

Understanding teachers' careers: Linking professional life to professional path

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Abstract

This research synthesis aims to more fully understand the current teacher retention crisis in the United States through a re-conceptualization of what is meant by a teaching career. Currently, research is divided into two broad categories: traditional research on teacher retention and traditional research on teachers' professional lives. This synthesis identifies key studies in both fields and argues for greater coordination between the two in an effort to conceive of teachers' careers along a continuum and utilize a range of methodologies for understanding those careers. The author points to select studies which begin to bring these two fields together and suggests potential future research directions.

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1. Rethinking research on teachers' careers

This research synthesis addresses the current crisis in teacher retention, which is most acute in American schools but felt worldwide (e.g., Orivel & Perrot, 1993). Traditional approaches to understanding the problem of teacher retention typically involve analysis of either individual or workplace characteristics that impact career decisions. In this paper, I suggest that existing research on teacher retention can be informed by teachers' own perspectives on their professional lives. Just as teachers have been given a voice in research on classroom practice (e.g., Cohn & Kottkamp, 1993), they can also shape current understandings of the teacher workforce. Connecting the teacher retention literature to research on teachers' professional lives can offer a broader methodological perspective, a view of teachers' careers along a continuum, and the opportunity for greater theoretical consistency. In this research synthesis, I begin with an overview of the teacher retention problem. Next, I present existing approaches to studying teacher retention. Finally, I highlight key areas of research on teachers' professional lives which can potentially speak to the problem of teacher retention. I conclude by pointing to promising directions in this field.

1.1. Teacher retention problem

In the United States, there is a "revolving door" for new teachers, particularly this current generation of teachers who have numerous job opportunities available to them (Johnson & Birkeland, 2003). Almost 40% of new teachers

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leave the field within their first 5 years in the classroom (Ingersoll, 2003), posing a significant burden to schools and students. Teacher turnover brings significant financial costs, up to US\$ 8000 for each teacher who leaves the profession (Ingersoll, 2003) and as much as 329 million to 2.9 billion dollars annually for just one U.S. state (Texas State Board for Educator Certification, 2000). Further, others suggest that teacher turnover impacts the effectiveness of the school overall (Bridge, Cunningham, & Forsbach, 1978), student development and attainment, and the morale of those who stay (Macdonald, 1999). Finally, and perhaps most importantly, teacher effectiveness grows over the first few years of teaching (Ferguson, 1991; Murnane & Phillips, 1981). Thus, teacher turnover that results in an inexperienced teaching force reduces educational quality for students (Grissmer, Flanagan, Kawata, & Williamson, 2000). While some suggest that stability in the workforce can lead to complacency (Macdonald, 1999), in general teacher retention is considered desirable.

Internationally, it is more difficult to determine the size and scope of the problem because less data is available on teacher workforce issues (Committee for the Review of Teaching and Teacher Education, 2003; Ross & Hutchings, 2003). Nonetheless, it is clear that the teacher retention problem does exist worldwide (Van Kraayenoord, 2001), with some calling it a silent crisis (Halperin & Ratteree, 2003). There are distinct differences between the teacher retention problem in industrialized and developing countries. In the industrialized world, which appears to have an international culture of teaching (Poppleton, 1992), the teacher retention problem is focused on particular geographic regions, such as rural areas or inner cities, as well as high-need subject areas like science and math (Committee for the Review of Teaching and Teacher Education, 2003; Ross & Hutchings, 2003). On the other hand, developing countries face a different set of issues, including poor working conditions, lack of access to education, high demographic growth, and even the loss of teachers to HIV/AIDS (Halperin & Ratteree, 2003; Kloep & Tarifa, 1994). Because of the breadth of challenges facing teachers worldwide, this synthesis focuses on teacher retention in the industrialized world and in the United States in particular, where the crisis is most critical.

1.2. *Methods of inquiry*

This research synthesis includes studies within education from a variety of perspectives, and is not intended to be a comprehensive review of all literature in the numerous fields of interest. Rather, this synthesis focuses on key empirical pieces that have led to a more complete understanding of either teacher retention or teachers' professional lives over the last 30 years. The investigation began with searches on the ERIC, Education Abstracts, and Web of Science databases using the keywords teacher retention, teacher attrition, teacher workforce, teach* career, teaching as a profession, job satisfaction, teacher burnout, teacher commitment, teacher motivation, attitudes-teachers, teachers-recruitment, professional socialization, and occupation-choice of. Empirical studies and literature reviews were used to guide a further review of related books and book chapters within the educational literature. Several recent pieces, not yet published, were also included based on conference presentations.

Articles that met criteria for inclusion focused specifically on teachers' careers rather than their practice, knowledge, or interaction in the classroom. The notion of teachers' careers was based on two parallel concepts, that a school is also a workplace (Johnson, 1990) and a teaching job is also a career (Yee, 1990). Included studies either considered careers from an external perspective, their particular steps through the profession, or from an internal perspective, the meaning they gave to those steps (Yee, 1990). Because of the large amount of available literature, priority was given to those studies cited at twice in related research. Moreover, when possible, priority was given to research focused on particular geographic regions, such as rural or urban areas, and high-need subjects such as mathematics, science, and special education. Research selected for the synthesis was then coded and grouped by purpose, methodology, findings, and implications in order to construct a framework for understanding and building upon existing literature in these multiple fields of study.

