As a professional within the field of education you are passionate about and committed to the work you do and its impact on the learners with whom you work. The National Board for Professional Teaching Standards (NBPTS; www.nbpts.org) is a nonprofit organization created from this same passion and commitment with the aim of identifying and advancing accomplished professional practice in education. This chapter will provide you with background information about NBPTS, its certification process, and research about the impact of National Board Certification on teachers and their students. As mentioned in the Preface, we use the term teacher throughout this book in the broadest possible sense to include those working in a variety of roles, including speech therapists, counselors, language specialists, and classroom teachers. There are National Board certificate standards for each of these categories of education professionals.

"Only when we have something to value, will we have something to evaluate . . . and we cannot value something that we cannot share, exchange and examine."

—Lee Shulman (1990)
Introduction to National Board Certification®

From Initial Licensure to Advanced Certification

Teaching is a profession. This simple statement acknowledges that teachers are members of a community where professional standards exist for both obtaining initial licensure and identifying expert practice. At the entry level, individuals who meet their state standards for becoming a licensed teacher are frequently referred to as “highly qualified.” This terminology comes from the No Child Left Behind (NCLB) legislation of 2001. While symbolizing that you have met a strict set of minimum standards for entering the teaching profession, being highly qualified is a starting point from which to enter the profession. As you gain experience and insight, you will seek opportunities to continue your professional growth and development. The National Board assessment process is an opportunity to demonstrate you have attained an advanced level of professional practice. This continuum of professional development—from entry-level licensure to advanced certification—is similar to that found in the medical profession where “medical licensure sets the minimum competency requirements to diagnose and treat patients,” whereas “Board certification . . . demonstrate[s] a physician’s exceptional expertise in a particular specialty and/or subspecialty of medical practice” (American Board of Medical Specialties, 2009). If earning a teaching license is a starting point, then how is expert teaching practice recognized?

Creation of the National Board for Professional Teaching Standards

NBPTS was established in 1987 in response to the recommendations of a report by the Carnegie Forum on Education and the Economy (1986) about the state of U.S. education and the need to create a rigorous set of standards to recognize high-quality “accomplished” teaching. Organized as an independent, nongovernmental, nonprofit organization, NBPTS is led by a board comprised primarily of practicing classroom teachers (who are required to form a majority of its members) together with university teacher educators, subject matter experts, policy makers, and leaders of educational organizations. During its more than 20-year existence, NBPTS has convened panels of experts—classroom teachers and university faculty—to develop and regularly review and revise standards for certifying accomplished teaching in 16 content areas within ranges from birth to age 18 to make a total of 25 certificates available that cover 95 percent of teachers (for a complete list visit www.nbpts.org/for_candidates).

Modeled after advanced “board certification” practices within the medical profession, NBPTS has three primary goals that define its mission:

1. To maintain high and rigorous standards for what accomplished teachers should know and be able to do.
2. To provide a national voluntary system for certifying teachers who meet these standards.
3. To capitalize on the expertise of National Board Certified Teachers (NBCTs).1

As of 2011 there were over 97,000 NBCTs in the United States, roughly 3 percent of the overall teacher population (though this percentage varies from one state to another).

**Overview of the National Board Certification Process**

Unlike state licensing requirements, which certify that you have met the minimum requirements, National Board standards are a measure of advanced certification. For that reason, only licensed teachers with at least three years’ teaching experience are eligible to apply for board certification. However, the *Take One!* option allows both experienced teachers and those with less than three years’ teaching experience (including student teachers as well as those not in the classroom, such as administrators) to participate in one component of the portfolio process.

According to the National Board (2002), effective teachers possess five main characteristics that hold true across all content areas and developmental age groups. These Five Core Propositions, which will be explored in more depth in Chapter 2, form the essence of the National Board Standards and underpin all that NBPTS does. The Five Core Propositions are:

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.

(National Board for Professional Teaching Standards [NBPTS], 2002, pp. 3–4)

Effective teaching is also defined by the demonstration of certificate standards that have been established by committees of teachers and experts in subject matter content, child development, assessment, and higher education. Built upon the foundation of these Five Core Propositions, certificate standards are both content-specific and developmental age-specific. This is a model of professional practice created by and for teachers, not imposed by those external to the real work of teaching. As such, you will find that the descriptions of accomplished practice, while setting the bar high, speak to the heart of why you went into the education profession and reflect what you know and do every day.

Both the Core Propositions and accompanying certificate standards interact and are put into practice in a model called the Architecture of Accomplished Teaching that involves a cycle of goal setting, planning, enactment, reflection, and revision. This cycle can take place in the course of a single day of instruction, over the course of an instructional sequence, or over the course of a semester or school year. While you can find out more about this model in NBPTS candidate materials, Chapter 2 will offer you a similar model we’ve created, the Cycle of High Impact Teaching, to help you think about how these processes are related to the certification process.

The degree to which your practice reflects the Five Core Propositions, the certificate standards, and the processes within the Architecture of Accomplished Teaching is measured through completion of a two-part assessment: the portfolio assessment and the classroom demonstration.
and the assessment center. The full candidate portfolio consists of four entries, each focusing on different aspects of your professional practice. Typically, three of these entries require you to document and analyze evidence of the impact of your work with current students. These entries might include evidence of using assessment over time to monitor student learning and inform teacher practice; evidence of specific pedagogical practices and student work samples demonstrating their effectiveness; and videos of teacher–student and/or student–student interactions. A fourth portfolio entry requires the documentation and analysis of professional practices and accomplishments that demonstrate how you go beyond the scope of what is expected in your everyday work, both within and outside the school setting, to impact student learning.

