

**NCLB and Curriculum Standards: What really
impacts teachers' intentions to leave the
profession?**

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Master's Thesis – Quantitative Methods in the Social Sciences

May 8, 2010

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Introduction

No Child Left Behind under George W. Bush

With the advent of the No Child Left Behind (NCLB) Act in 2001, American education has become a system heavily based on standards and accountability. The NCLB law was the reauthorization of the Elementary and Secondary Education Act (ESEA) of 1965, which was part of President Lyndon B. Johnson's War on Poverty. The ESEA was initially established to equalize access to education and to provide funding for instructional materials, professional development, and resources to help low-income students succeed. In its 2001 iteration, No Child Left Behind was intended to help all students succeed by holding teachers and school systems accountable for students' progress. So far, the way in which NCLB measures accountability has been through mandating that students take a multitude of national and state-specific standardized exams, usually in math and reading. This was done in order to be able to compare students on a national and state level, and to fully understand, through students' test performance measured at a single point in time, whether they were making adequate educational progress. While many people agree in theory with the concept of accountability and ensuring that all American students are educated enough to be individually prosperous and contribute to the well-being of society, there has been a great deal of opposition to the way in which the law has been implemented. For instance, under NCLB, the academic standards were developed by each state individually, which has meant that across the states, standards have varied widely in rigor. Some academically underperforming states made sure that their standards were low enough so

that their students could be seen as proficient. Further, academic proficiency in a state such as Mississippi looked quite different from academic proficiency in a state such as Connecticut. In many teachers' and policymakers' opinions, the watering down of academic standards in order to meet NCLB requirements is not the way to improve education in America.

Beyond the state standard issue, the almost exclusive focus on accountability has led low-performing schools to focus almost exclusively on helping their students pass state tests in fear of losing funding or even getting shut down. With the threat of such detrimental sanctions from not meeting AYP (Adequate Yearly Progress)¹, it is understandable that schools would want and need to do whatever necessary to remain a school. Thus, an unintended consequence of NCLB has been that teachers now have a declining degree of autonomy over their classroom, and are no longer able to focus on innovative, fun, and differentiated ways of teaching. Since teachers, schools, and districts are held accountable through their students' exam scores, teachers often have instructions from their administrators to make sure the students are prepared for the national and state standardized exams, since those are the metrics on which the school will be evaluated. This results in many teachers spending inordinate amounts of time attempting to prepare their students for math and reading test questions, which takes time away from other subjects, and takes time away from teachers' ability to experiment with different pedagogical approaches to best to help their students learn a concept or skill.

¹ "Under the NCLBA, each State establishes a definition of "adequate yearly progress" (AYP) to use each year to determine the achievement of each school district and school. The new definition of AYP is diagnostic in nature, and intended to highlight where schools need improvement and should focus their resources. The statute gives States and local educational agencies significant flexibility in how they direct resources and tailor interventions to the needs of individual schools identified for improvement." (US Department of Education 2002).

No Child Left Behind under Barack Obama and Arne Duncan

President Obama and Secretary of Education Arne Duncan are currently working to reauthorize and improve No Child Left Behind and address some of the issues associated with the 2001 version of the law. To address the issue of varying, watered-down state standards discussed above, the administration is moving to create a set of national, common core standards, which are intended to provide academic rigor for students across the country as well as prepare them for secondary education. In addition, the administration is allocating a great deal of funding, (approximately \$4 billion) through its Race to the Top fund, toward lower-performing schools and districts that are developing innovative ways to reform education in their schools and help their students succeed. One of the objectives of this funding is to turn around underperforming schools. This method of providing funding to lower-performing schools that show promise through their development plans is quite different from the approach outlined above, in which underperforming schools would be shut down, and perhaps this new approach is more palatable. While I believe these changes to NCLB will be good for American education, there are still some major concerns with the law's reauthorization regarding the strict adherence to standards and teachers' declining degree of autonomy in the classroom.

Teacher Satisfaction, Retention, and Turnover

Currently, this country suffers from a lack of qualified teachers in the highest needs schools, as the best teachers tend to want to work with the best students, who are generally found in high-achieving schools. In order to attract high-quality teachers either into the profession or into lower-achieving schools, philanthropic and governmental organizations have implemented a few noteworthy programs. Teach for America (TFA), an organization funded by the government, foundations, and private donors, recruits talented, young individuals who have demonstrated leadership qualities in a variety of fields such as business, law, medicine and education (TFA website). The idea is to attract these individuals with a variety of personal and academic backgrounds into the teaching profession. TFA places their teachers only in underserved schools, and requires them to make a 2-year commitment to teaching.

In addition to TFA, KIPP schools (Knowledge is Power Program), an independently funded, “national network of free, open-enrollment, college-preparatory public schools dedicated to preparing students in underserved communities for success in college and life” (KIPP website), recruits quality teachers by offering higher salaries than traditional public schools and offering comparable benefits. Although KIPP teachers are required to work a 9-hour work-day during the week and are asked to work some Saturdays, a premium is put on collaboration with colleagues and professional development to keep everyone motivated. Since teachers value this type of collaboration, the KIPP model has been relatively effective in recruiting high-quality teachers. In addition, all KIPP teachers share a common philosophy that every underserved child can

succeed in school, and they work together to help make that happen. Thus far, KIPP schools have been largely successful in terms of graduation and college-going rates.

It is important to discuss the teacher attraction programs above as their very existence shows we are struggling to draw qualified experts into the teaching profession. Many will agree that teachers are the cornerstone of our education system, and without the ability to recruit and retain qualified and talented teachers, especially in high-need subjects and schools, students will struggle to succeed academically. This issue of teacher turnover, retirement, and retention has been studied at length by various researchers. The findings, thus far, show that young teachers tend to leave the profession at higher rates than older teachers, and that school conditions such as administrator support and student behavior play an important role in teachers' job satisfaction, and thus in their decision to either leave the profession completely or to move to a different school or district (Ingersoll, 2001). My thesis will focus on teacher job satisfaction and teachers' intentions to either stay or leave the profession. In particular, I am interested in the relationship between teachers' decreasing degree of autonomy due to NCLB and increasing curriculum standards, and what effect that has on their decision to leave the profession. My hypothesis is that when teachers feel like they are "teaching to the test" and do not have a substantial degree of autonomy to teach what and how they want to, they will be more likely to be dissatisfied with the profession, and thus more likely to leave teaching and look for a job in a different field.