2. Existing approaches to teacher retention

There are two major approaches to research on teacher retention, what I term the "individual" and the "contextual" methods because of their levels of analysis. The first examines qualities of the individual which impact teacher retention, while the second explores qualities of the workplace context which impact teacher retention. The individual approach primarily employs large-scale, survey-based quantitative studies, while the contextual approach incorporates more in-depth qualitative work. While certain studies investigate both individual and contextual characteristics (e.g., Heyns,

1988), they tend to treat these characteristics separately, despite the fact that significant interaction has previously been found between background characteristics and workplace conditions (Ma & MacMillan, 1999). In this section, I provide highlights from the two major approaches of looking at teacher retention.

This synthesis deals with several interconnected aspects of teacher turnover, including retention, attrition, and migration. Teacher retention is generally considered as teachers remaining in their current teaching assignments within the same school (Billingsley, 1993). For attrition and mobility, I use Ingersoll's (2003) definitions. He explains that teacher attrition "refers to those who leave the occupation of teaching altogether", sometimes called "leavers." (Ingersoll, 2003, p. 3) On the other hand, teacher migration "refers to those who transfer or move to different teaching jobs in other schools," sometimes termed "movers" (Ingersoll, 2003, p. 3). Some of the included studies separate movers from leavers, while others lump them together, making it difficult to distinguish between the two groups. Quartz, Olsen, and Duncan-Andrade (2004) and Olsen and Anderson (2007) have also identified an additional variable termed "shifters", those teachers who leave the classroom but move into related educational roles both inside and outside of the school system. These include educational specialists, administrators, museum educators, and educational researchers. These educational but non-classroom roles are increasingly important but rarely acknowledged within the traditional teacher retention literature. Based on these notions, this paper addresses retention as well as migration and attrition, considering studies on why teachers stay as well as why they move or leave.

2.1. Individual level of analysis

Research on the attributes of individuals with respect to teacher retention draws connections between the characteristics of individual teachers and their decisions to stay, move, or leave the profession. Many of these studies are quantitative in nature and conducted retrospectively, after teachers have already made their career decisions. They typically use large-scale survey methods to predict which demographic and personal characteristics explain the variance in teacher retention. Overall, these studies emphasize the identification of variables that predict retention or attrition over and above explaining the process by which these decisions are made.

A number of empirical studies investigate teachers' career decisions by looking at their individual characteristics, such as gender, age, and race. For example, several studies explore the relationship between gender and teacher retention. Heyns (1988) used data from the National Longitudinal Study of the high school class of 1972 ($N=1147$) and found that men left the profession in greater number, with 53.7% of men and 65.6% of women remaining in the classroom after 5 years. Bobbitt, Faupel, and Burns (1991) used data from the 1988–1989 Teacher Followup Survey ($N=7173$), a supplement to the national Schools and Staffing Survey (SASS), and conversely found that women left more frequently than men, with 5.8% of female teachers leaving public schools and only 5.1% of male teachers leaving public schools annually. Murnane, Singer, and Willett (1988) used proportional hazards modeling with data from 5869 white teachers in Michigan to predict an interaction between age and gender, with young women under 30 having the shortest tenure in the classroom. According to their model, young women are predicted to stay 5.7 years and young men 10.8 years, while older women and older men stay more than 12 years. Therefore, the relationship between the background characteristic of gender and teacher retention is not entirely clear.

A number of studies have also looked at the relationship between age and teacher retention. With this characteristic the findings are more clear-cut: age and attrition tend to correlate in a U-shaped curve, with high attrition among very young teachers and much older teachers, but a dip in attrition among mid-aged teachers. This U-shaped curve is a common finding, but the attrition among younger teachers is more interesting because of the possible connection between older teachers' attrition and retirement. Boe, Bobbitt, Cook, Whitener, and Weber (1997) illustrate this finding using 1987–1988 SASS data ($N=4798$), showing that 9.0% of teachers under 30 leave, as compared with 6.0% of teachers 30–39, 3.0% of teachers 40–49, and 9.2% of teachers over 50 years. Bobbitt et al. (1991) confirm this finding with 1988–1989 SASS data ($N=7173$) showing that public school teachers under 30 and over 50 years of age have the highest rates of attrition. Among their sample, 9.0% of those under 30, 5.0% of those 30–39, 2.3% of those 40–49, and 9.8% of those over 50 left the profession. Dworkin's (1980) survey of 3549 public school teachers also found that younger teachers left more frequently, with 31.0% of those under 25, 30.1% of teachers 26–35, and 19.9% of teacher 36–45 seriously planning to quit teaching.

