

TEACHER REFORMS AND TEACHER ATTRITION IN MICHIGAN

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Overview

This policy brief examines the impact of Michigan teacher reforms on teacher exits (also known as attrition) from the profession. Teacher attrition is one important component of the teacher labor market and can be influenced by a variety of factors. Although moderate teacher attrition is common, elevated exit rates can be both causes and symptoms of larger problems within a school system (Ingersoll, 2001). Teacher attrition in Michigan is especially topical, given the recent attention it has been given both in the news media and in policy. The brief includes a discussion of some potential causes of changes in attrition rates, with a deep dive into one candidate cause: the 2011 labor market reforms in Michigan.

This brief uses data from the Michigan Department of Education (MDE) and Center for Educational Performance and Information (CEPI) to examine changes in teacher attrition rates in Michigan from 2005-2015.

Key findings include:

- Teacher attrition rates, which were relatively stable before 2010, began increasing substantially in 2011, with an increase of about 1 percentage point per year.
- The overall increases in teacher attrition beginning in 2011 are not attributable to Michigan's reforms to teacher evaluation and collective bargaining.
- Teacher attrition increased in districts with higher student poverty rates, lower student performance, and more high school dropouts. For these groups, the increase in attrition appears to have been caused by labor market reforms, especially among early-career teachers.
- Teachers with specialized degrees in STEM or from selective universities showed no significant change in patterns of exit from the profession attributable to Michigan's labor market reforms.

Background

In 2011, Michigan policymakers passed legislation that focused predominately on teacher evaluation and collective bargaining restrictions (Spalding, 2014). State bills [PA 100](#), [PA 101](#), [PA 102](#), and [PA 103](#) of 2011 attempted to improve teacher quality and performance through a prescribed teacher evaluation system that tied student performance to teacher effectiveness, hiring, and firing practices, and through reductions in the scope of collective bargaining. In 2012, the Michigan legislature passed [PA 349](#), making Michigan a “right to work” state. That law removed requirements for teachers to belong and contribute dues to their local teachers’ unions.

Together, these laws put new limits on collective bargaining and therefore local purview over teacher evaluation, transfer, reassignment, compensation based on performance, and classroom observations. Furthermore, the state provided additional oversight on the length of the school year and school discipline. Teachers’ tenure rights became tied to effective ratings on their teaching evaluations, based on state approved models. Finally, the length of probation for teachers was increased from 4 years to 5 years. Combined, these reforms restricted the scope of local collective bargaining, giving Michigan school districts less autonomy than most other states in the country (Zeehandelaar, 2012).

One main aim of teacher evaluation reform was to improve teacher quality. Advocates argued that implementing a rigorous teacher evaluation system would provide administrators with better information when making hiring and firing decisions, thus enabling a more effective teacher workforce, which in turn would lead to increases in student achievement. However, others raised concerns that increased emphasis on testing and

high stakes evaluation would deter future teachers and increase teacher turnover within schools.

Teachers value job stability and other benefits unrelated to their financial gain. Past research has found that teachers value both pecuniary and non-pecuniary compensation and may be particularly risk-averse to potential changes in employment (e.g. Murnane & Olsen, 1990; Rothstein, 2014; Loeb & Page, 2000). Thus, as teacher evaluation and collective bargaining reforms legislate more stringent hiring, firing, and tenure protection based on performance, thus increasing the level of risk associated with teaching, one might expect some subset of risk averse teachers to leave the profession. The state’s largest teachers’ unions, the Michigan Education Association (MEA) highlighted this possibility in a recent article titled, “The Disappearing Educator.” There they suggest a “toxic brew of conditions...[including] ever rising job demands, teacher scapegoating, loss of autonomy, budget cuts, and over testing” have caused teachers to leave their jobs and others to forgo the teaching profession (Ortega, 2017)

How This Analysis Was Conducted

We used data from the Michigan Department of Education (MDE) and the Center for Educational Performance and Improvement (CEPI) to examine the impacts of teacher evaluation and tenure reform on teacher retention. We followed the population of 140,000 Michigan teachers from the 2005-2006 through 2015-2016 academic years. Within this time period, we identified teachers’ movements across districts and out of the profession.

We considered teachers as having left the profession if they are not present in our data for at least two years. As such, we restricted our analysis to academic years 2005-2006 through 2013-2014. Within these years, teachers who left the profession

include teachers who may have taken leave but plan to reapply to a teaching position, those who have permanently left or retired, or teachers who moved to a school outside the Michigan public sector, such as a private school or out of state. We exclude charter school teachers from this analysis

We also adjusted our estimates for other specific local or state-wide policy reforms that may have impacted teacher employment, including a one-time state-wide retirement incentive implemented in 2010. In addition, given Detroit’s recent and current political climate, financial strain and bankruptcy, and its position as the largest public school district in Michigan, we excluded teachers in that city from our main analysis and examined patterns of teacher movement there separately.

To examine variation in teacher retention across district contexts, we used several proxies for challenging district climate: the proportion of lower income students in 2005 (our base year of study) as reported by free and reduced priced lunch enrollment (Hanushek, Kain, & Rivkin, 2004), district performance on the ACT, and high school drop-out rates.

