Research Summary

The research on National Board Certified Teachers (NBCT’s) is composed of national, regional and local studies. These studies include both experimental and quasi-experimental research designs, utilizing various methods of obtaining and analyzing effects on different variables. The populations sets of teachers analyzed in the studies varies from random assignment and non-random, self-selected participants. Additionally, the NBCT populations in different studies have included NBCT candidates, those who have obtained certification and those who did not apply and are not National Board for Professional Teaching Standards (NBPTS) certified.

The Washington State Institute of Public Policy (WSIPP) reviewed empirical studies on the effects of NBCT’s on student achievement outcomes, with the research question “Are NBPTS-certified teachers more effective than non-NBPTS certified teachers?” (Pennucci, 2011. Slide 4). The WSIPP meta-analysis of previous research found that “a teacher with NBPTS-certification can boost student test scores from 0 to .06 standard deviation units per year; best estimate = .02 standard deviations” (Pennucci, 2011, Slide 14).

We located and analyzed 20 results from 10 high quality studies we could find on this topic.

Finding

A teacher with NBPTS-certification can boost student test scores from 0 to .06 standard deviation units per year; best estimate = .02 SD

While the WSIPP meta-analysis of the effects NBCT’s have on student achievement found that students taught by a National Board Certified teacher outperform those taught by a non-certified
teacher, “not all studies have found a consistent link between NBCT status and greater gains in student learning” (Plecki, 2010, p.43).

Additional areas of research have been identified to further understand the “NBCT” effect:

- The majority of research has found that the process of attaining an NBPTS certification leads to increased teacher knowledge and effectiveness as well as the fact that the NBPTS process is an effective means of recognizing teachers who are already highly effective.

- The use of NBCT's in additional roles and responsibilities within schools and school districts, such as instructional coaches, mentor teachers and teacher leaders has been studied. The majority of research has found that NBCT's are more involved in leadership opportunities following attainment of the certificate.

- Research has found the NBCTs have the same or lower rates of exiting the public education system compared to other teachers.

Research Findings

Teacher Effectiveness and Student Achievement

Several studies have researched the National Board for Professional Teaching Standards (NBPTS) certification process and its ability to distinguish between effective and non-effective teachers, as measured by student outcomes on assessments. The focus on the NBPTS certification process is due to both the need to identify elements of effective teaching practice and improve the quality of the teaching workforce. Due to the financial incentives and connection to state teacher licensure, NBCT's impact on student achievement and their role within a school, a school district and as a resource to the state have also been examined.

The research on the effects of NBCT's on student achievement has been mixed. When compared to teachers who did not apply for NB certification, NBCT's that achieved their certification have been found to be more effective than those NBCT candidates that did not achieve certification (Cantrell, 2008). Additional research confirms a correlation between teachers who “attain certification are more effective than those who are unsuccessful applicants, providing some evidence that NBPTS is in fact identifying the more effective teachers of those they actually evaluate” (Goldhaber, 2004, p.13). Several studies focused on student results on achievement tests in NBCT and non-NBCT classrooms find that students of NBCTs outperform students of non-NBCTs, with the positive effect more noticeable among minority students (Cavalluzzo, 2004; Hakel, Koenig & Elliott, 2008; Goldhaber & Anthony, 2004). In regard to different subjects and grade level effects, Harris & Sass (2007) found that the effect of
NBCT’s varied by subject and grade level. Mixed or statistically non-significant results were found by Sanders, Ashton and Wright (2005).

**Equity and Distribution of NBCT’s**

Some research has addressed the issue of the equity and distribution of NBCT’s in low-performing schools and the “conditions and circumstances necessary for NBCT’s to contribute to the transformation of low-performing schools” (Koppick, Humphrey & Hough, 2007, p. 3). Several studies have identified that most NBCT candidates are from schools with high student achievement and low poverty (Goldhaber, Perry & Anthony, 2004; Koppick, Humphrey & Hough, 2007). In order to address the distribution of NBCT’s, Goldhaber (2007) examined how NBPTS certification affected a teacher’s career path and how long they remain in the teaching profession and in which districts and schools they teach, finding that “NBPTS certification is correlated with increased mobility of teachers within the profession, “at the early-career stage, both white and African-American NBCT’s are more likely than their non-certified peers to change schools within a district or change schools between districts (p. 25). However, Goldhaber also found that NBCTs were least likely to leave the public education system, with those “who apply to the National Board are likely to be the ones with a strong attachment to the teaching profession and the expectation that they will be in the system long enough to recoup the time investment associated with going through the certification process” (p. 27). According to a survey of Washington State NBCT’s in 2006, 13 percent indicated they would be willing to switch to a high-poverty or struggling school with no special incentive and when asked whether they would switch given a $10,000 annual bonus, 46 percent said they would be “very willing” and 37 percent were “somewhat willing” to switch to a high poverty or struggling school (Loeb, 2006). However, in a brief by the Center for Reinventing Public Education it was found that less than 1 percent of NBCT’s in Washington had switched to a challenging school each year, and that increasing numbers of NBCT’s teaching in challenging schools were already in those schools (Simpkins, 2011).