Along with gender and age, race also appears to be an important demographic predictor of teacher retention. Bobbitt et al. (1991) and Dworkin (1980) both found that White teachers had higher rates of attrition or planned attrition as compared with other racial groups. Bobbitt et al. (1991) ($N=4798$) found that 5.7% of White public school teachers

left the classroom, as compared with 5.1% of African Americans, 4.2% of Asian or Pacific Islanders, and 2.9% of Hispanic teachers. Similarly, Dworkin (1980) ($N=3549$) found that 27.8% of White teachers were seriously planning to quit teaching, as compared with 15.5% of Black and 17.8% of Chicano teachers. However, Dworkin (1980) also found that when class is introduced as a control, race ceases to be a distinguishing variable, showing that race is only relevant as it is correlated with class.

A number of additional background characteristics have also been linked to teacher retention. For example, Boe et al. (1997) ($N=4798$) found that teachers experiencing a change in marital status (8.1% of leavers), receiving an advanced degree within the last 2 years (8.1% of leavers), and having dependent children under the age of six (8.3% of leavers) left teaching in greater numbers. Dworkin (1980) ($N=3549$) also showed that teachers coming from a higher occupational class background had higher turnover rates, with 28.1% of those from a high occupational origin, 23.6% of teachers from a medium occupational origin, and 13.9% of those from a low occupational origin seriously planning to quit. Finally, Boyd, Lankford, Loeb, and Wyckoff (2005a) analyzed six administrative databases in New York State and found geography to be a major factor shaping the teacher workforce, with 61% of teachers taking their first job within 15 miles of their hometown.

In addition to individual background, several studies have looked at the relationship between personal characteristics and teacher retention. For example, Chapman (Chapman, 1984; Chapman & Green, 1986; Chapman & Huteson, 1982) conducted several studies looking at the relationship between specific personality traits and teacher retention. Chapman and Huteson (1982) used university alumni data ($N=690$) and found that skills and abilities, such as organization, time management, and dealing with the public, explained more of the variance in attrition ($R^2=0.09$ for elementary teachers, $R^2=0.10$ for high school teachers) than demographics alone ($R^2=0.03$ for elementary and high school teachers). However, a later paper (Chapman, 1984) ($N=400$) contradicts this finding by showing that personality traits do little to distinguish between stayers and leavers. Chapman's other studies (Chapman, 1984; Chapman & Green, 1986) develop a model in which initial commitment to teaching and early career experiences shape ultimate career direction.

Finally, several studies have explored the relationship between teachers' academic abilities, often as measured by standardized teaching tests, and their retention in schools. These studies have convincingly demonstrated that teachers with higher academic abilities have lower retention rates. Schlechty and Vance (1981) and Vance and Schlechty (1982) used scores on the National Teachers Examination (NTE) ($N=32,131$), the Scholastic Aptitude Test (SAT) ($N=4416$), and longitudinal data from North Carolina to show that the teachers with the highest academic abilities were also the teachers who most frequently left, while the teachers with the lowest academic abilities most frequently stayed. For example, while the overall retention rate for white females who entered teaching in 1973 was 52.93%, the retention rate for those in the top 10% on the NTE was 37.3% and those in the bottom 10% on the NTE was 62.5% (Schlechty & Vance, 1981). This was a conservative finding, given that the researchers took the unusual approach of counting anyone who remained in the field of education, inside or outside of the classroom, as staying in teaching. They used these data to predict a swiftly deteriorating talent pool in teaching. They also demonstrate that higher ability teachers enter classroom teaching less frequently in the first place, with only 10.21% of new teaching recruits in the highest scoring group, as compared with 21.92% of non-teaching recruits (Vance & Schlechty, 1982). More recently, Boyd, Lankford, Loeb, and Wyckoff (2005b) model retention and attrition behavior based on data for New York City elementary teachers working between the 1995–1996 and 2003–2004 school years. Their model predicts that the most qualified teachers are more likely to leave when paired with academically weak students, even when controlling for both student and teacher race. For example, their data indicate that the top 25% of teachers with 60% failing students had an 11.2% probability of leaving New York City schools, while the bottom 25% of teachers with 60% failing students had a 6.3% probability of leaving New York City schools.

Across these studies, it is clear that individual characteristics matter for teacher retention. These include demographic factors such as age, race, socioeconomic status, marital status, geography, and number of children as well as the personal factors of education level, academic ability, and individual characteristics.

2.2. Contextual level of analysis

The contextual level of analysis looks at individuals within the context of schools. Research in this vein typically employs broad survey methodology to link contextual factors to teacher retention. Most concretely, Buckley, Schneider, and Shang (2005) used surveys in Washington, DC ($N=835$) to demonstrate that the quality of school facilities, such

as lighting, temperature, air quality, and noise level, is positively correlated with teachers' decisions to stay ($r=0.117$, $p<0.05$). Other studies have demonstrated a link between size of the school or school district and teacher retention. Bobbitt et al. (1991) used SASS data ($N=7173$) to show that large schools have better teacher retention. According to their study, 87.8% of teachers remain in schools of 750 or more students, while 85.7% of teachers remain in small schools of less than 150 students. Additionally, using Washington State Certified Personnel Reports ($N=37,321$), Theobald (1990) found that teacher retention behavior was a function of class size, such that there was a high change in the probability, 19.04%, that a teacher would continue working in the same district following a decrease in the student–staff ratio.