My findings will show, however, that while overall, about half of teachers are dissatisfied with the standardized assessment program, this actually does not drive teachers to intend to leave the profession. Rather, the driving factor is actually how well

the principal works with the teachers to help them meet these curriculum standards imposed by NCLB.

Previous research has found, as stated above, that school conditions play a significant role in teachers' decisions to leave, but very few studies have focused specifically and in-depth on the effect of the NCLB law and standards on teachers' satisfaction and their decision to stay or leave the profession. The primary reason I am interested in this topic is that with the Obama administration, we can expect to see changes, as noted above, in the foundation and stipulations of NCLB. I hope that showing what effect increased adherence to state standards and tests has had on teacher satisfaction will provide implications for the direction NCLB will need to go in the future. I often feel that academic research does not hold attitudinal and perception-based research in as high esteem as research on hard data, and I believe that can have negative implications. Attitudinal data from teachers will be particularly important to understanding how to keep them in the profession. Most often, teachers themselves make the decision whether to stay or leave their jobs, so it would behoove the community to understand what drives those decisions. This research, along with other research on teacher turnover and satisfaction, may also hold particular importance for the policy that the new presidential administration develops to retain quality teachers.

Literature Review

Teacher Recruitment and Retention Research

In 2005, the National Center for Education Statistics (NCES) did a study on teacher mobility, and presented some facts about teachers that will help me set the stage for the rest of my literature review and analysis. They found that “During the 1999–2000 school year, a total of about 3,450,000 teachers worked in public and private elementary and secondary schools across the country—representing about 2.7 percent of the overall U.S. workforce that year” (NCES 2005). Also in the 1999-2000 school year, almost 83% of teachers stayed in the same school as they were in previously, 17% of teachers were new hires that year, and 16% of teachers left the profession or moved to another school at the end of that year, for various reasons. Out of that 16% of teachers who turned over, half moved to a different school, and 2% retired. Therefore, the other 6% (approximately 207,000 teachers) left the profession for reasons other than retirement, such as dissatisfaction.

In 2008, the year with the latest available data on teacher trends, NCES reports that there are a total of 3.7 million teachers, and 17% of these teachers (629,000 teachers) turned over, by either moving to another school or leaving the profession. Similar to the findings from the teacher mobility study mentioned above, NCES reports that “almost half of this teacher turnover was due to transfers: 8 percent of the teacher workforce (or 289,000 teachers) transferred to a different school. The remainder (9 percent of the teacher workforce or 333,000 teachers) was due to teachers who left teaching: teachers who took a job in a field other than elementary or secondary teaching (4 percent),

returned to school for further education (0.3 percent), left for family reasons (e.g., to raise children or take care of other family members) (1 percent), retired (2 percent), and left for miscellaneous “other” reasons (1 percent)” (NCES fast facts, 2009:

<http://nces.ed.gov/fastfacts/display.asp?id=28>). This shows that the data on teacher turnover did not change much in the years between 2000 and 2004.

In the majority of recent research on teacher satisfaction and turnover, there have been a few common findings. First, several authors found that organizational or work conditions were the strongest driver of teacher satisfaction (Culver 1990, Ingersoll 2001, Stockard and Lehman 2004, Liu and Ramsey 2006, Kukla-Acevedo 2009). Specifically, student behavioral problems (Kukla-Acevedo 2009, Ingersoll 2001, Liu and Meyer 2005) have played a significant role in teachers’ decisions to leave the profession, particularly with first-year teachers. In addition, increases in school poverty rate, which is often correlated with school-wide behavioral problems, can be related to likelihood to leave. In a 2009 longitudinal study of teacher turnover in Florida, Li Feng did a hazard rate analysis and found that “increases in the poverty rate at a school are associated with a greater likelihood of leaving the public school system in Florida. Specifically, a one-percentage-point increase in the school poverty rate is associated with a 57% increase in hazards/odds of leaving” (Feng 2009). However, in this study, Feng also found that classroom characteristics and work conditions, specifically math performance, were a stronger driver of teacher turnover than overall school characteristics. She found that “within the same lowest quartile math schools, the median survival time for teachers with the top quartile students is five years, compared to the median survival time of four years for teachers with the lowest quartile students in their classrooms. This difference in

classroom assignment is even more pronounced in the schools with the highest-performing students. The median survival time for teachers with the highest-performing students is seven years, three more years than the median survival time for teachers with the lowest-performing students in their classroom” (Feng 2009)

Researchers have also included the notion of autonomy within the concept of work conditions; however, the findings on autonomy have not always been consistent. In his article entitled “Teacher Turnover and Teacher Shortages: An Organizational Analysis,” Richard Ingersoll found that lack of teacher autonomy was a predictor of turnover. In particular, schools with higher levels of faculty decision-making influence and autonomy have lower levels of turnover. He writes, “A one unit difference in reported teacher influence between schools is associated with a 26% difference in the odds of a teacher departing” (Ingersoll, 2001). Earlier research also found that teachers who were given more autonomy in their classroom “tend to report lower levels of stress (Byrne, 1994; Sutton, 1984 as qtd in Kukla-Acevedo 2009), and were more likely to be satisfied” (Schwab & Iwanicki, 1982 as qtd in Kukla-Acevedo 2009). In addition, in Harris Interactive’s 2009 study on the American teacher, they found that “teachers who plan to leave are more likely than others to report worse experiences than expected with the professional prestige of teaching, salary and benefits, and control over their own work” (Markow et. al, 2006). However, in her 2009 article entitled “Leavers, Movers, and Stayers: The Role of Workplace Conditions in Teacher Mobility Decisions” Sharon Kukla-Acevedo did not find that autonomy was a significant predictor of teacher attrition. Instead she found that the only significant predictor of teacher turnover was lack of

administrative support, which was one of Ingersoll's findings as well (Kukla-Acevedo 2009).