The portfolio requirements are specific to each certificate and are available on the National Board website. The four portfolio entries are typically due to be submitted in March of the certification cycle year in which they were started (though you should always check for the deadlines specific to the cycle in which you have applied).

Whereas the primary focus of the portfolio is pedagogical practice, the assessment center is designed to measure both the depth and breadth of your content knowledge. Required of only full candidates, the assessment center consists of responding to six different prompts, one at a time, within a fixed time period. Like the portfolio entries, each assessment center exercise is specific to both the content area and developmental age range of the certificate being sought. There may also be some interplay of content knowledge and pedagogy—what Shulman (1987) refers to as pedagogical content knowledge—in the assessment center exercises. This assessment is taken at a private testing center (see www.nbpts.org for a list of centers closest to you) in the spring or summer of the certification cycle year. Once you check in at your testing center, you will be seated in front of a computer and presented with one prompt at a time and given 30 minutes to type your response to each one. As with the portfolio instructions, the areas of focus for the assessment center prompts are available on the National Board website.

Following submission, the four portfolio entries and responses to the six assessment center prompts are then separated and sent to be blind-scored at centers around the country. National Board assessors are trained in scoring just 1 of the 10 components and must be practicing, licensed teachers both in the subject and developmental age corresponding to the certificate entry they are evaluating. Each entry is scored separately by multiple assessors using rubrics developed by committees of trained teacher-assessors. Candidates earning a total of at least 275 points are deemed to have met the standards of accomplished teaching and therefore achieve National Board Certification.

It is important to know that National Board Certification is viewed by NBPTS as a professional growth experience that may take one to three years to complete, with significant and lasting impacts on teaching practices and student learning for those who persist and work to meet the standards established for effective practice. For this reason, candidates earning less than 275 points in their first attempt at certification are encouraged to “bank” their scores from stronger entries and “retake” other entries over the course of the next two certification cycles. The National Board refers to this as “retake candidacy” (also “advanced candidacy”), and specific portions of this book are designed for retake candidates. Note that in order to have a valid score generated, candidates for full certification must submit all four portfolio entries and all six assessment center exercises during the initial attempt to certify; those whose scores are less than 275 will then have two additional certification cycles during which to work toward meeting or exceeding 275 points.
For those who do not yet meet the eligibility requirements to become a candidate for full certification (hold an undergraduate degree; hold a valid teaching credential in the state in which they are teaching; completed three years of teaching as a fully credentialed teacher), or who are interested in National Board Certification but are not yet ready to commit to full candidacy, the Take One! option is available. Take One! requires participants to complete and submit one preselected portfolio entry. Although the entry selected varies from certificate to certificate, it always requires the analysis of a video of your classroom teaching and interaction as well as supporting instructional materials. Once submitted, this entry is scored along with all the other entries within the same certificate area submitted by full candidates, and scores are reported at the same time as those for full candidates. Take One! participants who achieve a raw score of 2.75 or higher may choose to bank their score and apply it toward full candidacy within the next three certification cycles (three years). Specific portions of this book are designed for Take One! participants.

Once earned, National Board Certification is valid for 10 years. If as an NBCT you choose to renew certification, you become a “renewal candidate” during either years 8 to 9 or 9 to 10 of your certification. The renewal process consists of one submission with three components analyzing the impact of Professional Growth Experiences (PGEs) that you have selected and a reflection on these PGEs. At least one 10-minute video of you teaching in your certificate area is required. Portions of this book are designed specifically for renewal candidates. Please note that NBCTs who allow their certification to lapse are not eligible for the renewal process and must instead complete the entire 10-entry process again.

Why Pursue National Board Certification?

With all of the demands on your time—lesson planning, evaluation of student work, conferences and parent communication, meetings (not to mention your personal life)—why try to squeeze in one more thing? While the answer to this question will be different for each person reading this book, among the many responses given, we usually hear teachers express one or more of the following reasons for pursuing National Board Certification:

- Examining one’s practices against the highest standards of professional practice
- Experiencing professional development intensely focused on the everyday work of teaching
- Becoming even more effective at impacting student learning
- Earning the ability to teach in over 40 states without additional requirements
- Joining a national cadre of teacher leaders whose voices impact education policy
- Making oneself more desirable to school districts
- Having a greater possibility of being immune from staffing reductions

“I am a better teacher because of this process. I know that an accomplished teacher has the greatest impact on student learning. Most importantly, I realize that I have a lot more to learn. I’m still growing [as a professional].”