Another important contextual factor appears to be the student population at the school, with respect to race, socioeconomic status, and achievement level. Bridge et al. (1978) examined the career patterns of teachers in 31 junior high schools, categorizing the student population as predominantly white schools or predominantly non-white. They found that “discrepant teachers”, those teachers with a different racial background than the majority of the students and the principal, had higher turnover rates (30.2% of discrepant teachers versus 23.5% of non-discrepant teachers), and white teachers in predominantly non-white schools had significantly greater turnover (47.9%). Dworkin's (1980) study came to similar conclusions ($N=3549$). He showed that 43.8% of teachers placed in schools with racial distributions they deemed “undesirable” planned to leave, as compared with 20.5% of teachers who preferred the racial distribution in their school assignment. Finally, Shen (1997), using SASS data from the 1990–1991 school year ($N=3612$), found that movers and leavers were more often from schools with greater numbers of minority students ($r=0.56$, $p<0.05$) and students receiving free and reduced meals ($r=0.52$, $p<0.05$).

However, there were contradictory results. For example, Heyns (1988), using data from the National Longitudinal Study ($N=1147$), found that leavers were more frequently from schools with more favorable conditions. For example, her data show that 50.3% of teachers left schools with upper or upper middle-class students, while only 45.5% of teachers left schools with lower or lower middle-class students. Likewise, 49.1% of teachers left schools with high or average ability students, while only 44.1% of teachers left schools with low ability students. This study followed one cohort of graduating teachers over 14 years, thus it was able to capture teachers first moving into “better” schools before leaving the profession altogether. This may explain the discrepancy between her results and the results in related studies. In addition, Horng (2005a,b) in her study of graduates from the University of California Los Angeles' (UCLA) specialized urban teacher education program ($N=547$) used a conjoint analysis of teacher preferences to determine that teachers preferred to be in schools with high-poverty students of color but left those schools because of working conditions like class size, administrative support, and salary. However, Horng (2005b) also worked with teachers from a self-selected population, those interested in urban teaching.

Finally, salary has been shown to be an important predictor of teacher retention. Murnane and Olsen (1990) used data from nine cohorts of new teachers in North Carolina ($N=13,890$) and found that salary mattered for teacher retention. According to them, a US\$ 1000 increase in salary was associated with a 15% increase in the probability that a teacher would stay in the classroom for at least 10 years. More recently Ingersoll (2001) used SASS data ($N=6733$) to show that higher salaries contribute to longer tenure in the classroom. For example, a US\$ 5000 increase in salary is associated with a 4% decrease in the chance of that teacher leaving. Internationally, Edwards' (1993) analysis of salary information from the United Nations Educational, Scientific, and Cultural Organization (UNESCO) shows that across 27 countries, teachers' relative salary is connected to teacher supply. More specifically, as a country's per capita income increases, teacher supply also increases as compared with other sectors.

However, there are dissenting voices. Weiss (1999) looked at first-year teachers from the 1987–1988 and 1993–1994 SASS surveys ($N=5088$) and could identify no clear pattern in the relationship between salary and plans to remain in teaching. Moreover, a Public Agenda survey ($N=914$) of new teachers' attitudes and perceptions (Farkas, Johnson, & Foleno, 2000) found that over 70% of teachers would choose schools with better working conditions over schools with higher salaries. Perhaps the effect of salary on retention is mediated by working conditions. Nevertheless, these findings complicate the seemingly clear-cut issue of salary and teacher retention.

In addition, a number of studies closely investigated the relationship between workplace context and teacher retention. For example, issues of student discipline and motivation are important predictors of teacher retention, commitment, and satisfaction. In a study of former teachers in the Milwaukee Public Schools ($N=40$), Haberman and Rickards (1990) looked at teachers' perceived problems and found that while teachers ranked underachieving students as the most serious problem before teaching, they ranked student discipline as the most critical issue after teaching. Ingersoll (2001), using national SASS data ($N=6733$), also found student discipline to contribute to teacher turnover, with 18% of movers

and 30% of leavers reporting discipline to be the source of their dissatisfaction and career movement. Rosenholtz and Simpson (1990), using a survey with teachers from Tennessee ($N=1213$), found that school-wide management of student behavior was positively correlated with teacher commitment to the field ($r=0.49$). Finally, Smith and Smith's (2006) semi-structured qualitative interviews ($N=12$) with predominantly white, female teachers in urban schools found that fear of violence was a major contributor to attrition within the first 5 years of teaching.

Support is also an important factor in teachers' career decisions. First, mentoring support is critical. Odell and Ferraro (1992) surveyed two cohorts of new teachers during the first year of teaching ($N=160$) and found that teachers with mentoring relationships had higher retention rates, 96%, as compared with the national average. The teachers indicated that strong emotional support was the most valuable aspect of the mentoring. Similarly, Smith and Ingersoll (2004), using national SASS data ($N=3235$), found that teachers provided with comprehensive induction packages had lower probability of leaving. More than 40% of teachers with no induction chose to move or leave, as compared with only 27% of those who participated in a collaborative induction program.

