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Although the turnover rate among beginning teachers has been a major concern for some time, most studies do not link teacher retention with teaching practice. In contrast, this study looks specifically at career decisions coupled with practice. Guided by a view of teaching as social and cultural practice, the study used multiple qualitative data sources, including extensive observations, interviews, and samples of teachers' and students' work. Based on within and cross-case analysis of 15 cases at four distinct time points within a 5-year period, the authors identified multiple patterns of teaching practice linked to early career decisions, which reflect considerable variation in quality of teaching and career trajectory. The authors argue that "stayers" and "leavers" are not homogeneous groups, as is often assumed in research and policy. Rather, there are multiple variations of practice coupled with career decisions, some desirable and others not, with different implications for policy and practice.

Keywords: retention, teacher education/development, career development, teacher characteristics

Over the past two decades, the high turnover rate among beginning teachers has become a major concern. This is the case even in localities where personnel decisions are currently driven by budget shortfalls stemming from the economic recession. Most studies of teacher attrition and retention in the United States have investigated the impact of the organizational structures of schools (e.g., salaries, working conditions, support) or characteristics of the teacher workforce (e.g., demographics, degrees held, certification status). With a few exceptions, however, most studies have not linked teacher retention with teacher quality, and some studies have treated teacher retention as if it were a desirable end in itself.

In contrast, the study described here is based on the assumption that we need to know not just whether and why new teachers persist in teaching and for how long, but what kinds of teachers they are, what opportunities they create for students, what roles they assume, and how their career decisions over time relate to teaching practice. This study followed 15 teachers for 4 or 5 years from point of entry into a 1-year preparation program through 3 or 4 years of teaching or exit from the program or from teaching.¹ The purpose of this article is twofold: to identify and analyze configurations and variations in the teaching practices and career decisions of beginning teachers and to consider the implications for policy and practice. Based on multiple data sources, we argue that when teaching practice is examined in tandem with early career decisions, it becomes clear that “stayers” and “leavers” are not homogeneous groups, as is sometimes assumed in research and policy. Rather, there are multiple variations of practice-coupled-with-career decisions, some of which are desirable and others not. These have different implications for the recruitment, preparation, support, and retention of early career teachers.

Beginning Teacher Retention and Teaching Practice

In 2003, the National Commission on Teaching and America’s Future labeled teacher retention a “national crisis” (p. 21), warning that attrition was most severe for beginning teachers and schools with large numbers of poor and minority students. Despite the current economic crisis, retention continues to be a problem in many urban and rural locations and in teaching areas such as science, mathematics, special education, and teaching multilingual learners (Ingersoll & Merrill, 2010). Age and experience are key predictors of teacher turnover, with both the youngest and oldest teachers and the least and most experienced teachers most likely to leave (e.g., Hanushek, Kain, & Rivkin, 2004; Murnane, Singer, & Willett, 1998). Our focus here is on beginning teachers, who are, by definition, the least experienced and are often among the youngest teachers.

The Problem of Beginning Teacher Retention

Richard Ingersoll’s work was seminal in pointing out that attrition of beginning teachers was a major problem in the United States, in part because of his initially stunning finding that as many as 46% of new teachers left the profession within 5 years (Ingersoll, 2002). Ingersoll’s work challenged the conventional wisdom that teacher shortages are due to an imbalance between supply and demand caused by teacher retirements, increased student enrollments, and an insufficient supply of new teachers. Instead, Ingersoll (2003) argued that the problem was teaching’s “revolving door” (p. 11), through which many beginning teachers exited because of job dissatisfaction or the desire to pursue a different career. Ingersoll concluded that efforts were needed to reduce demand by increasing retention through better working conditions.

What Do We Know About Teaching Practice and Early Career Decisions?

In this study, we wanted to know not only what kinds of early career decisions teachers made, but what kinds of teachers they were and what configurations and variations emerged in teaching practice linked to career decisions. To date, relatively little research has linked career decisions with teaching practice in either studies of teacher attrition/retention or studies of teachers' career trajectories.