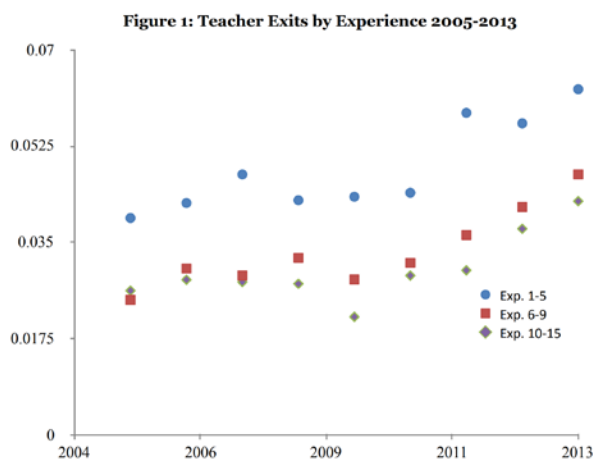
Finally, we hypothesized teachers may respond to changes within their profession differently based on their alternative employment opportunities. Therefore, we identified those teachers with a secondary STEM credential and those with diplomas from more selective universities. We expected that these individuals may have more opportunities for employment outside teaching and therefore analyze their responses to teacher evaluation and tenure reform separately.

Findings

Each year, there will be teachers that leave the profession or their school. On average, in Michigan

approximately four percent of teachers leave the profession, excluding end-of-career retirements.

Since 2011, a growing proportion of teachers are leaving the profession, but reform may not be the cause. Michigan teachers have been between 0.6 and 1.7 percentage points more likely to leave the profession since 2011. This change was most apparent in 2011 itself, especially for early-career teachers (Figure 1). We found, however, that although increases in teacher exit coincide with reform, the new laws themselves do not appear to be the cause of those exit increases overall. We draw this conclusion because individual districts were not eligible for the full slate of reforms until existing teacher contracts expired. We did not observe greater rates of exit when districts’ contracts expired and reform took full effect.



Collective bargaining and evaluation reforms differentially impacted teachers across schools.

We found that although reforms did not cause higher exit rates overall, the laws did cause increased attrition from hard-to-staff schools. Specifically, teachers in schools with higher rates of students who qualified for free or reduced priced lunch (a proxy for family income), lower ACT scores, and higher student drop-out rates were more likely to leave due to the Michigan reforms .

Teachers early in their career were differentially impacted by education reforms. Given that the reforms included a focus on teacher tenure, we examined the differential impacts of reform on teachers early in their career. We found that in hard-to-staff districts, teachers with less than six years of experience responded quickly to reforms when they were first implemented in 2011. This may be due to the fact that they experienced a longer probationary, pre-tenure period, and to the new requirement to show three effective performance ratings consecutively in order to achieve tenure.

Teachers with more alternative opportunities outside teaching due to degrees in greater demand show no increased likelihood to leave the profession. When we examined Michigan teachers with a STEM degree and those with degrees from more selective universities we did not find a significantly higher rate of exit caused by reform.

Similar patterns of teacher turnover persist when considering Detroit Public Schools. Given Detroit's unique local and political context, we ran all analyses with and without Detroit included. We find similar patterns of teacher turn-over across years regardless of whether or not we include Detroit teachers in our sample.

Non-instructional educational staff show no significant differences in turnover pre and post reform. To validate our conclusion that reform did not cause higher attrition overall but did increase exits from more challenging schools and among new teachers, we examine patterns of turnover across educational professional staff who did not fall under the purview of the 2011 reforms. This includes non-instructional professional staff from the following occupations: 1) school guidance counselors; 2) social workers; 3) accountants; 4)

nurses and other health services workers; 5) occupational and physical therapists; 6) school psychologists; and 7) audiologists. Our results showed no significant differences in turnover among these staff across years. Furthermore, our results remained consistent even for those in challenging districts. This supports our conclusion that teachers in more challenging districts exit as a result of the reform because we can rule out the possibility that teacher exits were part of a larger pattern of staff attrition from these schools for reasons unrelated to reform.

Conclusion

We examine patterns of teacher exit and consider how teacher turnover differs across years and a variety of local conditions. We find that although changes to teacher evaluation, tenure and collective bargaining did not seem to impact the average teacher's decision to leave the profession, teachers early in their careers or in particular districts were more likely to leave. Specifically, we note:

- Overall, although more teachers are leaving Michigan schools in recent years, these exits do not appear to be actually caused by labor market reforms statewide.
- Those reforms did, however, impact teacher turnover in some districts and among some teachers. Specifically, teachers within challenging district contexts—with greater poverty rates, lower student performance, and higher drop-out rates—had higher rates of attrition post reform.
- Teachers early in their careers also are more likely to leave the profession post-reform, and in hard-to-staff districts reform may have actually caused new teachers to exit.

These results imply that policymakers should consider how specific kinds of teachers, including

those who are teaching in the most challenging contexts or who are early in their careers, might respond to reforms that impact job stability and worker protections.

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DISCLAIMER: This research result used data collected and maintained by the Michigan Department of Education (MDE) and/or Michigan's Center for Educational Performance and Information (CEPI). Results, information and opinions solely represent the analysis, information and opinions of the author(s) and are not endorsed by, or reflect the views or positions of, grantors, MDE and CEPI or any employee thereof.