

THE IMPACT OF

National Board Certified Teachers
on the Literacy Outcomes of
Mississippi Kindergarteners
and Third Graders

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About NSPARC

For more than 15 years, NSPARC has used smart data and analytical techniques to connect academic research to public policy, economic development, and social issues. An interdisciplinary unit at Mississippi State University (MSU), NSPARC is No. 1 in external research funding at MSU. Dr. Domenico “Mimmo” Parisi is the director. For more information, visit www.nsparc.msstate.edu. Any questions about this report should be directed to Dr. Parisi at 662-325-9242.

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EXECUTIVE SUMMARY

The recent passage of the Literacy-Based Promotion Act has drawn greater attention to the need for promoting the reading abilities of K-3 Mississippi public school students. In this context, the National Board for Professional Teaching Standards (NBPTS) has launched an initiative to improve the literacy skills of K-3 Mississippi public school students through expanded utilization of National Board Certified Teachers (NBCT). National Board Certification (NBC) is a voluntary certification program established by NBPTS with the goal of distinguishing effective teachers. The NBPTS project seeks to improve literacy outcomes in Mississippi by having NBCTs mentor K-3 reading teachers on instructional methods, expanding the number of NBCTs serving as Mississippi Department of Education (MDE) Literacy Coaches and summer literacy instructors, and increasing the overall number of K-3 NBCTs working in Mississippi. This new emphasis on leveraging the capacities of NBCTs to enhance the reading skills of Mississippi public school students raises the question of whether teachers with National Board Certification typically make a greater contribution to student literacy achievement than other teachers in practice.

To address this issue, the current study examines the association between early-grade Mississippi public school students receiving reading instruction from a National Board Certified Teacher and their performance on standardized literacy assessments. The analysis focuses on kindergarten and third grade students in academic year 2015-2016. Descriptive and multivariate statistics on literacy outcomes were generated using a combination of data from the Mississippi Department of Education and information on Mississippi NBCTs from NBPTS. The results indicate that students with a National Board Certified reading teacher perform at a significantly higher level on literacy assessments than peers on average. The key findings are as follows:

- Overall, 35.8 percent of kindergarteners with an NBC reading teacher achieved a proficient literacy assessment score, compared to 30.7 percent of other kindergarteners. In addition, 88.2 percent of kindergarteners with an NBC reading teacher achieved growth in literacy assessment performance, while 86.4 percent of their peers did the same (see Figures 1 and 2).
- In total, 42.9 percent of third graders with an NBC reading teacher obtained a proficient literacy assessment score, compared to 32.2 percent of third graders without an NBC reading teacher (see Figure 3).
- The multivariate analysis shows that kindergarteners with an NBC reading teacher had 30.7 percent higher odds than kindergarteners without an NBC reading teacher of achieving a proficient literacy assessment score, after controlling for other factors (see Table 3). In addition, kindergarteners with an NBC reading teacher had 18.6 percent higher odds than peers of achieving growth in literacy assessment performance, holding other factors constant (see Table 4).
- The multivariate analysis shows that third graders with an NBC reading teacher had 10.7 percent higher odds than third graders without an NBC reading teacher of achieving a proficient literacy assessment score, after controlling for other factors (see Table 5).

National Board Certification is an indication that they meet NBPTS-defined standards for accomplished teaching, which are grounded in the organization's Five Core Propositions:

- 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 2017b:1)

The National Board Certification process requires candidates to take a computer-based test of their knowledge and teaching practices regarding their subject area. Candidates are also required to submit three portfolios. The first portfolio consists of student work samples that provide evidence for academic progress along with commentary from the candidate discussing their pedagogical decisions. The second portfolio includes videos showing classroom interactions between the candidate and their students in addition to two commentaries from the candidate on their teaching practices and interactions with students. The final portfolio requires candidates to utilize information on a class of their students along with their knowledge of assessment practices to plan and improve the educational process. Certification is available in 25 areas distinguished both by student developmental level and subject. The certification process can last from one to five years. Under a recently-established policy, maintenance of certification requires teachers to complete a renewal process every five years (National Board for Professional Teaching Standards 2017b).