Attrition/retention studies. Attrition/retention studies generally focus on either the characteristics of the teacher labor force, or the conditions of schools as workplaces, or some combination of these. Syntheses of this research (e.g., Borman & Dowling, 2008; Guarino, Santibanez, & Daley, 2006; Johnson, Berg, & Donaldson, 2005; Strong, 2005) conclude that most of these studies do not link retention to teacher quality, even though the ideal is identifying factors that increase the likelihood of retaining effective teachers (Guarino et al., 2006; Johnson et al., 2005). In contrast, some recent studies have found that less effective teachers are more likely to leave, with effectiveness defined in terms of value added to students' test scores (Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2009; Goldhaber, Gross, & Player, 2011; Hanushek et al., 2004; Krieg, 2006). Although this kind of study connects attrition with teacher quality, it does not address actual classroom teaching practice as an aspect of teacher quality.

Among the attrition/retention studies, several by Susan Moore Johnson and colleagues (Donaldson & Johnson, 2010; Johnson & Birkeland, 2003; Johnson & the Project on the Next Generation of Teachers, 2004) shed light on classroom practice and career moves. Johnson and colleagues use interview or survey data to get at teachers' perceptions and experiences, although they do not directly examine classroom practice. Across studies, they assert that negative aspects of teachers' work conditions (i.e., lack of support, difficult or inappropriate teaching assignments, inadequate preparation, lack of materials, and unsupportive organizational structures) lead to teachers' low sense of professional efficacy, which in turn leads to increased turnover.²

Career trajectories studies. Rather than focusing on labor markets or the school as workplace, studies of teachers' career trajectories explore teachers' professional learning experiences, concerns at various life stages, and career decisions. This work, which is more international in scope than that previously cited (e.g., Bayer, Brinkkjaer, Plauborg, & Rolls, 2009), utilizes longitudinal studies (either interview or survey based), life histories, and case studies of teachers at various career phases. In a recent international review, Rolls and Plauborg (2009) concluded that teaching practice had generally been neglected in studies of teachers' career trajectories, a situation they called "surprising" (p. 25) since practice is usually considered the teacher's primary task. Along related lines, in a recent review of empirical studies linking teachers' education to outcomes once they enter teaching, Cochran-Smith et al. (in press) found almost no studies that examined both teaching practice and career decisions.

In one of the few career trajectory studies that speak to early career decisions and teaching practice, Day, Sammons, Qing, Kington, and Stobart (2007, 2009) conducted a mixed-methods study of a representative sample of 300 U.K. teachers to examine variations in teachers' lives, work, and effectiveness across the professional life span. They concluded that teachers' emotional identities and school contexts were central moderating influences at all life phases on teacher effectiveness, commitment, and resilience. In a study of Danish teachers' gradual mastery of the "workplace curriculum," Bayer and Brinkkjaer (2009) found that how teachers managed the workplace cur-

riculum was central to their career trajectories, although teachers' actual lesson organization and delivery changed little.

Several early career studies of U.S. teachers have also explored career decisions and teacher development. Freedman and Appleman (2009) found that candidates from one preparation program stayed in urban teaching because of a sense of mission, persistence, and a disposition for hard work. Hammerness (2008) concluded that teachers moved to new schools primarily for pedagogical reasons, particularly whether their "visions" about ideal classroom practice matched the reality of schools. Olsen (2008) suggested that teachers' development and early career decisions involved their reasons for entering teaching, which shaped their evolving identity. As we have shown, little previous research directly links teaching practice with early career decisions, suggesting the need for more work in this area.

The Qualitative Case Studies Project

In this article, we draw on data from the Qualitative Case Studies project (QCS), a longitudinal, multisite, cross-case study of learning to teach over time that traces the experiences of 15 teachers from the point of entry into a 1-year master's level teacher preparation program through 3 or 4 years of teaching or until discontinuation of the program or exit from teaching. This project is part of a larger interdisciplinary research effort that began in 2004 as part of the Carnegie Corporations' Teachers for a New Era initiative and was later supported by a grant from the Ford Foundation.

Theoretical Framework

The QCS project was guided by a view of teaching as social and cultural practice.