—NBCT, LITERACY: READING/LANGUAGE ARTS
Earning higher salaries

Experiencing the stimulation of regular, productive dialogue about the craft of teaching with like-minded colleagues

A Professionally Rewarding Experience

Surveys and interviews with teachers who have been through the National Board assessment process have found widespread agreement that, although it is certainly a rigorous performance assessment, it is also a professional development experience without compare (Cohen & Rice, 2005; Lustick & Sykes, 2006). Teachers who have been through the assessment process report becoming more refined in their assessment practices, tying routine assessment to lesson planning and curriculum design, and better connecting students’ experiences and prior knowledge with what is being learned. This is the result of having to provide evidence—clear, consistent, and convincing—that demonstrates how one’s professional practices meet the rigorous National Board standards in the certificate area being pursued accompanied by reflective narrative that shows an awareness of one’s strengths and areas for further growth as a teacher who significantly impacts student development and learning.

Each of us authors can state unequivocally that due to the National Board assessment process our teaching became not only more effective but more efficient! While we might have felt initially that working toward National Board Certification was a way to see whether our level of expertise as professionals measured up to national standards of excellence, we soon learned that the process itself would require us to look deeply into our teaching practices and question whether and how well these met our students’ developmental and learning needs. Through the intense analysis and reflection required of candidates, we found ways to improve our work by identifying those actions that truly impact student development and learning. As a result we developed a more finely focused perspective on our own practice as teachers that enabled us to make better instructional decisions and implement teaching practices to make the best use of our time with students.

Nationwide, National Board Certification is regarded as the highest level of teacher accomplishment and, as such, is accepted by almost every state as equivalent to full licensure in the certificate area. This means an NBCT is able to move from one state to another without the burden of additional licensing requirements. For up-to-date information about each state’s position on reciprocity for National Board Certification, contact the appropriate state department of education.

In addition to reciprocity, many states and local school districts have placed bonuses or incentives for NBCTs into their teacher salary schedules. For example, for many years North Carolina offered NBCTs a 12 percent pay increase, an incentive that contributed to the state leading the nation with 10 percent of its teachers having earned National Board Certification! The National Board maintains a web page with information about state and local incentives: www.nbpts.org/resources/state_local_information. It is always a good idea, however, to check with your state office of education and local school district for current incentive information, as these can and do change.

Finally, many states and districts consider National Board Certification an additional qualification one has earned and in some cases use it as an additional criterion when making staffing decisions. In an increasingly competitive hiring environment, it is an excellent idea to set yourself apart by earning the highest level of certification possible.
A Process Supported by Research

Research on the National Board assessment process and of NBCTs has identified several significant effects related to teacher professional development, student learning and achievement, and teacher retention. Lustick and Sykes (2006) examined the National Board assessment process as a form of professional development by interviewing three cohorts of National Board candidates. They found that as a result of the process, teachers learned “to evaluate their own practice in the light of objective, external standards” (Lustick & Sykes, 2006, p. 29). The professional gains for teachers, moreover, were found for all candidates regardless of whether they attained National Board Certification. As most candidates will attest, the certification process itself is professionally meaningful.

In a thorough review of data and prior research on National Board Certification, the National Research Council (Hakel, Koenig, & Elliott, 2008) found strong evidence that students of NBCTs benefit in a myriad of ways. Given recent attention to the issue of teacher quality, it is important that multiple measures are used that capture a broad picture of all that teachers know and do. Hakel, Koenig, and Elliott (2008) draw parallels to professionals in other fields to point out the problems inherent in looking at only one type of outcome to evaluate teacher impact:

Measures of outcomes for students, such as their academic achievement, do provide a means of evaluating teachers’ job performance, but there are some drawbacks to the use of this kind of a criterion measure. It is enlightening to consider what this would mean if extrapolated to other fields. For example, this is similar to evaluating the validity of a medical certification test by collecting information about the outcomes for patients of a board-certified physician or evaluating the validity of the bar exam by considering the outcomes for clients of a lawyer who had passed the bar exam and been admitted to the bar. Outcomes for patients reflect many factors other than the skills and knowledge of the physician who provides services, such as the severity of the illness being treated and the degree to which the patient adheres to the professional advice given. Likewise in law, the outcome for the client depends on such factors as the nature of the legal problem, the record of prior legal problems, and the extent to which the client follows the advice. (p. 25)

Understanding that using standardized achievement tests as a measure of teacher impact on student outcomes is far from perfect, research on NBCTs nonetheless has found evidence that “National Board Certification distinguishes more effective teachers from less effective teachers with respect to student achievement” (Hakel et al., 2008, p. 179). Additionally, students of NBCTs show greater academic gains and exhibit better writing and critical thinking skills than the students of their non-NBCT colleagues.

Broadening the perspective to examine other forms of student outcomes, Bond, Smith, Baker, and Hattie (2000) examined classroom practices and student work samples of NBCTs and non-NBCTs. Using classroom observations the researchers rated the lessons across 13 dimensions of accomplished teaching and found lessons of NBCTs to be more highly rated than lessons of non-NBCTs on 11 of these. Particularly powerful is their finding that “74 percent of the work samples of students taught by NBCTs reflected deep understanding, while 29 percent of the work samples of non-NBCTs were judged to reflect deep understanding” (in Hakel et al., 2008, p. 279).
Lending further evidence as to the validity of National Board Certification as an indicator of expert practice, Berliner (2004) examined 12 measures of expertise among a group of teachers who all attempted National Board Certification. It was found that on all 12 measures teachers who certified outperformed teachers who did not certify. In addition, significant differences in the quality of student work samples were found between NBCTs and non-NBCTs.