Further, administrative support is also consequential for teachers' career decisions. Bobbitt et al. (1991) ($N=7173$) found administrative support to be the primary reason teachers cite for their dissatisfaction and defection from the profession (26.4% of public school teachers). Likewise, Ingersoll (2001) ($N=6733$) confirmed the importance of administrative support, with 38% of his sample attributing their dissatisfaction to lack of administrative support. In her analysis of SASS data ($N=5088$), Weiss (1999) found that perceptions of school leadership and culture were the strongest factors associated with teacher effort, commitment, and planned retention, explaining 33.6% of the variance in 1987–1988 and 37.1% of the variance in 1993–1994. In their survey of Tennessee teachers ($N=1213$), Rosenholtz and Simpson (1990) also found a variety of school-based factors to explain 57.3% of the variance in teachers' commitment ($p \leq 0.05$), with principal support in the form of “buffering”, or reducing interferences, as one of the most powerful effects ($r=0.63$).

Finally, professional culture, in the forms of autonomy and input into decision making, is also related in various ways to teacher retention. Using national SASS data ($N=5088$), Weiss (1999) found teacher perceptions of autonomy and discretion to be predictive ($p \leq 0.05$) of morale, career commitment, and planned retention. Similarly, Rosenholtz (1989) and Rosenholtz and Simpson (1990) ($N=1213$) found task autonomy and discretion to be positively correlated with workplace commitment ($r=0.61$) and faculty involvement in school-wide decision making to be an important source of teaching learning, which seems relevant to workplace conditions and teacher commitment. Finally, Ingersoll's (2001) SASS analysis ($N=6733$) shows that 13% of teachers cite limited faculty influence as a source of dissatisfaction with teaching.

Just as individual characteristics are clearly linked to teacher retention, contextual factors in the workplace environment have also been shown to be important. Despite some dissenting voices, salary appears to matter for teachers. School factors, including facilities, size, support, leadership, and culture also influence retention. And the population, discipline and motivation of the student body also make a difference for teachers' career plans.

2.3. Analysis of teacher retention research

Traditional work in the field of teacher retention informs a problem: it identifies individual and contextual factors that appear to influence the movement of teachers within and out of the profession. However, the majority of this work is retrospective, capturing retention or attrition decisions at a single point in time, often after they have already been made. This methodology often prevents an understanding of the process by which these decisions are made, settling instead for a singular reason. Existing understandings about teacher retention could be enhanced by incorporating teachers' own perspectives on their careers. This approach would address the limitations of the current research through investigating career decisions in a prospective and longitudinal manner that also captures teachers' own voices. While researchers in the field of teacher retention have been calling for an increase in this type of methodology for some time (e.g., Billingsley, 1993; Bloland & Selby, 1980), a strong connection has yet to be made.

In addition to capturing teachers' perspectives and process of career movement, this approach could also theoretically enhance related work on job satisfaction, an underlying notion in this debate and an important predictor of teacher retention (Shann, 1998; Stockard & Lehman, 2004). While the concept of job satisfaction is central to teacher retention, theoretically it lacks clarity (Rhodes, Nevill, & Allan, 2004; Stockard & Lehman, 2004), with Ingersoll (2001) for one citing 13 different sources of job dissatisfaction. Some models have been proposed (e.g., Culver, Wolffe, & Cross, 1990), but there is no single accepted approach. Studies have linked job satisfaction to a variety of underlying factors,

including intrinsic and extrinsic rewards (Latham, 1998), recognition and responsibility (Ellis & Bernhardt, 1992), workload (Rhodes et al., 2004), and support and mentoring (Woods & Weasmer, 2004), which closely parallel the teacher retention literature. An in-depth look at teachers' perspectives on their professional lives may be able to inform both retention and satisfaction research and move toward theoretical clarity in both fields.

3. Existing research on teachers' professional lives

Literature on teachers' professional lives does not view careers in the traditional sense of upward mobility through a series of formal organizational benchmarks (Biklen, 1995; Yee, 1990). Rather, this work attempts to understand how teachers view their professional lives from their own perspectives. Research in this vein explores why teachers choose to enter teaching and what they expect from their time in the classroom. This work represents a combination of methodologies, although most is qualitative in nature. The common thread and significance of these studies is their attempt to understand how teachers' construct an understanding of their own professional lives. Although research on teachers' professional lives represents a broad range of literature, this section reviews only the most thoroughly investigated aspects of this research.

3.1. Teachers' initial motivations

Some literature has explored the reasons that new teachers cite for entering the field of education. These initial motivations are important because they illuminate how teachers' make sense of a decision to enter classroom teaching and identify the factors that are most salient for incoming teachers. Over 30 years ago, Lortie (1975) used focused interviews ($N=94$) to identify five attractors to teaching, which he termed the interpersonal theme, the service theme, the continuation theme, material benefits, and time compatibility. These themes continue to serve as a strong organizing framework for what motivates teachers to enter the classroom.