Administrative and collegial support, or lack thereof, has also been studied in relation to teacher satisfaction and turnover. In many recent studies, this has been either the strongest driver, or one of the strongest drivers, of teacher turnover (Ingersoll 2001, Kukla-Acevedo 2009, Johnson 2003, Stockard and Lehman 2004). In his 2003 article entitled "Pursuing a Sense of Success: New Teachers Explain Career Decisions," Johnson found that "many of the teachers from this sample who left teaching after one or a few years cited lack of support from their school and administration as a big influence on their decision to leave the profession completely, or to move to another school" (Johnson 2003). Similarly, in a 2004 article on state and nation-wide trends in teacher satisfaction of first-year teachers, Jean Stockard and Bryan Lehman found that the "most important influences on satisfaction involve variables related to social support and school management, and that the most important influence on retention decisions is job satisfaction" (Stockard and Lehman 2004). Even beyond research on the teaching profession, studies have shown that organizational ties and social networks are important drivers of job satisfaction, particularly in non-profit settings. In their article entitled "The Ties that Bind: Social Networks, Person-Organization Value Fit, and Turnover Intention," Donald Moynihan and Sanjay Pandey write, "We find support for the hypothesis that social relations shape turnover intention. Employees who feel a sense of obligation toward their coworkers are less likely to consider exiting the social network of which they are a part, either in the short or long term" (Moynihan and Pandey 2007). While these studies have shown that a supportive administration is important for teacher

satisfaction and retention, they have often not identified what this administrative and social support looks like. We do not know from these studies what specific steps administrators should take to support their teachers.

Researchers have also studied salary as a driver of teacher satisfaction and turnover. Generally, these studies have found that salary is a relatively strong and significant predictor of teacher satisfaction and likelihood to leave the profession (Liu and Ramsey 2006, Liu and Meyer year, Feng 2009, Markow 2009, Darling-Hammond 2003, Tuck et.al 2009). For instance, in the 2009 study on the American teacher, Markow et. al found that one of the strongest predictors of teacher satisfaction was that the “teacher feels that his or her salary is fair for the work done” (Markow et.al, 2006). In addition, research has shown that teachers are more likely to leave when they work in districts that pay lower wages, or when they believe they can be more highly compensated somewhere else (Darling-Hammond 2003, Feng 2009). This would include moving to a different school or leaving the teaching profession entirely.

Researchers have also consistently found that new teachers are far more likely than experienced teachers to leave the profession, until they reach retirement age (Guarino 2006, Liu and Ramsey 2006, Liu and Meyer 2005, Kukla-Acevedo 2009). Because of this shared knowledge that new teachers are more likely to leave, some researchers have also focused teacher satisfaction studies on this group of teachers (Stockard and Lehman 2004, Feng 2009). The drivers of satisfaction for new teachers are similar to the drivers for the teacher population as a whole; however, the relationships are often stronger amongst the new teacher population. In her model on just first-year teachers, Sharon Kukla-Acevedo found that while a school’s behavioral climate was a

significant predictor of leaving for the entire teacher population, it had a stronger effect on whether first-year teachers left. In addition, in Stockard and Lehman's 2004 study on the influences of satisfaction on first-year teachers, they found that "1st-year teachers were more satisfied when they were in safe and orderly schools, with supportive colleagues and parents, and a school management style that promoted effective teaching and collaboration" (Stockard and Lehman 2004).

NCLB: Reauthorization Support and Criticism

As of March 2010, the current presidential administration had put together a blueprint for the reauthorization of No Child Left Behind. This plan, like any other legislation, has some bipartisan support and suffers from some criticism (Klein March 17, 2010). In her March 17 article entitled, "ESEA Plan Draws Bipartisan Praise – And Questions," Alyson Klein writes of the blueprint's unveiling, "The reception, particularly in the Senate, was generally positive to the plan unveiled March 13 for revamping the ESEA, whose current version—signed into law by President George W. Bush in 2002—is the No Child Left Behind Act" (Klein 2010).

However, even though the blueprint has bipartisan support in the Senate, many questions remain as to whether this version of the law will be accepted and supported by teachers and other education policymakers. So far, teachers unions have been opposed to the new provisions being set by the law's reauthorization (Klein 2010, Sawchuk 2010). In an Edweek article entitled "ESEA Renewal Blueprint Faces Legislative Hurdles" Alyson Klein writes about discontent among the NEA (National Education Association) and AFT (American Federation of Teachers). She states, "Dennis Van Roekel, the

president of the NEA, has said the blueprint, which would retain the testing regime in the NCLB law, still relies too heavily on standardized tests, rather than looking at other measures of student and school success” (Klein 2010). In addition, teachers and some policymakers have been opposed to the proposals for how to evaluate teachers, as it will be extremely difficult to do that fairly. Dale E. Kildee of the House Education and Labor Committee asked, “How do we assure that any teacher evaluation is, first of all, developed in collaboration with teachers and really accurately measures teacher performance” (Klein 2009)? This shows that even though the reauthorized law has improved a great deal from its original 2001 state, there are still stipulations that are opposed by the US’s two major teachers’ unions.