With respect to the relationship between board certification and a teacher’s career pathway, studies have found that NBCTs remain in the profession longer and demonstrate increased collegiality and leadership. This is important since the recruitment and retention of teachers is a critical issue in education, particularly in schools serving high-need populations. Keeping highly effective teachers in our nation’s schools by recognizing their expert level of professional practice is imperative to the quality of not only educational opportunities offered in their classrooms but also peer mentoring and leadership they can provide to colleagues.

Questions to Ask Yourself

Now that you know more about the origins of National Board Certification, the certification process, and the research that supports it, it is a good time to ask yourself what is leading you to consider pursuing National Board Certification. It is important that you take time to carefully consider the reasons for this because the process will require a high level of commitment and effort. Some questions to ask yourself include:

- What led me into teaching?
- What is it that keeps me in the profession?
- What will it mean to me, personally and professionally, to earn National Board Certification?
- What forms of support—professional and personal—will I have (or need) as I go through the assessment process?
- Where am I professionally with regard to my teaching practice? And what is my ability to commit my time and effort to this process? Is Take One! a good place to begin this journey, or am I ready to pursue full certification?

It is our hope that your responses to these questions will help guide you as you consider your readiness for entering into what will be a transformational journey toward certification. We’ve summarized the certification pathways in Figure 1.1 to make it easier for you to see the requirements for Take One!, full certification, and renewal. There is space for you to record your thoughts following this (and every) chapter, and we encourage you to take a moment to do so. The remaining chapters are designed to provide support for you as you go through this process of professional growth and
reflection. When you’re ready to begin, the “How to Use This Book” section of the Preface offers a guide by candidate type for navigating the most pertinent parts of the book.

**Additional Resources**

The National Education Association and American Federation of Teachers have partnered to offer resources to teachers pursuing National Board Certification: [http://www.nea.org/home/31738.htm](http://www.nea.org/home/31738.htm).

The National Association of State Boards of Education offers a hyperlinked list map of the United States that will take you to any state’s board of education. Once on your state’s website, search for information about National Board Certification support: [http://nasbe.org/index.php?option=com_contact&view=category&catid=1119&Itemid=1046](http://nasbe.org/index.php?option=com_contact&view=category&catid=1119&Itemid=1046).
<table>
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<th>MY THOUGHTS</th>
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<td>(Use this space to record ideas generated from reading this chapter, including the prompts near the end.)</td>
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Standards have become a significant force driving what we do in education. As an educator, your everyday work is likely guided to some extent by national, state, and local standards. Sometimes these can be challenging to keep up with, as not all standards are developed with teachers and teaching in mind. Wouldn’t it be rewarding to use standards designed solely by and for teachers like yourself to guide and gauge your work as a professional? This is exactly the purpose of the National Board for Professional Teaching Standards (NBPTS), and your work as a National Board candidate will be grounded in the specific standards for your certificate area. It is important to understand these and how they are central to the process of working toward certification.
The National Board’s Five Core Propositions are the foundation upon which each certificate’s specific standards are based. These core propositions, as discussed in Chapter 1, are:

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. (NBPTS, 2002, pp. 3–4)

As a candidate beginning (or continuing) your journey toward certification, you must determine what each of these propositions means in terms of your teaching practice and think about how they will form the basis of the evidence you provide to demonstrate that you are an accomplished teacher. Stop for a moment and reflect on your own teaching: How does each of the core propositions relate to what you do as a professional? How does it look in your classroom, and what does it mean for your students, to have a learning environment that is created and monitored by a teacher whose philosophy and practice are grounded in these five propositions? The statements and prompts that follow are intended to take your thinking about these even further. Feel free to record your thinking about them in the “My Thoughts” space at the end of the chapter.

Core Proposition 1: Teachers Are Committed to Students and Their Learning

The National Board candidate process stresses the importance of the impact on student learning as the ultimate goal for all teachers. Accomplished teachers are committed to knowing their students well and realize this is the critical first step toward impacting student learning. As a candidate, you will need to provide clear, convincing, and consistent evidence that you know and are dedicated to understanding the specific needs, learning styles, skills, and abilities of each and every student in your classroom. You strive to meet these needs and recognize the uniqueness of every individual student as you provide a successful educational experience for every student. In everything you do, ask yourself: What do I know about my students, and how does this help me support them as learners and lead to positive learning outcomes?

Core Proposition 2: Teachers Know the Subjects They Teach and How to Teach Those Subjects to Students

Accomplished teachers know their students first, but they also have a deep understanding of the subjects they teach and how to organize learning experiences that support students in developing the knowledge and skills they need. As a candidate
you will need to consider how you modify, differentiate, and extend learning to make content meaningful and accessible to all students. What do you know about the required curriculum (and how it builds on prior knowledge and prepares students for what will come later)? How do you supplement the standard curriculum with additional resources and materials to better engage students and further their development and learning? Just as you asked yourself in regard to your knowledge of students, you must ask yourself in everything you do: What do I know about the subjects I teach, and how does the way in which I teach them impact student learning outcomes?