We assumed that teaching, like all social practice, is informed by cultural ideals, beliefs, principles, and values that have implications for issues of power, control, and authority (Gee, 1996). We assumed that teachers learn to teach through social interactions with students, colleagues, parents, administrators, and others both within and against the structures, affordances, and constraints of teacher preparation programs, schools, school districts, and larger accountability and policy contexts, which are mutually constitutive.

Conceptualizing teaching as social and cultural practice is akin to regarding teaching and learning to teach as cultural production (Eisenhart, 2001). In this sense, the QCS research project set out to study how teacher candidates (and then beginning teachers) "creatively occupied" (Levinson & Holland, 1996, p. 14) the different spaces of schools and classrooms as they were shaped by but also shaped those spaces. Eisenhart (2001) argues that this perspective involves looking at teachers' beliefs and expressions of identity and purpose in a different way:

These expressions would not be considered reflections of a fixed state of mind or enduring beliefs, but a response to past experiences that is simultaneously a commitment to future experiences. . . . They would be identified, not by individual statements of belief, but by combinations in the ways participants act in classrooms, label their own efforts, and describe themselves to others with whom they normally and regularly interact over time. (p. 217)

Working from the notion of teaching as social and cultural practice, the QCS study regarded teaching as complex and interpretive, where individual agency interacts with the

conditions of schooling and the cultures of schools in complex ways. We thus followed new teachers over time and looked for both patterns and variations in their evolving beliefs, practices, and identities as teachers as indicated by how they experienced the teacher education program, what ideas resonated with them, what they did in classrooms, how they talked about their work, how they interpreted their own and others' actions, how they constructed problems and formulated tentative solutions, how they utilized resources, and how they positioned themselves in relation to colleagues, administrators, parents, and students.

Research Questions

The larger QCS study addresses a wide array of questions about how people learn to teach over time. In this article, we address three: How do early career teachers construct practice, and what career decisions do they make? Are there identifiable configurations in teaching practice coupled with career decisions? What are their implications for policy and practice?

Study Participants and Research Site

All participants in this study were from the same teacher education program at the same institution, a highly selective Jesuit university with approximately 15,000 undergraduate and graduate students. From a pool of 150 master's level teacher candidates during 2 successive years, 12 and 10 volunteers, respectively, were recruited into the study; we were able to collect complete data on 15 participants, which became the primary database.

The characteristics of these volunteers were similar to those of the larger program population in school level, certification area, race/ethnicity, gender, age, educational background, and performance on multiple program measures of teaching practice. In addition, as Table 1 indicates, the participants in the study are fairly typical of teacher candidates in many university-sponsored programs—most were White, women, middle class, and monolingual.

Unlike the general profile of teacher candidates nationwide, however, all the participants in this study entered the program with strong academic backgrounds from selective colleges. All who took the Massachusetts Test for Educator Licensure (MTEL) passed and received state teaching certification, thus deemed "highly qualified," according to the federal mandate.

Data Sources

Johnson et al. (2005) point out that few studies track teachers longitudinally and have enough information about their backgrounds, experiences, and workplace conditions to examine how these factors influence one another over time and in differing contexts. The QCS study was unusual along these lines: The study extended over 5 years; participants worked in multiple school sites, levels, and subject areas; and a rich combination of directly observed and self-reported qualitative and quantitative data sources was collected. As Table 2 shows, data sources included: extensive face-to-face interviews with candidates/beginning teachers; detailed classroom observations during time periods 1, 2, and 5; interviews with instructors, supervisors, mentors, and administrators; candidates' coursework materials; samples of the assignments and assessments teachers used along with samples of their students' work; and surveys at multiple data points from program entry to 3 years out.³

Data Analysis

Findings are based on cross-case analysis of 15 cases of teacher candidates/ beginning teachers at four distinct time points. Analysis is based on a combination of within-case and cross-case comparison.