NCLB and Standards-specific Research

While there has been quite a bit of research done on NCLB efficacy and teacher turnover, there is very little research involving teacher job satisfaction or intention to leave the profession as related to increasing standards imposed by the law. It should be noted, however, that moving forward, one piece of the NCLB plan is to survey teachers about working conditions every two years. It remains to be seen what these data will be used for, but it is a move in a positive direction. The research done on teacher attitudes around standards and the law to date has been largely qualitative. The quantitative studies that I found do not give much information on methodology, so we should not give their findings too much weight. However, I will note them here as a point of information. The findings throughout this research have been relatively consistent. For instance, several studies found that when teachers had less classroom decision-making power, and

had to script lessons based on standardized tests, they were more likely to have to constrain their curriculum, be frustrated and less likely to be satisfied with their job (Crocco 2007, Pinder 2008, Pedulla 2003, Crocco 2007). Pedulla's (2003) study found that "many teachers believe that tests have a narrowing effect on what they teach", but this study did not look at this dimension in relation to satisfaction. This study also found that only 30% of teachers agreed with the statement, "Overall, the benefits of the state-mandating testing program are worth the investment of time and money" (Pedulla 2003). In another study entitled "The Narrowing of Curriculum and Pedagogy in the Age of Accountability: Urban Educators Speak Out," the researchers found that a major issue for teachers is the "shrinking space for their classroom-based decision-making" (Crocco, 2007). The article states that these teachers were "frustrated by their inability to use professional expertise acquired through their professional preparation. They believe that scripted lessons and mandated curriculum not only deprofessionalized their work, but also depersonalized the human connections nurtured by more student-centered curriculum and pedagogy" (Crocco, 2007, cited from Costigan, 2004-2005). Similarly, in an article on Maryland teacher perspectives on increased standardized testing and NCLB, researchers found that "Maryland practitioners do not feel that NCLB is serving the needs of either teachers or students" (Pinder, 2008). The interviews with math and science teachers focused on three areas: "benefits (or lack thereof) of increased testing, the retention of testing and accountability within 5-10 years, and testing and accountability effects on teaching and teachers in general" (Pinder, 2008).

Data

My data source for this research is the US Census Bureau/NCES Teacher Follow-Up Survey (TFS) from 2005. My objective is to do an analysis of teacher intention to stay in the profession, and learn what effect, if any the increased federal and state curriculum standards imposed by NCLB have on teachers' intention to stay in the profession. I will also examine administrator support, specifically in relation to these standards, and the effect that has on teacher satisfaction and their intention to leave or stay in the profession.. In the TFS, several questions were asked about teachers feelings toward standards and standardized assessments, and these questions will be my primary variables of interest.

There are two versions of the Teacher follow-up survey. One was administered to current teachers, and one to teachers who left the profession. In my analysis, I will focus on only the current teachers who remain in the profession. I've chosen to focus on this specific group as my objective is to measure and understand why teachers would choose to leave the profession, not why they actually left. This distinction is important because we can still improve the situation for current teachers and encourage them to stay in the profession, while the former teachers have already made their decision, and likely will not be returning.

One major limitation of this research is that the questionnaire I am using was not specifically designed to test teachers' perceptions of NCLB and state standards, and the effect of those standards on teaching satisfaction. Therefore, I have only limited information and variables to work with. Another limitation of my research is that the

data are from five years ago. While the direction of teacher perceptions of state standards and the NCLB law has probably not changed over the past five years, my expectation is that in more recent years, teachers would actually have stronger negative reactions to the stipulations of the original (non-reauthorized) law.

Measures

Dependent variable. To investigate teacher intention to leave the profession, I created my dependent variable from a question that asked current teachers how long they were planning to stay in the profession. There were eight response categories, which all captured varying degrees of whether or not a teacher was planning to stay in the profession (1=as long as I am able, 2=until I am eligible for retirement benefits for this job, 3=until I am eligible for retirement benefits from a previous job, 4=until I am eligible for social security benefits, 5=until a specific life event occurs, 6=until a more desirable job opportunity comes along, 7=definitely plan to leave as soon as I can, 8=undecided at this time). I recoded this categorical variable into a dummy variable (1=plan to stay, 0=plan to leave) to make my final results easier to interpret.

Main Predictor variables. Because I wanted to examine the relationship between standards imposed by NCLB and teacher intention to stay in the profession, I selected a few variables that reflected teacher satisfaction with the standards. The first variable was a factor (stdassessment1) created from a series of questions around teacher satisfaction with standardized district and/or state assessments given to their students. This factor was standardized (M=0, SD=1). The second variable related to standards measured whether or not teachers agreed that state or district content standards had a positive

influence on their satisfaction with teaching. This was asked on a 4-point agree/disagree scale (but included a choice for not applicable). This categorical variable was then recoded into a dummy variable named *standards_positive* (1=strongly agree/somewhat agree, 0=strongly disagree/somewhat disagree). Then, in an attempt to explore what kind of effect principal support specifically in relation to standards has on teachers' intent to stay, I used a categorical variable that measured how effective the teacher thought their principal or head of school was in working with staff to meet curriculum standards. This categorical variable was originally on a 5-point likert scale from not at all effectively to extremely effectively. I then recoded this variable into *helped_meet_standards* (1=very/extremely effectively, 0=somewhat/slightly/not at all effectively).

Other predictor variables. Based on my literature review and knowledge of the education arena, I needed to include several other variables that would be likely to affect teachers' intent to stay in the profession. These include salary, general administrative support, overall satisfaction, student behavior, and whether or not they said they would leave for better pay. Except the leave for better pay variable, each of these variables were recoded from a likert scale of strongly agree to strongly disagree into dummy variables (1=strongly/somewhat agree, 0=strongly/somewhat disagree). The leave for better pay variable was recoded into a dummy variable (1=strongly agree/agree, 0=strongly disagree/disagree).

Control variables. Because there are some basic demographic characteristics of teachers and the schools they work in that would likely affect their intent to stay in the profession, I had to adjust for these factors in my model. They included teacher years of experience (1=new, 0=experienced), recoded from a continuous variable that was then

bucketed into the following categories (1=1-5 years of experience, 2=6-10 years of experience, 3=11-20 years of experience, 4=20+ years of experience), whether or not a teacher taught high school (1=high school, 0=not high school), the urbanicity of the school (codes), whether the school was public or private (1=public, 0=private).

Analytic Approach

Descriptive Statistics. For the current study, I employed several analytic techniques. First, to explore the data and relationships among the variables, I ran chi-squared tests. To combine a series of variables that measured the standardized exam construct, I performed a factor analysis. The factor score that resulted included variables that measured whether teachers felt they received adequate support to prepare their students for assessments, whether they believed their students were capable of performing well on the assessments, whether the assessment program influenced the curriculum they taught, whether they felt their students' abilities were reflected accurately through these assessments, and overall satisfaction with the assessment program.