Core Proposition 3: Teachers Are Responsible for Managing and Monitoring Student Learning

Through their expertise and knowledge of a wide range of teaching strategies, accomplished teachers create positive and supportive learning environments and monitor student learning regularly through a variety of means. As a candidate, and depending on the requirements of your certificate standards, you will need to articulate how you create such learning environments and provide evidence of how you work with students—as individuals, in various grouping formats, or in whole-class learning situations—to meet their needs. You will need to demonstrate how you monitor student growth and learning, based on goals and objectives, using multiple measures. As you reflect on this proposition, ask yourself: How do I create an environment that makes learning accessible for all students, and how do I monitor and assess student growth and learning to best impact student outcomes?

Core Proposition 4: Teachers Think Systematically About Their Practice and Learn From Experience

Accomplished teachers are reflective practitioners who exemplify lifelong learning as they strive to impact each and every student’s learning each and every day. As a candidate you will write about your habits of practice and how you analyze both your teaching practices and the outcomes for students as a basis for constantly improving what you do. You will provide evidence of how you have grown and developed as a professional and how this has impacted student outcomes. As you consider what this proposition means in relationship to what you do, ask yourself: What are the ways in which I think systematically about my practice? How do I use reflection to examine my practice and make modifications that lead to increased student development, learning, and achievement? What am I doing to continue to grow professionally, and how does my growth impact student outcomes?

“Even after fourteen years in the classroom, I am a work in progress, but I am always willing to reflect and improve because I want to be the best teacher I can.”

—NBCT, EARLY ADOLESCENCE ENGLISH LANGUAGE ARTS

Core Proposition 5: Teachers Are Members of Learning Communities

High-impact teachers know the importance of learning communities of educators who work together to impact student development and learning. They know that a learning community is multifaceted, and work collaboratively with colleagues, community members, families, and anyone else who might impact student development.
As a candidate you will need to provide evidence of the specific ways in which you reach out to and incorporate the entire learning community in the work you do with your students, and how these efforts have a direct relationship to student outcomes. As you think about your efforts as part of a learning community, ask yourself: *How do I as a member of a learning community reach out, collaborate, and impact student outcomes through these interactions and collaborative efforts?*

### Why These Standards?

Why did NBPTS arrive at these core propositions? Recall from Chapter 1 that these standards were developed by a team that consisted of practicing teachers and experts in subject matter content, child development, and higher education. These individuals brought with them significant practical classroom experience as well as knowledge of educational theory and research about effective practice. In addition, significant evidence exists in research literature that these five elements are strongly connected to improved student developmental and learning outcomes. Table 2.1 provides a quick glance at some of the research that supports the ideas of the Five Core Propositions. A more exhaustive look at the research base is provided later in this chapter if you wish to delve deeper.

<table>
<thead>
<tr>
<th>Core Proposition</th>
<th>Supporting Research</th>
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<tbody>
<tr>
<td>1. Teachers are committed to students and their learning.</td>
<td>Bransford et al., 2005; Eccles et al., 1993; Eccles &amp; Roeser, 2009; Eccles &amp; Wigfield, 1985; Hamre &amp; Pianta, 2005; Resnick et al., 1997</td>
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<tr>
<td>2. Teachers know the subjects they teach and how to teach those subjects to students.</td>
<td>Ball &amp; Cohen, 1999; Berliner, 2004; Bransford et al., 2005; Scardamalia &amp; Bereiter, 2006; Shulman, 1986</td>
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<tr>
<td>3. Teachers are responsible for managing and monitoring student learning.</td>
<td>Berliner, 2004; Bransford, Brown, &amp; Cocking, 2000; Bransford et al., 2005</td>
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<tr>
<td>4. Teachers think systematically about their practice and learn from experience.</td>
<td>Berliner, 2004; Ertmer &amp; Newby, 1996; Krull et al., 2007; Rodgers, 2002b; Stigler &amp; Hiebert, 1999; Thompson et al., 2009; van Es &amp; Sherin, 2002</td>
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<td>5. Teachers are members of learning communities.</td>
<td>Lave &amp; Wenger, 1991; Little et al., 2003; Marzano, 2003; Perkins, 1993; Sheldon, 2003; Sheldon &amp; Epstein, 2005; Tschannan-Moran, 2003</td>
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### The Cycle of High-Impact Teaching

While the Five Core Propositions are the foundation of the certificate standards, the way in which they are interwoven in a teacher’s practice is something that NBPTS refers to as the Architecture of Accomplished Teaching. You will find this structure depicted by NBPTS as a helix and are encouraged to learn about it in materials provided by the organization. From our work with candidates, we have
found it helpful to think about this as repeating cycles of setting goals, designing and implementing instruction, assessing student achievement, and reflecting on instruction that represent the actions of a high-impact teacher (see Figure 2.1). We developed this model by extending the ideas offered in the Education Trust’s (2005) report, Gaining Traction, Gaining Ground, about practices within high-impact high schools. Specifically, a “high-impact” teacher is one whose actions lead to greater than expected learning for his or her students. The visual in Figure 2.1 may be helpful for internalizing and understanding how the core propositions are enacted as well as for identifying and documenting evidence of your impact on students. Note that we use accomplished (NBPTS’s term) and high-impact (our term) interchangeably.