Level 1: Within-case analysis. Within-case analysis was used to reduce data and identify themes with explanatory power for individual cases (Ayres, Kavanaugh, & Knafel, 2003). These took the form of detailed case narratives with key excerpts from interview and observational data. The organizing structure for each within-case narrative included: (a) participant's entering characteristics; (b) program experiences; (c) experience of the first year of teaching, specifically content and pedagogy, learning and assessment, and efforts to teach for social justice; (d) experiences during the second and third years of teaching, as previously described; and (e) career decisions. The "conceptual infrastructure" (Stake, 2006) or working theory of each case drew upon the interplay of patterns and themes that created a sense of coherence for the case in its particular context.

Level 2: Cross-case analysis. There is a tension in cross-case analysis between maintaining the particularity of the individual case and identifying patterns that help explain a group of cases (Ayres et al., 2003). Collaboratively, our research group identified key elements of the cases, how these played out in individual cases, and how they compared across cases. Our intention was to bring into simultaneous view both the local detail of the individual case and key linkages between practice and career decisions. To do this, we created a series of multilevel, information-rich matrices, which substantially reduced individual case data and allowed us to see patterns across the vast amount of data we had for four time periods and 15 cases. We tested these by recontextualizing the data in terms of the particulars of individual cases, an iterative process that was repeated multiple times.

Linking Practice With Career Decisions in the Early Years of Teaching

To address a missing piece of the teacher education research, we explored whether and how practice and career decisions were linked over time within different contexts and conditions of schools and classrooms. To do so, we developed five continua of teaching as social and cultural practice coupled with a nuanced understanding of career decisions.

Understanding Teaching as Social and Cultural Practice: Five Continua

Based on data collected across cases, we analyzed teaching as social and cultural practice in terms of five continua, each scored on a 5-point scale from -2 to 12 (described in more detail in the following), which captured the range and variation of the practice enacted by the teachers in this study. Continua were constructed through a recursive analytic process that drew upon the multiple data sources described previously as well as prominent themes in the current research literature about how people learn and how teachers teach for a wide array of academic, social, emotional, and citizenship goals. We elaborated each continuum and its specific dimensions on the basis of their explanatory power within and across cases. The five continua are:

- Continuum 1: Relationships, Classroom Management, and Environment
- Continuum 2: Content and Curriculum
- Continuum 3: Pedagogy and Practice
- Continuum 4: Student Learning: Responsibility and Opportunities
- Continuum 5: Professionalism.

Each continuum subsumes multiple dimensions related to teachers' knowledge, interpretive frames, skills and strategies, values and dispositions, modes of interaction, relationships with others, and inquiry perspectives.

As a way to represent and assess quality of teaching, these continua are somewhat unconventional. This is the case in part because, as we noted earlier, the continua were developed through a recursive process based on analysis of longitudinal data and previous research. More importantly, these continua are intentionally holistic and overlapping because we aimed to explicate the complexity of teaching as social and cultural practice. That is, we conceptualized practice as simultaneously practical, interpretive, relational, culturally appropriate, and strategic, rather than technical and linear with the unidimensional goal of transmitting a given body of knowledge. The lower end of the rating scale for each continuum ($-2 \rightarrow 0$) includes aspects of practice regarded by both the teacher preparation program and in the research literature as relatively less effective, less empowering, less respectful, and/or less productive in terms of student learning opportunities, while the higher end of the rating scale ($0 \rightarrow +2$) delineates aspects of practice regarded by both the teacher preparation program and in the research literature as relatively more effective, more empowering, more respectful, and/or more productive. We provide a general description of each of the continua in the following.

Continuum 1, Relationships, Classroom Management, and Environment, has to do with the nature of the classroom learning environment (e.g., Newmann & Wehlage, 1993). Aspects of practice on the lower end of the rating scale for this continuum includes those that foster dysfunctional learning environments in which classroom interactions are chaotic and disorganized, students are disrespectful toward their classmates, and teachers' expectations for students are low and inconsistent. Further, on the low end of the rating scale, teachers make little effort to understand students' lives beyond the classroom or to address issues linked to gender, class, ethnicity, or sexual orientation. In contrast, aspects of practice on the higher end of the rating scale for this continuum promote rich relationships and positive interactions among all classroom participants, where the teacher utilizes effective routines to create an organized and orderly classroom. At the higher end of the rating scale, teachers demonstrate that they understand much about students' lives and view students' experiences and backgrounds as assets to build upon.