A number of studies have supported the contention that teachers enter teaching because of the interpersonal theme, or a desire to work with children. Lortie (1975) noted that teaching is one of the few middle-class occupations in which adults can interact with normal, healthy children over prolonged periods of time. As part of the longitudinal survey of UCLA urban education graduates ($N=360$), Lyons (2004) found that 60% of her sample ranked working with children as an extremely important reason for entering the classroom. Wang (2004), conducting interviews ($N=33$) and a survey ($N=101$) of graduate students in Taiwan, also found that many new math and science teachers (64% of interviewees, 88% of survey respondents) selected the profession because of previous rewarding experiences working with children.

Lortie's (1975) service theme has also gained support from more recent studies, although recently the theme has been expanded to include notions such as social justice and societal change. For example, Weiner (1990), using interviews and classroom observations of elite university teaching candidates ($N=8$), found that the majority of the students entered teaching for its social usefulness. LaTurner (2002), using survey data on secondary math and science teachers from the Baccalaureate and Beyond ($N=211$), found that less qualified teachers were driven by a desire to make a difference, with high levels of community service and a desire to be leaders in their communities. Schutz, Crowder, & White (2001), in their study of college education majors ($N=49$), found that the highest number, 20%, had altruistic reasons for wanting to become a teacher. Finally, Olsen and Anderson (2007) found that many of their teachers wanted to "change the world".

Lortie's (1975) other themes have more limited support. His theme of continuation is reinforced by the Schutz et al. (2001) study ($N=49$), in which 19% of college education majors cited past experiences and 18% cited past teachers as key reasons for wanting to enter teaching. Lortie's (1975) theme of material benefits was not supported in the United States, but held up internationally. Wang's (2004) interviews ($N=33$) and surveys ($N=101$) in Taiwan identified teachers' perceived motivations as related to compensation (30% of interviewees and 70% of survey respondents) and job security (66% of interviewees and 91% of survey respondents). Lortie's (1975) final theme of time compatibility was not specifically addressed in more recent studies.

There were also two additional themes which emerged from the literature: subject matter and self concept. Espinet, Simmona, and Atwater (1992) surveyed teachers from the Georgia Science Teacher Association ($N=113$) and found that many science teachers were first attracted to the subject of science and later to teaching science. In her longitudinal survey of UCLA urban education graduates ($N=360$), Lyons (2004) also found that 40% ranked subject matter as an extremely important reason for entering teaching.

Teachers in a number of studies also cited self concept as a reason for entering teaching. For example, many of Weiner's (1989) questionnaire respondents from an elite university ($N=78$) entered teaching because they thought they had the personality to teach well. Using interviews about teachers' lay theories ($N=15$), Sugrue (1996) found that many Irish teachers entered the profession because family members told them they would be good teachers. Schutz et al. (2001) found that college students ($N=49$) developed the goal to become a teacher because they believed they had the right personality characteristics.

Today's teachers choose teaching for a number of reasons, from the traditional motivators of working with children, service to the community, continuation, and material benefits to the more recently identified notions of subject matter and self concept. Understanding teachers' reasons for choosing the profession, one piece of their professional perspective, informs our understanding of the rationale underlying their professional roles.

3.2. Teachers' expectations

A number of studies also examine teachers' expectations of the profession, once again asking them how they themselves make sense of a career in the classroom. This has been done in two primary ways: a more fine-grained look at teachers' specific images, or myths, and a larger grained look at teachers' overall orientations toward their profession. While these studies use a variety of terms, they all appear to be exploring what teachers expect from their careers and how those expectations match up with the realities of the workplace, a relationship which has important implications for teacher retention. This body of literature is particularly disjointed, consisting of a number of independent studies using different conceptions of expectations rather than a cohesive set of work building upon related studies.

The first set of studies takes a fine-grained look at teachers' expectations of life in the classroom. Some studies focus on the role of teachers' images of teaching and of themselves as teachers. Calderhead and Robson (1991) followed 12 student teachers in England, describing their images of themselves as teachers, the origin of these images in prior experience, and the impact of these images on classroom practice. Kuzmic's (1994) case study of the socialization of Kara notes that she entered teaching with strong images of herself as a teacher, but constraints in the workplace prevented her from being able to realize those images.

Other research discusses the role of teachers' past experiences in shaping their expectations of teaching. For example, Lortie (1975) argues that the "apprenticeship of observation" (Lortie, 1975) shapes teachers' expectations. Teachers often fall back on their original conceptions of teaching, developed over years as students. Similarly, Feiman-Nemser and Buchmann (1985) use three vignettes to explore the possible dangers of relying on unexamined experience in learning to teach. Using interactive journals, interviews, and autobiographical statements, Cole and Knowles (1993) found that student interns held strong preconceptions about themselves as teachers, the role of a teacher, and the reality of schools, classrooms, and students, which were shattered during their initial field experiences. Cole and Knowles (1993) suggest that this disillusionment can lead to attrition from teaching. It is interesting to note that most of the work on cultural images is conceptual, rather than empirical, in nature.