This cycle begins with Core Proposition 1, knowing one’s students. While including personal information such as knowing students’ likes and dislikes, accomplished teaching goes beyond this. In the context of organizing and planning, the high-impact teacher knows what students already know, how deeply they know it, and what they do not yet know. The high-impact teacher understands the various assets students bring to the classroom (both developmental and cognitive) and how to best help students leverage those attributes to promote further development and learning. All of this takes place against a backdrop of external demands of state standards, local benchmarks, and other curricular requirements. Goal setting is the result of a complex set of decisions that includes all these factors.

Once clear goals are identified, the design and implementation of instruction (Core Proposition 2) comes next in the cycle. The accomplished teacher knows how best to design engaging and appropriately challenging tasks and activities to help

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**Figure 2.1**

*The Cycle of High-Impact Teaching*  The cycle of high-impact teaching is a process of goal setting, designing and implementing instruction, assessing student achievement, and reflecting on instruction. Driven by the Five Core Propositions, repeated cycles lead to increases in learning and development over time.
students accomplish specific goals. The cycle continues as the high-impact teacher manages and monitors student learning in response to the instruction and in light of the stated goals (Core Proposition 3). Knowledge of the students, the content, and command of a broad repertoire of skills and techniques for assessing student achievement in light of specific goals are characteristic of the high-impact teacher. The constant adjustment and modification of instruction that is at the heart of high-impact teaching is evidenced here.

Core Proposition 4 comes into play as accomplished teachers connect evidence of student outcomes to their teaching decisions, reflect on the degree to which goals were met, and think about how to facilitate continued student development and learning. The cycle of goal setting, designing and implementing, assessing, and reflecting can be particularly effective when it includes the input of colleagues, parents, and other stakeholders (Core Proposition 5).

Having completed one such cycle, in light of what was learned the high-impact teacher immediately begins a new cycle with the identification of new goals. It is a continual process of planning, teaching, analyzing, and reflecting. It is important to note that there are often multiple cycles ongoing at any given time—a cycle can occur over the course of a school year, a semester, an instructional unit, or even one day. There can also be multiple “cycles” for multiple students, because not all students have the same learning needs at the same time. Driven by the Five Core Propositions, the Cycle of High-Impact Teaching leads to continuous improvement over time, both in terms of student achievement and one’s instructional expertise. The accomplished teacher is a professional who learns from experience and applies this knowledge in future practice. The climb may have its bumps and ruts at times, but generally speaking the accomplished teacher is effective at sustaining progress.

It is important to be aware that in this model, effective reflection occurs after some data, whether formal or informal, have been generated and you’ve taken the opportunity to make sense of what that information means about how well the goals have been met. You’ll read more on effective reflection in Chapter 5. At this point, the main idea to remember is that the core propositions are constantly in play, in a disciplined sequence, driving the actions of an accomplished teacher.

**The Certificate Standards**

As previously noted, standards are at the forefront of everything we do in education. In your everyday work with students, your teaching and your students’ learning is undoubtedly driven by state or local content standards that have been designed to meet or exceed national standards. You may also be basing the work that you do on professional teaching standards. As you work toward National Board Certification®, your teaching and your daily interactions with your students will not change your current emphasis on the standards you have been working with.

However, each National Board certificate has its own unique set of standards that have been developed by committees of National Board Certified Teachers (NBCTs) and experts in the field for each certificate area and revised on a regular basis. The National Board standards, grounded in the core propositions, describe what accomplished teachers in your certificate area should know and be able to do. They are meant to supplement, not supplant, all other standards in that particular field and serve as a model for standards developed by other organizations, such
as the International Reading Association (IRA), National Council of Teachers of Mathematics (NCTM), National Association for the Education of Young Children (NAEYC), National Council of Teachers of English (NCTE), and National Science Teachers Association (NSTA).

The specific standards for your National Board certificate will be the lens through which you focus as you respond to the questions asked of you in the portfolio entries and assessment center exercises. Through the lens of your specific certificate standards you must be able to describe, analyze, and reflect on your teaching and professional practices and how you are able to impact student development, learning, and achievement. Further, you must be able to document and provide clear, consistent, and convincing evidence that you have met your certificate standards.

A critical first step in working toward National Board Certification is a thorough understanding of your certificate standards. You should begin by reading through the entire certificate standards document, highlighting and making notes of what strikes you as important to remember. As you move through the candidate process, reread the standards over and again, continuing to revise and refine your notes. You will refer to these standards extensively throughout the process and must be intimately familiar with them as you work toward certification. Ultimately, the goal is to see yourself as an accomplished educator whose teaching practices, professional growth, and students’ development and learning are driven by these standards.

As mentioned earlier, the certificate standards are built on the foundation of the core propositions. It will be important in your portfolio entries to demonstrate that you recognize this connection. To help you make explicit the relationship between the core propositions, your specific certificate standards, and your professional practices, consider completing a table like the one shown in Table 2.2 for each of the propositions (so you end up with five charts when you’re finished). This will give you the opportunity to review your certificate standards, think about how they relate to each of the core propositions, and systematically connect them to your professional practices and student outcomes. It is worth taking time to do this exercise early in the process to generate a clear vision of what you’re trying to document and describe. An example of how an Early Childhood Generalist candidate might complete this for Core Proposition 1 is shown in Table 2.3. Again, we encourage you to make one table like this for each of the Five Core Propositions using the standards for the certificate area you are pursuing.