Multivariate Logistic Regression. To understand the relationship between my outcome variable (plan to stay) and my predictor variables, I ran several regression models. The first was a bivariate logistic regression, looking only at one of my main predictors of interest (helped_meet_standards) and the outcome variable. In model 2, I introduced the remaining variables of interest: whether the standards had a positive influence on their teaching, satisfaction with salary, general administrative support, satisfaction with standardized assessments, general satisfaction, and whether or not a

teacher would leave for better pay. Model 3 represents the final model, where I adjusted for teacher and school demographic characteristics. Model 3 was the most comprehensive, best-fitting model, so I will report on that one in the Results section below.

Results

Descriptive Results

Dependent and demographic variables. Graph 1 in Appendix A (attached) shows the distribution of the recoded plan_to_stay variable. Graph 1 shows that approximately 1/3 of teachers plan to leave the profession. However, looking at Graph 2, we see that a higher percentage of experienced teachers plan to stay in the profession than less experienced teachers. Part of this may be due to the fact that older teachers are more ingrained in the profession and closer to retirement. In addition, of those teachers who report planning to leave the profession, 17% actually attempted to leave teaching by applying for a job either outside the field of education, or for a different role (i.e. administrator) within the field of education.

Amongst school demographics such as type (public or private) and urbanicity (whether the school is in a large city, urban fringe, or small town), we see that the biggest difference is between teachers in large, central cities and small towns. Table 1 in Appendix B shows that a lower percentage (62%) of urban teachers plan to stay in the profession than small-town teachers (68%). There is very little difference on the plan to stay measure between high school teachers and non-high school teachers (2 percentage points); however, this difference is statistically significant ($p < .05$).

Predictor Variables of Interest. My primary variables of interest measure satisfaction with curriculum standards and assessments, and how effective the principal is at working with staff to meet those standards. Graph 3 in appendix A shows that half of teachers feel that their principal was very to extremely effective in working with the staff

to meet curriculum standards, while the other half felt their principal was not at all, slightly, or somewhat effective at supporting them with this particular task. In addition, Table 1 shows us that there is a relationship between teachers who plan to leave the profession and whether they felt their principal was effective at helping them meet curriculum standards ($p < .001$). Specifically, of teachers who felt that their principal was effective in helping them with curriculum standards, almost 70% planned to stay in the profession, whereas the percentage of teachers planning to stay in the profession dropped to 62% when the principal was not effective in this collaborative task.

When examining teachers' satisfaction with assessments, we can see from Graph 4 that less than half of teachers are satisfied with their school, district, or state standardized assessment program. Furthermore, over 80% of teachers say that the assessment program influenced the curriculum they taught. From these descriptives, we can infer that teachers may be dissatisfied with the fact that the assessment program is influencing the curriculum they teach. However, as we will see later in the regression section, this does not drive teachers to want to leave the profession.

Related to the assessment variable in Graph 4 is the variable measuring whether state and district standards have had a positive influence on their satisfaction with teaching. In Graph 5, in Appendix A, we see that only 50% of teachers strongly to somewhat agree with this statement. Further, in Graph 6, we see that of teachers who strongly agree that state and district standards have had a positive influence on their satisfaction with teaching, 73% plan to stay in the profession. However, of those teachers who strongly disagree that state and district standards have had a positive influence on their teaching, only 64% plan to stay in teaching.

Table 1 in Appendix B provides a summary of a few of the aforementioned statistics, but also includes additional variables. Within each variable in this table, we can see the percentage of teachers who plan to stay in the profession, versus those who plan to leave. For instance, from this table, we can see that of teachers who somewhat agree or strongly agree that they are satisfied with their teaching salary, 70% plan to remain in the profession; however, only 61% of those not satisfied with their teaching salary plan to remain in the teaching profession. In addition, and important for my analysis is the fact that more teachers with generally supportive administration and principals who work effectively with them to help them meet standards report wanting to stay in the profession than those with less supportive administrators ($p < .001$).

Logistic Regression Results

Model 1 is a bivariate logistic regression using just one of my predictor variables of interest: whether the principal was effective in working with the staff to meet curriculum standards (*helped_meet_standards*). In this model, a relationship exists between this variable and likelihood to plan to stay in the profession ($p < .001$).

Specifically, when teachers believe that their principal is effective at this particular task, the odds are 1.3 times greater that they will intend to stay in the teaching profession.

In Model 2, a multivariate logistic regression, I included other predictor variables that would likely be related to whether or not a teacher intended to stay in the profession. In this model, there was still a relationship between the *helped_meet_standards* variable and intention to stay in the profession ($p < .05$). This model shows that for teachers who believe their principal is effective at helping them meet curriculum standards, the odds of

staying in the profession for are 1.2 times greater than for their counterparts who do not think the principal was effective at this task, a slightly lower likelihood (1/10) than in the first bivariate regression. In Model 2, the other variables that are related to whether or not a teacher intends to stay in the profession are salary ($p < .001$), whether the teacher reported she would leave the job for better pay somewhere else ($p < .001$), and general satisfaction with teaching at his or her school ($p < .001$).

Model 3 represents the best fitting model ($R^2 = .10$), and includes all relevant predictor and control variables. The findings are broken out and discussed by category below.

Administrative support, curriculum standards, assessments. In this model, I continue to find a relationship between my predictor variable of interest and whether a teacher plans to stay in the profession ($p < .05$). On average, for teachers who feel that their principal was effective in collaborating with them to help meet curriculum standards, the odds of intending to stay in the profession are 1.2 times greater than for teachers who feel that their principal is not effective at this task. It is interesting to note here that although this specific aspect of principal support is strongly related to a teacher's intention to stay in the profession, general administrative support is not ($p > .05$).

My results also suggest a relationship between whether state or district content standards have had a positive influence on satisfaction with teaching (standards_positive) and whether they intend to remain in the teaching profession. Specifically, for teachers who feel that standards have had a positive influence on their teaching, the odds of remaining in the profession are 1.2 times greater than for teachers who do not feel that standards have had a positive effect on their teaching.

Surprisingly, my results do not suggest a relationship between teachers' attitudes toward standardized assessments and whether or not they plan to remain in the profession ($p > .05$).