Additional research takes a larger grain approach and examines teachers' overall orientations toward the profession. These orientations can also be conceived of as expectations, but they are expectations about the profession in general rather than expectations about teachers' roles or classroom realities. For example, in his work with teaching graduates in England ($N=470$), Lacey (1977) found that teachers came from two primary teaching orientations: a professional orientation with a commitment to the field of teaching, and a radical orientation with a commitment to achieving certain ideals about education and society. Similarly, McLaughlin and Yee (1988) explored the question of what makes a satisfying teaching career. They found that teachers held two primary conceptions of teaching, an institutional model in which success is defined as a progression through various career stages toward the top and an individually based model in which success is defined as an internal sense of satisfaction. Moreover, Johnson (2004) conducted a longitudinal study of 50 new Massachusetts teachers and found that her sample of teachers, part of what she terms a new generation, were in general less committed to teaching as a profession. Instead, they entered with one of two orientations, exploring or contributing. In many ways, the orientations put forth by Lacey (1977), McLaughlin and Yee (1988), and Johnson (2004), while they use different terms, have important parallels. All address this possible dichotomy between teaching for personal and professional gain and teaching for the sake of others.

Smulyan (2004) also addresses this dichotomy between two possible teaching orientations in her longitudinal study of female educators from an elite liberal arts college ($N=28$). She found that these women redefined what was meant by success in their own careers as well as in the classroom to incorporate individual and social change. Similarly,

van Veen, Slegers, Bergen, and Klaassen (2001) conducted a quantitative study of the teaching orientations of 452 secondary school teachers in the Netherlands, looking at teachers' orientations toward instruction, educational goals, and school organization. They found that these orientations varied along two axes, restricted to extended and progressive to traditional. These axes again have similarities to the professional and service-based teaching orientations identified in related work. Research in this field addresses teachers' initial ideas about instruction, teachers, and teaching from a variety of perspectives and over an extended time period. These preconceptions inform teachers' experiences in the classroom and, in turn, their movement within and outside of education.

4. Linking teacher retention to teachers' professional lives

Existing research on teachers' professional lives informs a problem: it describes the perspectives of teachers working in classrooms and schools. Rather than allowing teachers' careers to boil down to a single moment in time, this research captures the motivations and expectations of a variety of individual teachers in a variety of contexts over an extended period of time. In this way, this research begins to unpack the black box of teachers' careers. However, this research tradition is often disconnected in nature, using a variety of terminology and failing to build upon related findings. Further, it rarely links research results to concrete issues in education, such as retention and attrition.

A small body of research links teacher retention to teachers' professional lives. Similar to Marcos and Tillema's (2006) attempt to bring thought closer to action in teacher reflection, this research brings teachers' professional perspectives closer to their career choices. Moreover, this approach begins to conceptualize teachers' careers as one entity. Rather than considering pre-service, in-service, and retention or attrition as separate phases of an individual's life, they can be considered longitudinally as part of one educational experience. The remainder of this synthesis will discuss several research studies which consider the teaching career as just that: a singular career that expands, grows, and changes over time. These studies primarily fall into two areas: teachers' short-term and long-term goals. Both of these approaches consider teachers' experiences as a whole, linking their experiences to their ultimate career trajectory.

4.1. Teachers' short-term goals

This field of study connects teacher retention to teachers' professional lives through the idea of teachers' more immediate goals in the classroom. These studies use various terms, but in one way or another all discuss the relationship between what teachers want to achieve in the classroom and what they are ultimately able to achieve.

First, Yee (1990) recognizes that existing retention research ignores the dynamic quality of teachers' career decisions. She writes: "... traditional turnover studies treat retention as a static phenomenon; they rely heavily on sources of immediate dissatisfaction and attraction and neglect contextual or earlier influences related to the development of professional efficacy and identification" (Yee, 1990, p. 4). Her study took a different approach, conducting interviews ($N=59$) and surveys ($N=215$) on teachers' professional lives in an inner-city school, a wealthy suburb, and a working class community. At these three distinct school sites she examined how teachers made career choices within the context of the work environment, the dynamic process of career decision making, and the workplace conditions that affected teachers' level of satisfaction with their work. She found that perceived efficacy was a key component of job satisfaction and consequential for teacher retention.

More recently, Johnson (2004) and Johnson and Birkeland (2003) followed the experiences of 50 new teachers throughout Massachusetts. They followed these teachers for 4 years, conducting bi-annual interviews and administering one survey to track their career moves. Johnson (2004) found that these teachers sought a sense of success with students and their ability to meet students' needs emerged as a central theme in their experiences again and again. Johnson also notes that the goals of teaching were ambiguous and the day-to-day workplace environment often uncertain. These factors made it challenging for teachers to feel like they were making a difference with students. She found that many teachers left their current work environments in search of a more supportive school culture, where they could feel successful.

Hammerness (2006) demonstrates the important role of teachers' vision in their career decisions. Vision can take many forms, but in this case it refers to teachers' images of practice. In order to more fully understand teachers' visions, Hammerness administered a survey to 80 teachers, conducted brief case studies of 16 participants, and constructed in-depth portraits of four teachers and their professional visions. She found that teachers' ability to bridge the gap between their vision and their reality was central to how they felt about their work, and asserted that teach-

ers made career moves toward work environments that better supported their ability to reach their vision. While all three of these studies use different concepts to make their point, they all lend support to the idea that career decisions are driven by the relationship between teachers' goals and their ability to reach those goals in their workplace context.