**Professional Development and the National Board for Professional Teaching Practices Process of Certification**

The question as to whether the very process of becoming National Board Certified provides professional development and improves teachers has also been addressed by some researchers. Positive impacts of NBCT on student outcomes and teaching practice has been found by several researchers (Cavaluzzo, 2004; Lustick & Sykes, 2006). The positive effect has been attributed to what teachers learn through the process of becoming certified as measured against professional teaching standards, as well as teacher learning that can occur in cohort based extended learning communities.

**Roles and Responsibilities of NBCTs**

The potential for NBCTs to pursue or be directed into additional leadership roles and responsibilities including mentoring, providing instructional coaching and additional supports in their schools has been studied by several researchers. One study found that teachers changed their roles,
leadership responsibilities and activities due to becoming certified (Sato, Hyler & Monte-Sano, 2002). Loeb and her colleagues (2006) found that while most NBCT’s were involved somewhat in leadership activities prior to certification, “a majority indicate that their involvement has increased as a result of their NBCT status. Developing and facilitating professional development opportunities in their school or district or mentoring new teachers are the kinds of leadership roles these teachers often assume” (p. 12).

**NBCT’s in Washington**

In Washington, the number of NBCT’s has grown significantly since 2000, due in part to the state policy incentives for teachers to obtain certifications, as well as state, district, university and union sponsored preparation and support programs. Washington ranks 2nd nationally in new 2010 NBCT’s behind North Carolina, and 4th nationally overall in total numbers of NBCT’s, with 5,247 NBCT’s in 2010.1 The majority of NBCT’s continue working in classrooms after receiving certification, with “the number of NBCT’s working as classroom teachers in K-12 public education in Washington more than tripling from 2006-07 to 2009-10, raising the proportion of teachers who are NBCT’s from 1.9 to 6.0 percent of the total teacher workforce” (Plecki, 2010, p. 7)

**Retention, Distribution and Mobility**

NBCT’s have become an increasing proportion of the teaching workforce in Washington, with the majority of NBCT’s remaining in teaching positions after certification. In 2009-10, “the overwhelming majority of NBCT’s (91 percent) were in classroom teaching positions for at least a portion of their assignment (3,352 teachers of 3,686). The remaining 334 NBCT’s (9 percent of all NBCT’s) worked in other support, specialist or administrative roles, such as counselor (26 percent), library media specialist (20 percent) or in administrative roles such as certificated administrator (16 percent).” In comparison to other teachers in the state, a greater proportion of NBCT’s have mid-career levels of experience and are more likely to hold a Masters degree, with the regional distribution of NBCT’s roughly corresponding to teachers statewide, with the exception of Western Washington outside of Educational Service District 121. The proportion of NBCT’s who are persons of color is much lower than the proportion of students of color served in the state, however, NBCT’s are located in schools with similar proportions of students of color compared to teachers statewide. The proportion of NBCT’s located in the highest poverty schools has been increasing in recent years and is now close to the state average for all teachers (Plecki, 2010, p. 6-7).

Few NBCT’s change their placement from one year to the next, with fewer than five percent of NBCT’s working as classroom teachers moving to a different primary assignment in the following year.

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1 National Board Certification 2010 Quick Numbers Retrieved September 30,2011
http://www.k12.wa.us/Compensation/pubdocs/NationalBoardCertification2010Numbers.pdf
The majority of the changes in placement are into other support staff positions (library media specialists, counselors, etc.), with a small number of those changing their placements moving into the role of school administration (fewer than 15 individuals in any given year). “Some NBCT’s (18 percent) assumed other teaching roles after certification, serving as Teachers on Special Assignment/lead teachers and curriculum specialists or coaches, roles that give NBCT’s the opportunity to help their colleagues improve” and assumed additional leadership roles after certification, including mentoring, consulting and working with universities (Plecki, 2010, p. 7). NBCT’s are retained in their schools from one year to the next at rates that are comparable to all teachers statewide, with more mobility from one school or district to another and lower rates of exiting the workforce compared to other teachers. There are no large differences among NBCT’s and other teachers in retention rates by endorsement area, with proportionately more NBCT’s holding endorsements in mathematics and science than other teachers (Plecki, 2010, p. 13).

Challenging Schools- NBCT’s Distribution and Equity

“Challenging schools” represent most of the state’s lowest performing schools and serve larger proportions of students of color. According to Plecki (2010), the number of schools identified in the “challenging schools” list has increased during a period in which both the criteria for the list changed, as well as an additional bonus was added for teaching in schools identified as “challenging” (in the 2007-08 school year, the bonus of $5,000 for challenging school began, with the initial criteria for a challenging school being 70% or more students enrolled in the Free or Reduced Price Lunch program (FRPL)). In the second year of the challenging schools bonus (2008-09) the criteria was changed by lowering the FRPL rate to at least 50 percent for high schools and 60 percent for middle schools, with 70 percent for elementary schools remaining unchanged. By year three of the incentive program, the percent of challenging schools with at least one NBCT increased from 21 to 58 percent, with the majority of the increase in the number of NBCT’s coming from teachers earning NB certification who were already located within a challenging school. However, in year three (2009-10) of the incentive program for challenging schools, there were still 40 percent of districts with challenging schools that did not have any NBCT’s within the district (Plecki, 2010, p. 13-16). The challenging schools without NBCT’s were more likely to be located in rural, remote areas and in Western Washington outside of ESD 121, as well in small schools with enrollment less than 200 students. NBCT’s in challenging schools were retained at rates similar or higher than other NBCT’s statewide and at higher rates than other teachers in challenging schools.