“The certificate standards, combined with state standards for teaching, and teaching standards for teachers gave me a lot to think about. I learned that I can never say I have it all under control, and I know for certain that I need to always reflect and refine. Each student, each year, even each lesson are unique experiences. There’s no way I can just do what I have done before and expect to be satisfied with my performance.”

—NBCT, EARLY CHILDHOOD GENERALIST
<table>
<thead>
<tr>
<th>Core Proposition</th>
<th>Related Certificate Standard(s)</th>
<th>The High-Impact Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><em>What this looks like, feels like, sounds like in my classroom, for my students, and for my professional development.</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>What is the impact on student development and learning?</em></td>
</tr>
</tbody>
</table>
Digging Deeper into the Core Propositions

You may find it helpful to explore the core propositions more deeply. The next section includes brief descriptions of research supporting each of them, followed by bulleted prompts that encourage you to make connections between the propositions, educational research, and evidence of the impact of your teaching practices on student development and learning. Although it is not mandatory to relate your entries to research, it is our belief that as professionals it is often helpful to be able to point to both standards and research to support and further develop our practices.
Core Proposition 1: Teachers Are Committed to Students and Their Learning

Eccles and colleagues’ (1993) theory of stage–environment fit states that the degree of alignment between a child’s developmental needs (such as autonomy, peer acceptance, and supportive relationships with caring adults) and the environment provided both at home and at school is related to the level of social, academic, and emotional turmoil experienced by youths. When children’s needs are well met by their environment, problematic behaviors tend to be avoided. Conversely, when there is a misalignment between student needs and opportunities afforded by the school environment, emotional, social, and academic problems are likely to arise. Eccles and colleagues identify adolescence as a time of particular risk, where changing psychological needs such as increased desire for autonomy, increased peer orientation, and increased cognitive power do not match up well with the traditional parenting and schooling trends of limiting autonomy, limiting collaborative tasks, and failing to provide tasks of greater intellectual complexity during this time.

- What are the developmental needs (physical, emotional, cognitive, language, social) of my students, and what evidence do I have that my actions consistently meet these needs?
- In what ways can I better meet students’ needs, and how do I know this?

Eccles and Wigfield (1985) argue that teacher expectations strongly contribute to student achievement. In classrooms with teachers who express high expectations and a belief that students can learn, student achievement is higher than their peers with teachers who do not demonstrate this commitment.

- What evidence do I have that I set and communicate high expectations for my students?
- How does my teaching reflect my belief that all students can and will learn?
- What evidence do I have that students understand what is expected of them?
- How do I ensure that my expectations match my instructional and assessment practices (and what do I do when there is a mismatch)?

Research by Hamre and Pianta (2005) provides strong evidence for the importance of positive teacher–student relationships. A national sample of 910 children who were identified by their kindergarten teachers as having multiple problems (social, academic, behavior, and attention) were divided into two groups: One group was placed with a supportive first-grade teacher; the second group was placed with a less-supportive teacher. By year’s end, the at-risk students placed with a teacher who provided high levels of instructional and emotional support scored as well as their peers who were not at risk, while those with a less-supportive teacher continued to struggle. Positive teacher–student relationships continue to be important in middle and high school. In a longitudinal study of over 12,000 students in Grades 7 through 12, Resnick et al. (1997) found that positive relationships with teachers and other measures of “school connectedness” acted as a protective factor against a variety of student health risk factors, such as drug and alcohol use, violent behavior, emotional distress, suicide, and sexual activity.
Digging Deeper into the Core Propositions

- How do I consistently provide instructional and emotional support for my students?
- What evidence do I have from students that they feel supported?
- In what ways can I be more supportive of my students, and how do I know this?

Core Proposition 2: Teachers Know the Subjects They Teach and How to Teach Those Subjects to Students

Shulman (1986) introduced the term *pedagogical content knowledge* (referred to as PCK by pedagogy wonks), which he defined as “a blending of content and pedagogy into an understanding of how particular topics, problems, or issues are organized, represented, and adapted to the diverse interests and abilities of learners, and presented for instruction” (p. 8). A teacher’s pedagogical content knowledge has subsequently been found to be an indicator of effectiveness by numerous studies (Ball & Cohen, 1999; Berliner, 2004; Bransford, Darling-Hammond, & LePage, 2005).

- What evidence do I have that I know my content well and know how best to teach it?
- How does this knowledge help me determine the best sequence for teaching related ideas?
- How well do I anticipate and address student misconceptions?
- How can I clearly articulate evidence that I consistently use multiple methods or approaches to support student learning, development, and achievement?
- What knowledge do I have that informs this decision making?

Core Proposition 3: Teachers Are Responsible for Managing and Monitoring Student Learning

Berliner (2004), in a study of “expert” teachers, identified the following characteristics: more extensive pedagogical content knowledge; better problem-solving strategies; better adaptation and modification of goals for diverse learners; more ambitious objectives for students; better monitoring of learning and providing feedback; greater display of a passion for teaching. A study of 92 highly effective K–8 teachers in Tennessee revealed a shared set of consistent actions including monitoring student learning by moving throughout the classroom; organizing multiple small-group activities; encouraging student participation in discussion and academic conversations; managing lesson flow from planning activities to arrangement and availability of materials; and displaying student work in the classroom (Bransford et al., 2005). The researchers were also struck by what was *infrequent* in these classrooms: teachers standing at the front lecturing; students working individually with desks in traditional rows; teachers using instructional time ineffectively.