Overall satisfaction. My results in Model 3 suggest a relationship between teachers' overall satisfaction with teaching at their school and their likelihood to remain in the profession ($p < .001$). Specifically, for teachers who are generally satisfied with teaching at their school, the odds of remaining in the profession are almost twice as great as for those who are not generally satisfied. Similarly, there is a relationship between whether teachers say they would take a job that offered them better pay and whether or not they intend to remain in teaching. Specifically, for teachers who report that they would leave their job for a better paying one, the odds of remaining in the profession are 65% lower than for teachers who would not leave teaching for a higher-paying job.

Salary. My results in Model 3 also suggest a relationship between whether a teacher is satisfied with her salary and her likelihood to intend to stay in the profession ($p < .001$). Specifically, the odds of intending to stay in the profession are 1.3 times greater for teachers who are satisfied with their salary than for those who are not.

Demographic Variables. I also find evidence of relationships between teacher level of experience and urbanicity, and the likelihood of intending to remain in the teaching profession ($p < .001$; $p < .05$ respectively). Model 3 shows that the odds of staying in the profession for new teachers (who have 1-5 years of experience) are 50% lower than for their more experienced counterparts.

Discussion

The above analysis is mostly, but not fully, aligned with findings of previous research. First, in my model, as in theirs, salary is a strong and significant predictor of likelihood to want to remain in the teaching profession. In addition, the fact that overall satisfaction with teaching at their school is a strong predictor of whether the teacher plans to stay is expected and supports prior research. However, my results also suggested some new and interesting findings that can be added to the literature on this topic. The finding that teacher attitudes toward standardized assessments did not have any impact on their intention to remain in teaching was surprising to me. Based on all the articles indicating that a great number of teachers and teachers unions are very dissatisfied with and opposed to the influx of standardized assessments under W. Bush's iteration of NCLB, one would think that this unhappiness could drive them out of the profession. In addition, because my descriptive analysis showed that half of the teaching population had negative feelings around standardized state and district assessments, I had assumed that the assessments would be a strong contributing factor to their desire to leave the profession. What I found instead was not that the standardized assessments themselves drive teachers to want to leave, but rather the lack of effective administrator support with implementing these numerous standards.

This is also where the current analysis departs from prior research. While many prior researchers have found general administrative support to be a strong predictor of teacher intention to remain in the profession, it was not significant in my model. However, the specific aspect of administrator support discussed above – whether

principals are effective in working with teachers to meet curriculum standards – was strongly related to teacher intention to stay in the profession. This suggests that what is important to retain teachers in the profession is not a generally supportive, helpful administration, but more specifically an administration or a principal who is effective at helping teachers meet the curriculum standards imposed by No Child Left Behind.

This finding, though very logical, is an important addition to the existing research because it has implications for policy. For instance, these findings suggest that a promising way to retain teachers would be to give their principals training or professional development on how to collaborate with them to facilitate the implementation of the many existing and soon-to-come curriculum standards. Particularly because curriculum standards and standardized assessments are not going away anytime in the near future, it will be important for principals to help and support their teachers as they work to implement these many standards into their daily lessons. The current findings also suggest that while teachers will likely continue to be dissatisfied with the sheer number of and focus on standardized assessments, they will likely not plan on leaving the profession unless they feel that they are on their own when trying to implement the standards into their teaching. In addition, the current findings suggest that increased salary, coupled with this stronger support for standards implementation, would help to retain teachers in the profession.

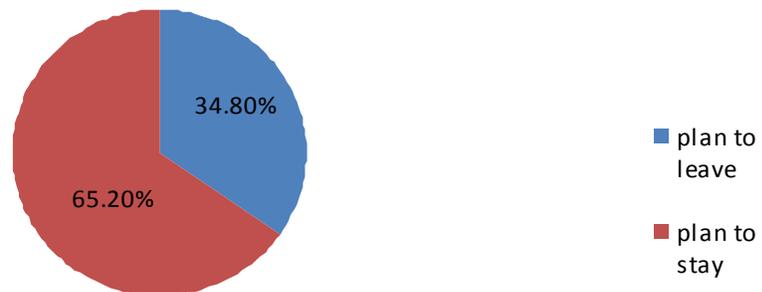
Conclusion

As discussed above, my results have shown that one of the strongest drivers of teachers' intention to leave the profession is when their principals do not effectively work with them to meet curriculum standards. Contrary to my original hypothesis, teachers do not intend to leave because they are dissatisfied with the sheer number of standardized assessments and curricula, but rather because they do not have support from their administration in implementing these standards into their classrooms. This suggests that one way of keeping teachers in the profession would be to offer professional development to principals that is focused specifically on helping their teachers meet the federally- and state-imposed standards. Therefore, if the current administration is going to require schools to implement the upcoming national, common core standards, and continue to require a multitude of standardized assessments, it is crucial for them to also mandate that principals attend professional development to learn and become effective at this particular skill.

One of the major limitations of the current study is that it does not tell us much about the relationship between intending to leave the teaching profession and actually leaving the teaching profession. Therefore, further research on teacher turnover should explore this relationship. In addition, future questionnaires should address the upcoming policy changes to NCLB, and the implications that these have for teacher turnover. For this further research to have the greatest impact, the questionnaires should be administered approximately one year after the policy is in place, and the data should be analyzed within that same year, so that any policy changes necessary to retain teachers in the profession can be made immediately.