Professional Development, Roles and Responsibilities

NBCT’s can play a systemic role in a school district, utilizing their expertise both in their classroom and by assuming different responsibilities in the school or district or in additional leadership roles. Based on survey findings, Plecki (2010) found that NBCT’s “report that NB certification had a positive impact on their ability to evaluate individual student needs, use assessments to inform instruction, use multiple instructional strategies and make a difference in student achievement outcomes” (p. 25). In challenging schools, the impact of National Board certification had a greater
impact, with NBCT’s in challenging schools reporting “that becoming a NBCT impacted their ability to understand how culture and linguistic factors, as well as poverty, affect student learning. Since the NB process requires that teachers show how they impact the learning of their students, it makes sense that NBCT’s who teach students from diverse cultural and linguistic backgrounds, as well as students impacted by poverty, would report greater impact in those areas” (Plecki, 2010, p.27). Additionally, Plecki found that a majority of principals responded that NBCT’s had a “very positive impact” in their ability to “develop professional relationships with colleagues, assume coaching and mentoring responsibilities, contribute to the quality of the professional community, work with building administrator(s), prioritize how to take on additional duties” (p. 29).

According to the survey data, Plecki found that the number of NBCT’s in a building may make a difference in their individual impact, with schools “where there are very few NBCT’s their impact is often described as very positive. This may suggest that they are called on more often to assume leadership roles” (p. 29). The majority of NBCT’s surveyed indicated that they were somewhat or very interested in assuming additional leadership roles, with 92 percent interested in mentoring beginning teachers and 83 percent in mentoring experienced teachers in content areas. The non-NBCT’s respondents also indicated a strong preference for mentoring beginning (85 percent) and experienced teachers (63 percent) (p. 32).

Policy Implications and Areas for Improvement

In the Study of the Incentive Program for Washington’s National Board Certified Teachers, Plecki and the research team identified the policy implications of different decisions regarding NBCT, as well as additional areas for improvement. The study found the following areas for improvement:

- The policy is not yet reaching all schools. The equity of the distribution of NBCT’s remains a concern.
- Additional attention is needed to further diversify both the overall teacher workforce and those who become NBCT’s.
- Some academically struggling schools do not meet the current criteria for a “challenging” school (do not meet the poverty threshold, yet are persistently lowest achieving schools).
- The implementation of the incentive program is largely driven by individual teacher choice. The challenging schools bonus is dependent on individual teachers locating and pursuing potential options in identified schools, the frequency and distribution of openings and is influenced by regional labor market conditions and varying teacher retention rates.
- There is no explicit link to other state or local improvement efforts. The current incentive does not link NBCT’s to school improvement plans, or contain a mechanism to systematically match teachers to schools where their skills may be most useful. Many NBCT’s have interests and abilities in areas of leadership, mentoring and coaching that could be better tapped.
The current policy does not offer differential approaches to address local needs. Districts could be given greater discretion or capacity to identify the “most challenging” schools and place NBCT’s strategically in those schools. Local districts are able to support NBCT candidates in different ways, and less than half of the districts with challenging schools (58 of 136) offer any kind of local support for their candidates. (p. 36-37).

The study identified potential policy options in response to the concerns and areas of improvement noted above:

- Continue with the incentives in place as they are currently constructed, with the current policy rewarding accomplished teaching and strategically targeting high needs schools and further monitoring of outcomes.
- Make a minor adjustment to ensure that all schools identified as persistently low-achieving are included in the list of challenging schools. The adjustment could include both poverty and student performance, including any of the remaining Tier I or Tier II schools on the state’s school improvement list that are not also identified as challenging (do not meet poverty threshold).
- Consider strategies that may further support increase in the number of NBCT’s in challenging schools, particularly those currently untouched by the policy. Proportionately larger numbers of challenging schools in rural and remote areas of the state have no NBCT’s. Several strategies could target this issue, including utilizing NBCT’s to give informational sessions, targeting districts without NBCT’s with additional support and incentives for teachers to become certified, utilizing the Take One program for individuals or school teams to complete one National Board entry and developing specific incentives for groups of NBCT’s to move together to challenging schools.
- Focus on developing an information network that would assist in linking the specific staffing needs of challenging schools with teacher’s skills and experiences.
- Give high-need districts greater discretion to decide which schools are “challenging” (p. 37-38).

Works Cited:


