



School accountability and teacher mobility[☆]

Li Feng^a, David Figlio^{b,*}, Tim Sass^c

^a Texas State University, United States

^b Northwestern University and NBER, 2040 Sheridan Road, Evanston, IL 60208, United States

^c Georgia State University, United States



ARTICLE INFO

Keywords:

School accountability
Teacher quality
Teacher labor markets
Administrative data

ABSTRACT

We exploit a 2002 change in Florida's school accountability system, and use regression discontinuity and difference-in-difference approaches, to study the effects of accountability pressure on teacher mobility. While school grading "shocks" do not affect mobility at most parts of the measured school quality distribution, there exists strong evidence that teachers are more likely to leave schools that have received a failing grade. Receipt of an "F" grade translates into differently higher turnover for the best teachers, measured by contributions to student test scores, at a school. These results are robust to a wide range of parametric and nonparametric model specifications.

1. Introduction

School accountability – the process of evaluating schools based on performance of their students and holding the schools responsible for student outcomes – is becoming increasingly prevalent around the world. In the U.S., the passage of the Every Student Succeeds Act (ESSA) in 2015 has freed states from uniform federal accountability standards based on "adequate yearly progress" (AYP), but it also requires states to submit their own school accountability plans which must include multiple measures of academic performance. While some states have been moving away from public reporting and accountability grades (most notably, California, Nevada, Texas, and Virginia), school ratings systems are still ubiquitous in many states. As of September 2016, letter grades (or similar types of ratings, such as star ratings) are assigned to schools either statewide or in very large jurisdictions in 35 states and the District of Columbia that are not directly related to AYP. Moreover, a number of states have recently added additional heft to their accountability systems, such as by tying school vouchers to accountability grades in places like Indiana, Louisiana, Ohio, and Pennsylvania. Still others, such as Illinois, are currently considering new accountability systems that would be linked to school finance. As states submit their

plans required under ESSA, they must decide how they want to shape their school accountability frameworks. Better understanding of both the benefits and potential negative consequences of this form of grading systems is particularly valuable at this time.

Accountability systems typically provide direct incentives in the form of explicit rewards or sanctions associated with student performance. In addition, accountability systems may engender social pressure, since a school's constituents have both educational and financial¹ reasons to influence low-performing schools to improve. There exists considerable evidence that schools are changing as a result of accountability, but the evidence regarding the effects on teachers – the people charged with carrying out school policies and practices – is extremely limited. This paper makes use of detailed individual teacher-level data from Florida to gauge the degree to which these direct and indirect forms of accountability pressure affect the occupational choices of teachers.

There is strong reason to believe that accountability pressure influences the ways in which educators carry out their jobs. The weight of the evidence suggests that accountability systems tend to improve the outcomes of low-performing students (see, e.g., Ballou and Springer, 2008; Carnoy and Loeb, 2002; Chakrabarti, 2007; Chiang, 2009; Dee

[☆] This is a considerably updated version of a paper with the same name that first appeared as NBER working paper 16070 (June 2010). We are grateful to the U.S. Department of Education (via the National Center for the Analysis of Longitudinal Data in Education Research), National Science Foundation and National Institutes of Child Health and Human Development for research support and to the Florida Department of Education for providing the data for this analysis. We also wish to thank seminar participants at Indiana, Northwestern, Oregon, Wisconsin, and the Swedish Research Institute for Industrial Economics, as well as conference participants at the American Education Finance Association, Association for Public Policy Analysis and Management, Society for Research on Educational Effectiveness, and Southern Economic Association meetings, for helpful comments. We alone are responsible for any errors in analysis or interpretation. The results reported herein do not necessarily reflect the views of the Florida Department of Education or of our funders.

* Corresponding author.

E-mail address: figlio@northwestern.edu (D. Figlio).

¹ School accountability ratings are capitalized into housing prices (Figlio and Lucas, 2004), which in turn affect the property tax base for schools, and they affect a school's ability to raise voluntary contributions (Figlio and Kenny, 2009).

and Jacob, 2011; Figlio and Rouse, 2006; Hanushek and Raymond, 2005; Ladd and Lauen, 2010; Reback et al., 2014; Rockoff and Turner, 2010; Rouse et al., 2013; West and Peterson, 2006; Wong et al., 2010), implying that these systems are changing the ways in which schools do business.² Rouse et al. (2013) document a number of the ways in which accountability pressure has changed school instructional policies and practices in Florida's low-performing schools, and relate these instructional policy and practice changes to increased student performance. The same pressures to improve efficiency also may lead to other changes in the school environment; Booher-Jennings (2005), Krieg (2008), Neal and Schanzenbach (2010), Ozek (2010) and Reback (2008) show that schools subject to accountability pressure tend to concentrate attention on some students at the apparent expense of others. Some schools have responded by differentially reclassifying low-achieving students as learning disabled so that their scores will not count against the school in accountability systems (see, e.g., Cullen and Reback, 2007; Figlio and Getzler, 2007; Jacob, 2005).³ Figlio and Winicki (2005) suggest that Virginia schools facing accountability pressures altered their school nutrition programs on testing days to increase the likelihood that students will do well on the exams, and Figlio (2006) indicates that schools differentially suspend students at different points in the testing cycle in an apparent attempt to alter the composition of the testing pool.