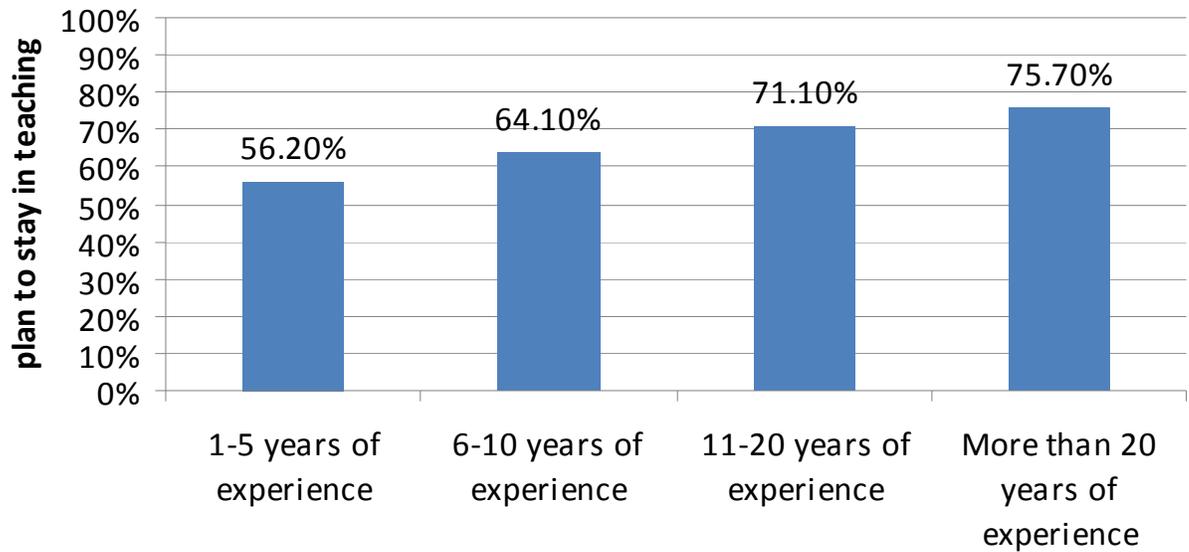
Appendix A

Graph 1: Percentage of teachers who plan to stay in the profession, versus those who plan to leave.

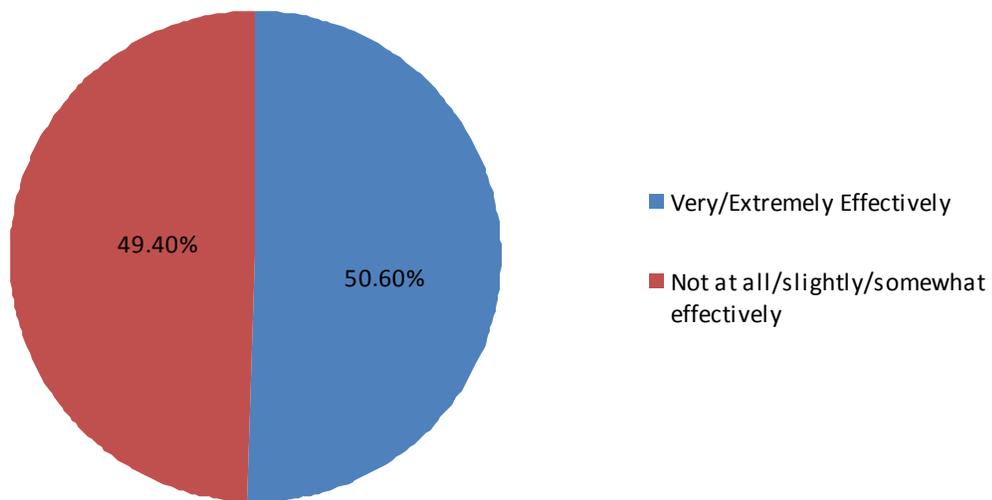


Plan_to_stay variable recoded from 8-category variable: (1=as long as I am able, 2=until I am eligible for retirement benefits for this job, 3=until I am eligible for retirement benefits from a previous job, 4=until I am eligible for social security benefits, 5=until a specific life event occurs, 6=until a more desirable job opportunity comes along, 7=definitely plan to leave as soon as I can, 8=undecided at this time)

Graph 2: Percentage of teachers, by experience level, who plan to stay in the profession

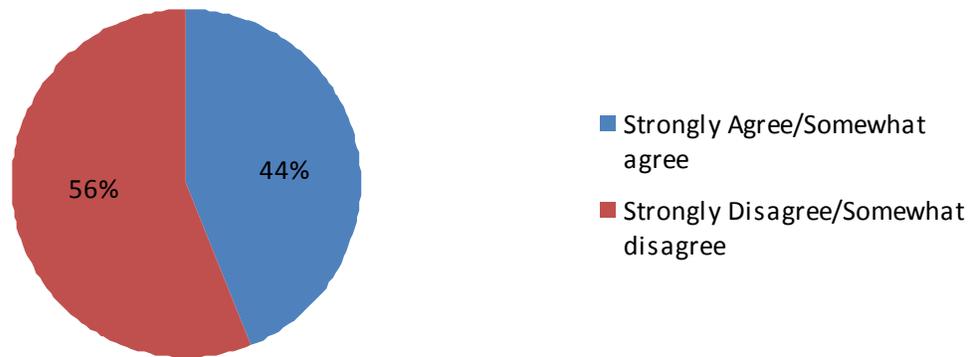


Graph 3: Percentage of teachers reporting that their principal was effective or not effective in helping them meet curriculum standards during the prior year



Question wording: Indicate how effectively your principal or school head performed each of the following.
Worked with staff to meet curriculum standards.

