user's guide to qualitative methods*. Thousand Oaks, CA: Sage.
- Moseley, C. & Rains, A. (2003). National Board for Professional Teaching Standards: A reflective essay. *The Delta Kappa Gamma Bulletin*, 68(4), 44-48.
- National Board for Professional Teaching Standards. (2001a). *Current candidate survey, September 2001(all candidates)*. Retrieved March 20, 2003 from http://www.nbpts.org/pdf/cert_allcand_survey.pdf
- National Board for Professional Teaching Standards (2001b). *Leading from the classroom: Highlights from the 2001 NBPTS teacher leadership survey*. Arlington, VA: Author. (ERIC Document Reproduction Service No. ED 475767)
- National Board for Professional Teaching Standards (2009). *2009 class of National Board certified teachers advances nation's school reform movement*. Retrieved February 7, 2010 from <http://www.nbpts.org/userfiles/File/2009CertificationDayNational/FINAL.pdf>
- National Board for Professional Teaching Standards (2010a). *About us*. Retrieved February 7, 2010 from http://www.nbpts.org/about_us
- National Board for Professional Teaching Standards (2010b). *Fields of certification*. Retrieved February 7, 2010 from http://www.nbpts.org/become_a_candidate/available_certificates1/fields_of_certification

- National Board for Professional Teaching Standards (2010c). *The five core propositions*. Retrieved February 7, 2010 from http://www.nbpts.org/the_standards/the_five_core_propositio
- National Board for Professional Teaching Standards (2010d). *Assessment process*. Retrieved February 7, 2010 from http://www.nbpts.org/become_a_candidate/assessment_process
- National Board for Professional Teaching Standards (2010e). *Retake candidates*. Retrieved February 7, 2010 from http://www.nbpts.org/for_candidates/retake_candidates
- Pool, J., Ellet, C., Schiavone, S., & Carey-Lewis, C. (2001). How valid are the National Board of Professional Teaching Standards assessments for predicting the quality of actual classroom teaching and learning? Results of six mini case studies. *Journal of Personnel Evaluation in Education*, 15(1), 31-48.
- Porter, A., Garet, M., Desimone, L., & Birman, B. (2003). Providing effective professional development: Lessons from the Eisenhower program. *Science Educator*, 12(1), 23-40.
- Pyke, C.L. & Lynch, S. (2005). Mathematics and science teachers' preparation for National Board of Professional Teaching Standards certification. *School Science & Mathematics*, 105(1), 25-35.
- Quick, H., Holtzman, D., & Chaney, K. (2009). Professional development and instructional practice: Conceptions and evidence of effectiveness. *Journal of Education for Students Placed at Risk (JESPAR)*, 14(1), 45-71.
- Rotberg, I., Futrell, M., & Holmes, A. (2000). Increasing access to National Board certification. *Phi Delta Kappan*, 81(5), 379-382.
- Sato, M. (2000). *The National Board for Professional Teaching Standards: Teacher learning through the assessment process*. Paper presented at the Annual Meeting of American Educational Research Association, April. New Orleans, LA.
- Stake, R. E. (2000). Case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed.) Thousand Oaks, CA: Sage.
- Strauss, A. & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks, CA: Sage.
- Thornton, H. J. (2001). The meaning of National Board certification for middle grades teaching. *Middle School Journal*, 32(4), 46-54.
- Tracz, S., Sienty, S., Todorov, K., Snyder, J., Takashima, B., Pensabene, R., Olsen, B., Pauls, L., & Sork, J. (1995). *Improvement in teaching skills: perspective from National Board for Professional Teaching Standards field test network candidates*. Paper presented at the Annual Meeting of the American Educational Research Association. (ERIC Document Reproduction Service No. ED390827)
- Vandevoort, L., Amrein-Beardsley, A., & Berliner, D. (2004). National Board certified teachers and their students' achievement. *Education Policy Analysis Archives*, 12(46), 1-117.

Wolcott, H. F. (2002). Ethnography? Or educational travel writing? In Yali Zou & E. (H.) T. Trueba (Eds.), *Ethnography and schools: Qualitative approaches to the study of education*. Lanham, MD: Rowman & Littlefield.