With school accountability changing the ways in which schools are operating, it seems natural to believe that these systems would influence the teacher labor market. School accountability systems may influence the desirability of certain teaching jobs, and may also affect the willingness of schools to retain certain teachers. From a theoretical perspective, the effects of accountability pressures on the teacher labor market are ambiguous. On the demand side, in order to avoid sanctions and/or the stigma associated with being designated as a “failing” school, schools could increase their efforts to identify low performing teachers and remove them from their classrooms. On the supply side, accountability pressure and associated changes in school policies could lower the net benefit of teaching in a school by reducing teacher discretion over curriculum or teaching methods. Likewise, the potential stigma from teaching in a “failing” school could lead some teachers to seek employment at other schools. On the other hand, the resources that often accompany sanctions (e.g. reading coaches, enhanced training for teachers, etc.) could reduce the non-monetary costs associated with working in low-performing schools and actually increase teacher retention.

A number of recent papers have analyzed the determinants of teacher mobility and attrition (Boyd et al., 2005, 2006; Feng, 2009; Hanushek et al., 2004; Imazeki, 2005; Jackson, 2012, 2013; Krieg, 2006; Podgursky et al., 2004; Scafidi et al., 2007). However, the literature relating recent public policy changes regarding teachers, such as accountability pressures, to teachers' labor market decisions has been much spottier. Boyd et al. (2008) explore the responses of teachers to the introduction of mandated state testing in New York State. They find that teacher turnover in fourth grade, the critical accountability year in New York, decreased following the introduction of testing, and that entrants into fourth grade were more likely to be experienced teachers than had previously been the case. Clotfelter et al. (2004) evaluate how North Carolina's accountability system influenced the ability of schools serving low-performing students to attract and retain high-quality teachers. They find that the introduction of the accountability system exacerbated teacher turnover in these schools, though it is less evident that accountability led to lower qualifications of the teachers serving low-performing students. Both of these papers carefully describe the accountability systems in their states, but because they evaluate

accountability systems that affected all schools within a state, it is difficult to derive causal inference from their analyses.

In this paper, we exploit a major rule change in Florida's school accountability system that took place in the summer of 2002 to identify the effects of changing school accountability pressures on teacher mobility between schools and occupations. Florida had graded every school in the state on a scale from “A” to “F” since the summer of 1999, based on proficiency rates in reading, writing and mathematics. Florida's system of school accountability, called the A+ Plan for Education, included a series of rewards and sanctions for high-performing and low-performing schools. Florida's system has become a model for the rest of the United States, with a number of states and localities, ranging from Arizona to Indiana to North Carolina to New York City,⁴ adopting accountability systems that mirror many key features of the policy. In 2002, the state dramatically changed its grading system to both recalibrate the acceptable student proficiency levels for the purposes of school accountability and to introduce student-level changes in test scores as an important determinant of school grades. Using student-level micro-data to calculate the school grades that would have occurred absent this change, we demonstrate that half of all schools in the state experienced an accountability “shock” due to this grading change, with some schools receiving a higher grade than they would have otherwise received and other schools receiving a lower grade than would have otherwise occurred. Furthermore, some schools were shocked downward to receive a grade of “F”, which no school in the state had received in the prior year of grading. These grading shocks and the sharp cut-offs for specific school grades provide the vehicle for identification of accountability effects in this paper.⁵

We make use of the specific details of this policy change as well as teacher transitions that occurred after versus before the policy change, and employ both difference-in-difference and a series of regression discontinuity approaches to investigate the effects of accountability shocks on teacher mobility. While we find little evidence suggesting that other grade thresholds made a difference in teacher mobility, the results are very consistent with regard to teachers in schools shocked to receive a grade of “F”: Schools that just fell into the “F” category under the revised school grading scheme experienced a discrete jump of 4–17 percentage points in the probability of teacher turnover relative to schools that just missed being branded as an “F” school. The general finding that receipt of an “F” school grade significantly boosts teacher mobility is robust to a variety of functional forms and estimation techniques – both regression discontinuity and difference-in-difference strategies. Inclusion of a variety of additional controls for observed teacher, classroom, school, and district characteristics yields even higher estimated impacts on the rate of teacher mobility.

Since Florida has had statewide achievement testing in all grades 3–10 since 1999–2000 we are also able to compute “value-added” measures of teacher quality and determine whether receipt of an “F” tends to increase or decrease the mobility of high quality teachers at a school. We find that receipt of an “F” grade translates into differentially higher turnover for the best teachers at a school (measured by their contribution to student test scores). Given the important role of teacher quality in determining student achievement, our findings suggest that school accountability can have very consequential effects for both teachers and their students.

2. The Florida school accountability program

Florida's A+ Plan education reform called for annual curriculum-

² Craig, Imberman, and Perdue (2013) identify some ways in which school accountability systems influence school resource allocations.

³ Chakrabarti (2007), however, does not find that schools respond in this way.

⁴ In addition to Arizona, Indiana, North Carolina, and New York City, other states recently adopting school grading systems modeled after Florida's include Alabama, Louisiana, New Mexico, Ohio, South Carolina, and Utah.

⁵ A number of authors, including Chiang (2009), Figlio and Kenny (2009), Rouse et al. (2013), and West and Peterson (2006), have made use of this policy change for identification of other effects of school accountability.

Download English Version:

<https://daneshyari.com/en/article/7370928>

Download Persian Version:

<https://daneshyari.com/article/7370928>

[Daneshyari.com](https://daneshyari.com)