Continuum 2, Content and Curriculum, focuses on the scope, sequence, and substance of what is taught. On the lower end of the rating scale for this continuum are practices that reflect little attention to developmental, diversity, or student engagement issues. At this end of the rating scale content knowledge is shallow, and there is little attention or responsiveness to student reactions to and ways of making sense of content. On the higher end of the rating scale for this continuum, teaching practices reflect relevant, standards based content; build on students' prior knowledge; draw connections to the real world; and incorporate multiple perspectives (Onosko, 1996). Content and curriculum at this end of the rating scale are developmentally and linguistically appropriate and informed by rich content knowledge.

With an emphasis on classroom instruction, Continuum 3, Pedagogy and Practice (Figure 1), involves the values, assumptions, and expectations teachers enact in their classrooms. On the lower end of the rating scale are pedagogies and practices that assume universality in student learning styles and pay little attention to variations in learning outcomes and approaches. At this end of the rating scale, assessment practices are inauthentic, sporadic, and focused on memorization and recall. The teacher's attitude toward subject matter is indifferent and uninspiring. On the higher scoring side of this continuum

Table 1
Participant Background Information

Pseudonym	Race/ Ethnicity	Gender	Age	Work		Languages Spoken	Program of Study	Specialization in Teaching English Language Learners
				Experience Before	Master's			
Craig Woods	White	M	44	Computer science		English	Secondary science	No
Mark Roberts	White	M	33	Construction, waiter		English	Secondary history ^a	No
Lola Werner	White	F	25	Environmental science consultant		English	Elementary ^a	Yes
Sonia Chavez	Hispanic	F	23	Research assistant		English, Spanish, French	Elementary ^a	Yes
Sylvie Li	Asian	F	24	NA		Mandarin, English	Elementary	Yes
Mara Howard	White	F	24	Fashion design		English	Secondary history	No
Elizabeth Sigel	White	F	22	NA		English	Secondary English ^a	Yes
Elsie Reynolds	White	F	22	NA		English, French	Secondary English	No
Riley Miller	White	F	22	NA		English	Elementary	No
Matt Thompson	White	M	25	Sign language interpreter		English, American Sign Language	Secondary math	No
Kevin Ryan	White	M	22	NA		English	Secondary science	No
Amanda Lee	Chinese/White	F	22	NA		English, Mandarin, some Spanish	Secondary English ^a	Yes
Flick Webb	White	M	33	BOSE ESL tutor		English	Secondary history ^a	Yes
Rachel Kelly	White	F	26	City Year		English	Elementary	Yes
Susan Pershing	White	F	39	Social worker, university dean of finance director		English, Hebrew, some Spanish	Elementary ^a	Yes

^aDonovan Urban Teaching Program.

Table 2
Data Sources

	In-Depth Interviews (In-views)/General Topics	Collection of Teacher Observations (Obs) and Assignments and Pupil Collection of Teaching Work Samples	Materials/Timing	Larger Program Surveys	Additional Interviews	Program Assignments
Time Period 1: Pre-service program year	In-view 1: Background, teaching expectations In-view 2: Pre-practicum In-view 3: Program In-view 4: Full-practicum In-view 5: Pupil learning, inquiry In-view 6: Program reflection, career plans In-view 7: First year experiences, inquiry In-view 8: Pupil learning, social justice In-view 9: First year reflection, future plans In-view 10: Comparison first and second years of teaching, pupil learning, social justice, inquiry In-view 11: Big picture perceptions of the role as teacher In-view 12: School context, satisfaction and retention, pupil learning In-view 13: Career plans, pupil learning, social justice, inquiry In-view 14: Education reform, pupil learning, fourth year teaching In-view 15: Career plans, role of teacher, pupil learning, social justice, inquiry	With In-view 5	Obs 1: During pre- practicum Obs 2: Beginning of student teaching Obs 3/4: Middle of student teaching Obs 5: End of student teaching Obs 6: Beginning of year Obs 7: Few months into teaching Obs 8: Middle of year Obs 9: End of year	Entry—Beginning of fall semester Exit—End of spring semester	Program faculty inter- views Supervisor interview Cooperating teacher interview Administrator interview Mentor interview	Inquiry project, course units, journals, philoso- phy of education, other assorted assignments
Time Period 2: First year of teaching		With In-view 7 With In-view 8 With In-view 9		One Year Out—End of first year of teaching		
Time Period 3: Second year of teaching		With In-view 10 With In-view 11		Two Years Out—End of second year of teaching		
Time Period 4: Third year of teaching		With In-view 12 With In-view 13		Three Years Out—End of third year of teaching		
Time Period 5: Fourth year of teaching		With In-view 14 With In-view 15	Obs 10: During first semester Obs 11: End of year			