The NBPTS strategy to utilize National Board Certified Teachers to improve the literacy outcomes of Mississippi public school students has multiple objectives. One is to train NBCTs in Literacy Essentials for Teachers of Reading and Spelling (LETRS)—a methodology endorsed by the Mississippi Department of Education (MDE)—and subsequently have them mentor Mississippi K-3 reading teachers on instructional approaches. Another goal is to expand the deployment of NBCTs as MDE Literacy Coaches - officials who work to advance the agenda of the Literacy-Based Promotion Act by providing professional support and guidance to school-based literacy coaches and teachers (Mississippi Department of Education 2015). The plan also aims to boost the number of NBCTs serving as summer literacy instructors, thus increasing the amount of reading instruction provided by NBCTs to Mississippi students. An additional component of the NBPTS strategy is to increase the number of K-3 National Board Certified Teachers in the state.

This literacy-promotion effort centered on National Board Certified Teachers directs attention to whether NBCTs advance the reading skills of Mississippi public school students in early grades more than other teachers on average. A body of research has developed in recent years that examines the effectiveness of NBCTs in fostering student achievement within particular states and regions. This literature tends to show that having a National Board Certified Teacher is positively associated with student literacy outcomes even after controlling for other factors (Cantrell, Fullerton, Kane, and Staiger 2008; Clotfelter, Ladd, and Vigdor 2006, 2007; Cowan and Goldhaber 2015; Goldhaber and Anthony 2007; Harris and Sass 2009; Vandevort, Amrein-Beardsley, and Berliner 2004). For example, Goldhaber and Anthony (2007), examining third through fifth graders attending North Carolina public schools during 1997-1999, report that the reading ability gains achieved by students of NBCTs significantly exceeded the corresponding gains achieved by peers, holding constant student demographic characteristics; teacher demographic

SUMMARY

The issue of how to promote the reading skills of early-grade Mississippi public school students has received increased attention in the wake of the 2013 passage of the Literacy-Based Promotion Act. In line with these changes, the National Board for Professional Teaching Standards has initiated a project to improve the literacy rates of K-3 Mississippi public school students by means of National Board Certified Teachers. The NBPTS program aims to enhance student reading ability by utilizing NBCTs to mentor K-3 Mississippi reading teachers on instructional methods, increasing the number of NBCTs who serve as MDE Literacy Coaches and summer literacy instructors, and expanding the pool of K-3 NBCTs in Mississippi. These NBCT-focused efforts to enhance the reading skills of Mississippi students raise the question of whether the teachers with National Board Certification improve student literacy outcomes more than other teachers in practice.

Drawing on data from the Mississippi Department of Education and the National Board for Professional Teaching Standards, this report sought to provide evidence concerning whether NBCTs tend to enhance the literacy abilities of early-grade students in Mississippi. The analysis focused on kindergarten and third grade students attending Mississippi public schools during academic year 2015-2016. Overall, the results show that students with an NBC reading teacher significantly excel peers with a non-NBC reading teacher on measures of reading ability. In particular, kindergarteners who received reading instruction from an NBCT were 5.1 percentage points more likely than other kindergarteners to achieve a proficient score on the MKAS2 reading test, and 1.8 percentage points more likely to achieve performance growth on the MKAS2. Furthermore, third graders with an NBC reading teacher were 10.7 percentage points more likely than peers to achieve a proficient score on the MAP English test. The advantage in literacy skills of students taught by an NBCT remain even after controlling for student demographic and academic characteristics, teacher experience levels, and general school performance. Holding constant other factors, kindergarteners with an NBC reading teacher had 30.7 percent and 18.6 percent higher odds than other kindergarteners of, respectively, achieving a proficient score on the MKAS2 and achieving performance growth on the MKAS2. In addition, third graders with an NBC reading teacher had 10.7 percent higher odds than peers of achieving a proficient score on the MAP English test, after controlling for other attributes.

The present study has consistently found that being taught by a National Board Certified reading teacher is associated with a higher level of literacy achievement for early-grade Mississippi public school students. The results thus lend credence to current efforts to enhance literacy outcomes in the state through greater utilization of National Board Certified Teachers. Future research could build on this analysis by examining how the relationship between teacher NBC status and the reading skills of Mississippi public school students varies by student attributes. Such work would serve to refine the picture presented here of NBCTs' potential impact.