- What evidence do I have of how my teaching consistently exhibits these actions and characteristics?
- What evidence do I routinely collect about my students’ development and learning, and how do I use this to modify instruction to better support student development and learning?
- In what ways do I clearly provide feedback to students that supports their continued growth?
Core Proposition 4: Teachers Think Systematically About Their Practice and Learn From Experience

Ertmer and Newby (1996) identified several characteristics of expert learners (which is an essential characteristic of the highly effective teacher): experts are strategic, self-regulated, and reflective. It is not simply the amount of knowledge or skills one possesses, but rather the ability to self-regulate learning that makes him or her expert. Experts know their strengths and weaknesses and adjust their actions accordingly. To evaluate their effectiveness, experts systematically consider their initial goal(s) while examining both the outcomes of their actions and the processes they used.

- In what ways do my actions demonstrate an understanding of the task and draw on my strengths?
- What evidence do I have that I systematically evaluate the effectiveness of my teaching and the lesson(s) used?
- What evidence do I collect about outcomes and processes, and how do I analyze it to inform and improve my teaching?

Van Es and Sherin (2002) have written about teachers learning to “notice” student thinking through collaborative examination of classroom videos and student work samples. They studied a group of elementary teachers over the course of a year as they developed skills in noticing—identifying specific instances in video or aspects of student work that gave insights into students’ thinking. As the teachers became more adept at noticing, their written reflections shifted from narrative descriptions of what occurred (first I did this, then I did that) to become more organized around “analytic chunks” (e.g., recognizing a significant incident, relating it to a principle of teaching or learning, processing what the evidence provided says about students’ learning, and reflecting on how this informs their own practice as teachers). Through this research van Es and Sherin found that expert teachers are more focused on what students do and say, allowing them to better understand student thinking and learning. Similarly, Krull, Oras, and Sisack (2007) found that when given a video of teaching to analyze, expert teachers tended to focus their attention on “teaching and learning as a joint activity” and “learner activities and learning” than novices who primarily focused on “teaching activities.”

- What do I “notice” when I look at my teaching artifacts (videos, student work samples, lesson plans, etc.)?
- Do I focus on my actions and words, or those of my students?
- How do I go beyond a narrative description of my teaching to highlight instances of student action or speech that provide insight into their thinking processes?
- When I make evaluations of my teaching (this went well; this did not go well), what evidence are they based on?

Core Proposition 5: Teachers Are Members of Learning Communities

Many researchers espouse the value of working collaboratively as professionals. Perkins (1993) describes the “person-plus” model of learning where the learner
draws on surrounding resources (tools, other learners, texts) to construct new understanding. This is certainly true in teaching. In a study of four schools using various models for examining student work (Little, Gearhart, Curry, & Kafka, 2003), researchers identified several characteristics associated with effective collaborative practice: Participants used tools to structure and focus their investigations and discussion; participants shared pedagogical content knowledge across disciplines (math, English, science, social studies); participants welcomed critical dialogue—they disagreed openly, but respectfully challenged assertions and asked tough questions; and participants were led by a facilitator who maintained a level of comfort and trust while challenging the group to engage in critical dialogue.

- What resources do I draw on to examine artifacts of teaching?
- What additional resources would be useful?
- What is my focus when I examine these artifacts?
- What evidence can I provide demonstrating my willingness to ask “hard questions” about teaching and learning?
- How do my collaborative efforts impact student learning within and beyond my classroom?

Tschannan-Moran (2003) conducted a study of 50 schools in a large urban district. Teachers, principals, parents, and students were surveyed about their own level of collaboration, participation, and trust with each of the other groups. Results revealed that all three factors were strongly related to one another. In particular, a reciprocal relationship existed between parents and all other groups—the level of trust and collaboration with parents strongly influenced trust and collaboration between other groups. A study by Sheldon (2003) of 82 elementary schools found that in schools that “worked harder to overcome challenges to family and community involvement,” students earned higher scores on standardized state achievement tests, establishing a connection between opportunities for meaningful involvement and student development and learning. A more recent study by Sheldon and Epstein (2005) indicated that the quality of parental involvement matters and subject-specific activities that encourage child–family interaction and participation may influence student achievement in the target subject area.

- What do I do to increase the level of trust between myself and various stakeholders (e.g., colleagues, administrators, students, and students’ parents and guardians)?
- What do I do to overcome challenges faced by students’ families or caregivers to being actively involved with their child’s learning?
- What opportunities do I provide for productive involvement of families?

The Next Step

Now that you’ve had an opportunity to study the National Board standards and core propositions in depth, you are ready to get started with the certification process! Chapter 3 will give you a detailed look at the logistics of the candidate process with...
specific “to-do” lists for those pursuing *Take One!*, full candidacy, retake candidacy, and renewal. Chapter 4 will get you thinking deeply about the process of reflection, which is at the heart of your work toward certification and will provide guidance on how best to enter into this process.

**MY THOUGHTS**

Use this space to record ideas generated from reading this chapter, including the prompts about each of the Five Core Propositions.