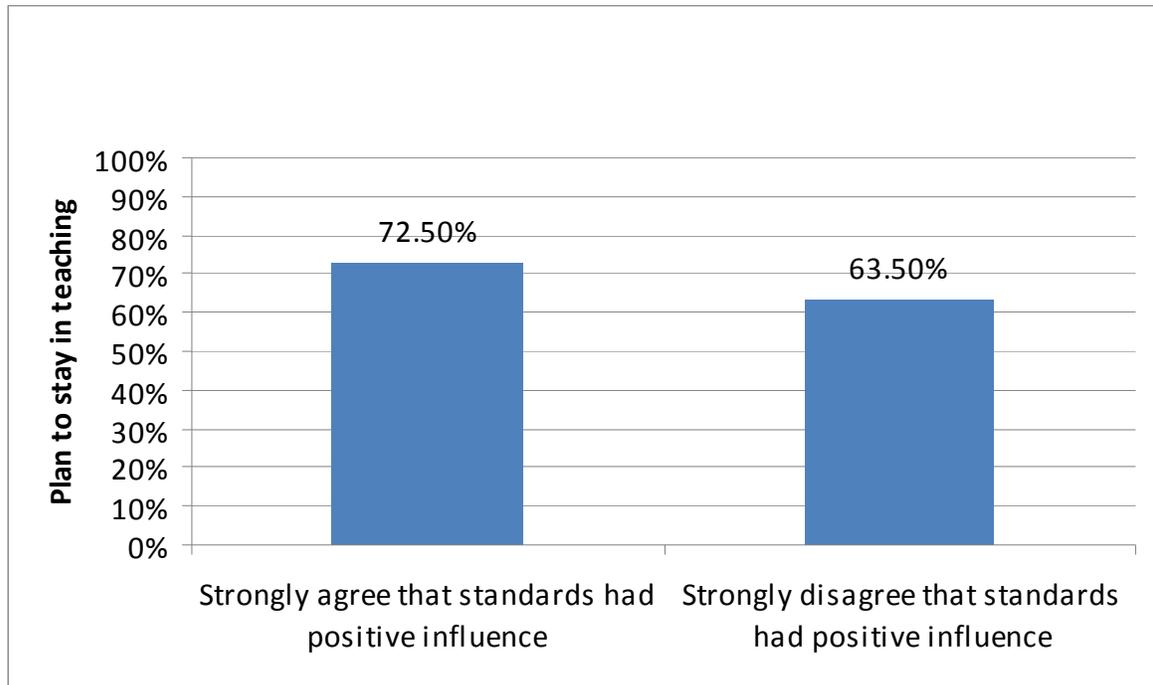
Graph 4: Overall, I was satisfied with the assessment program.



Graph 5: State or district content standards have had a positive influence on my satisfaction with teaching



Graph 6: Percent of teachers planning to stay in the profession, by whether or not standards had a positive influence on their teaching



Appendix B

Table 1: The relationship between planning to stay in teaching, demographic characteristics and work conditions (TFS 2005, n= 4776)

	Plan to Stay (recoded) ¹	
	Yes	No
Teacher Demographic Characteristics		
<i>Teacher Years of Experience</i> ²		
1 through 5	0.56	0.44
6 through 10	0.64	0.36
11 through 20	0.71	0.29
20+	0.76	0.24
<i>School level taught</i> ³		
High School	0.64*	0.36
Non-high school	0.66	0.34
School Demographic Characteristics		
<i>Sector</i> ⁴		
Public	0.66*	0.34
Private	0.63	0.37
<i>Urbanicity</i> ⁵		
Large or mid-size central city	0.62**	0.38
Urban fringe of large or mid-size central city	0.66	0.34
Small town/rural	0.68	0.32
Curriculum/Exam standards		
<i>State or district content standards have had a positive influence on my satisfaction with teaching</i> ⁶		
Strongly/somewhat agree	0.69	0.31
Strongly/somewhat disagree	0.63	0.37
<i>Overall, I was satisfied with the assessment program</i> ⁷		
Strongly/Somewhat agree	0.69**	0.31
Strongly/somewhat disagree	0.63	0.37
Administrative support		
The school administration's behavior toward the staff is supportive and encouraging. ⁸		
Strongly/somewhat agree	0.67***	0.33
Strongly/somewhat disagree	0.54	0.46
<i>Principal worked with staff to meet curriculum standards</i> ⁹		
Very/Extremely effectively	0.69***	0.31
Not at all/slightly/somewhat effectively	0.62	0.38
Salary		
<i>I am satisfied with my teaching salary</i> ¹⁰		
Strongly/somewhat agree	0.70***	0.30
Strongly/somewhat disagree	0.61	0.39

¹ dummy variable recoded from 8-level categorical variable

² length of time teaching, recoded from a continuous variable

³ dummy variable representing whether or not a teacher teaches high school. Recoded from individual variables indicating the grade-level taught. High school = grades 9-12.

⁴ School sector representing whether the teacher works in a public or private school

⁵ 3-level categorical variable indicating the locale of the school building

⁶ dummy variable recoded from 4-point likert scale representing whether standards had a positive effect on their satisfaction with teaching

⁷ dummy variable recoded from 4-point likert scale representing whether or not they were satisfied with the assessment program

⁸ dummy variable recoded from 4-point likert scale representing level of general administrative support

⁹ dummy variable recoded from 5-point likert scale representing whether the principal/school leader was effective in helping staff meet curriculum standards.

¹⁰ dummy variable recoded from 4-point likert scale representing whether or not teacher is satisfied with her salary

* $p < .05$, shown on the first category of the variable.

** $p < .01$, shown on the first category of the variable

*** $p < .001$, shown on the first category of the variable.

Table 2: Effects of administrative support, curriculum standards, and demographic characteristics on teachers' intent to stay in the profession

	Plan to stay in teaching									
	Model 1			Model 2			Model 3			
	Beta	SE	Exponent (Beta)	Beta	SE	Exponent (Beta)	Beta	SE	Exponent (Beta)	
Explanatory variables										
Principal worked with staff to meet curriculum standards	0.296***	0.07	1.34	.176*	0.07	1.193	.150*	0.071	1.162	
Standards:positive influence				0.102	0.07	1.107	.177*	0.072	1.193	
Salary				.275***	0.071	1.317	0.278***	0.072	1.32	
General administrative support				0.095	0.106	1.099	0.118	0.108	1.125	
Leave for better pay				-.972***	0.077	0.378	-	1.035***	0.079	2.816
General satisfaction				.738***	0.12	2.091	.678***	0.121	1.971	
satisfaction with standardized assessments (factor)				0.034	0.034	1.035	-	0.04	0.985	
Control Variables										
High school teacher							-.111	0.076	0.895	
Teacher experience							-.677***	0.073	0.508	
Sector							0.152	0.1	1.164	
Urbanicity							.104*	0.05	1.11	
Constant	.528***	0.05	1.7	1.008***	.124	.365	1.069***	0.172	0.34	
Pseudo R2	0.005			0.078			0.1			

*p<.05
 **p<.01
 ***p<.001

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