4.2. Teachers' long-term goals

A second body of literature deals with veteran teachers as they reflect upon why they stayed in the field and what they got out of their careers as teachers, their goals over the course of a career. This research is primarily qualitative in nature, although some studies mix surveys with interview methods. For example, Brunetti (2001) conducted a mixed methods study involving a survey ($N=169$) and interviews ($N=28$) of long-term high school teachers in California. He found that teachers were generally satisfied with their jobs. He lists seven primary motivators for remaining in the classroom: students, passion for the subject, excitement of the classroom, autonomy, collegiality, importance to society, and practical motivators such as job security and salary and benefits.

Stanford (2001) came to similar conclusions in her study of veteran educators in Washington, DC. Stanford's (2001) research focused exclusively on African-American female teachers ($N=10$) working together in one urban elementary school. These teachers explained that they were able to remain in the classroom because of their commitment to their students, internal sources of satisfaction such as making a difference and seeing academic progress, personal support networks, and the collegiality of the faculty.

Cohen (1991) also conducted ethnographic case studies of five veteran high school teachers across the country in an effort to understand what a successful educator looks like. She found that each of these teachers was propelled by a passion for the subject matter, perceived success as personal improvement, saw themselves as continually learning, worked toward their own self-actualization, with student achievement as a by-product, and valued their own interpersonal abilities over and above structured teacher education.

Further, Nieto (2001, 2003) facilitated an inquiry group for veteran teachers ($N=8$) in the Boston Public Schools exploring the question "What keeps teachers going in spite of everything?" The themes that emerged from these conversations included the importance of autobiography in teaching, love for students, belief in the hope and possibility of public education, but anger and frustration at the inequalities of the system, the intellectual work of teaching, the democratic work of teaching, and the possibility for teaching to change lives and shape futures. While these studies find that teachers hold a range of long-term professional goals, three primary dimensions emerge as important over time, their own professional growth, the development of their students, and service to the community.

4.3. Promising research directions

Traditional research on teacher retention informs the question of career movement in education. However, it often looks at career decisions retrospectively, rather than as a continual process over time. Moreover, teacher retention research methodologically uses a large grain size, which cannot capture teachers' voices as part of their own career decisions. Research on teachers' professional lives takes steps toward illuminating teachers' motivations and expectations, but does not directly speak to retention. Moreover, because of its diverse foundations, it tends toward a theoretically inconsistent body of work. Addressing these existing limitations involves combining methodological and theoretical approaches from the two bodies of research to look across groups as well as individuals, consider teachers' career on a longitudinal continuum, and provide theoretical consistency to the field.

Traditional research on teacher retention often uses a very large grain size, while teachers' professional lives' grain size is small. An integrated approach captures both the group as well as the individual. This is to say, understanding teachers' career paths might need to combine larger scale quantitative research with some smaller scale case studies, an approach suggested over 25 years ago (Bloland & Selby, 1980) but rarely adopted. This mixed methods approach can work to problematize and contextualize some of the factors identified as important, while offering some predictive value to the lived experiences of classroom teachers. There are a number of ways to go about combining methodologies (Tashakkori & Teddlie, 1998) and some recent research which has already begun to look at the group and individual at the same time (e.g., Hammerness, 2006; Johnson & Birkeland, 2003; Quartz & TEP Research Group, 2003) can serve as a model for future work in its ability to identify patterns in career movement while also understanding how teachers themselves make sense of that movement.

Second, this new model of career research conceptualizes teachers' careers along a continuum, with a number of entry and departure points. Rather than dividing up research into categories such as pre-service and in-service, this new notion recognizes that individual teachers live their lives continuously in a variety of settings. Just as Feiman-Nemser (2001) offers the notion of a continuum in teacher learning over time, this synthesis suggests that a teaching career is also a continuum over time. Moreover, there are a number of ways in which teachers enter the profession, and a number of places they ultimately end up both within and outside of the educational system. These entry and departure points should be captured under the umbrella of teachers' careers. Logistically, this means more longitudinal studies, and more studies that start and end outside of the confines of the university.

Finally, future research in this field should work toward theoretical consistency. New research should draw upon the findings of previous research, use common terminology, and link conclusions together for more robust understandings. One place to start might be with the notion of goals. While no single study states this explicitly, together recent research appears to offer a common theme: teachers' goals, both short-term and long-term, are central to their career decisions. Future research might build off of this finding, use the language of goals, and further this emerging understanding. Single research studies can thus come together to form a more comprehensive synthesis. Theoretical frames might even reach beyond the confines of education, into sociology, economics, psychology, or career theory for a start, to draw in a variety of perspectives for a rigorous and complete theoretical treatment of teacher retention.

Grain size, a continuous conceptualization, and theoretical consistency frame this integration of teacher retention with teachers' professional lives. Together, they begin to link teachers' lives with their professional paths in order to understand and ultimately solve the education current crisis in the United States and around the world.

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