are practices that draw on students' cultural and linguistic resources and employ multiple scaffolding techniques (Zwiers, 2008). On this side of the scale, practices and pedagogies include formative and summative assessments, which guide teachers' decisions about continuing instruction (Black & Wiliam, 1998) and inform them about how to create multiple ways to access course knowledge and skills.

Student Learning: Responsibility and Opportunities is the label for Continuum 4, where the twin key ideas are the richness and cognitive complexity of the learning opportunities teachers create and the degree to which they assume responsibility for student learning. On the lower scoring side of this continuum are practices that reflect the assumption that some underachievement is inevitable and thus the teacher need take little responsibility for students' learning. In addition, practices on the low scoring side of the continuum isolate students' learning from real-world contexts and understandings, resulting in fragmented bits of knowledge and little depth or breadth of student learning. On the higher scoring side of the continuum are practices that reflect the idea that teachers and their students share responsibility for student learning. Accordingly, lesson planning and curriculum development practices on this side of the continuum are guided by ongoing reflection about student work and interests (King, Schroeder, & Chawszczewski, 2001; Wiggins, 1988). Here, learning opportunities for students feature considerable higher order thinking, are relevant beyond the classroom, and blend depth of thinking and breadth of knowledge in ways appropriate for subject area and grade.

The final continuum, Professionalism, focuses on teachers' sense of commitment, obligation, and responsibility to the teaching profession. On the lower end of the rating scale for this continuum are minimal participation in professional development opportunities, little attention to issues of social justice, and narrow visions of teachers' roles in the school community, including relationships with parents and other community members. On the higher end of the rating scale for this continuum are teachers' regular efforts to critically reflect on and examine their assumptions and actions, their collaboration with others to improve student learning, and their assumption of leadership roles in schools and in the profession. On the higher scoring side of the continuum, teachers actively seek out ways to open up their practice in order to continue to learn from teaching by working with others.

In the interest of space limitations and for illustrative purposes, the individual dimensions of Continuum 3, Pedagogy and Practice, are represented in Figure 1. (The elements of Continua 1, 2, 4, and 5 are represented in figures available in the online version of this journal.)

To characterize overall quality of teaching practice for the teachers in this study, all participants were assessed on each dimension of each of the five continua at multiple time points: toward the end of the student teaching period, toward the end of the first year of teaching, toward the end of the second year, and toward the end of the third year. To determine teachers' placements on individual dimensions of each continuum, the research team used as evidence data from case narratives, classroom observations, interviews, samples of teachers' class assignments and the resultant student work, selected scale scores from program surveys, and school context information. The team "quantitized" the qualitative data (Tashakkori & Teddlie, 1998), rating the 15 teachers on each dimension of each continuum using a 5-point scale (from -2 to 12). The team established the scores based on a recursive and consensual process, depending in particular on the in-depth knowledge of the lead researcher for each case, but also constantly comparing each case to all the other cases based on team members' cross-case knowledge.

The research team used the average score of the dimensions on each continuum to

generate a rating for each case study teacher on each continuum during the student teaching period and then repeated this same process for years 1, 2, and 3 of post-preparation teaching for each case. An overall yearly rating for each case was also generated, which was the average of the teacher's five continuum scores for each time point: the student teaching period and each of the three post-preparation periods. We then combined the overall average scores for years 1, 2, and 3 of teaching (but not including the score for the student teaching period) to produce an overall average for each teacher's post-preparation performance. (If a teacher did not teach all three of these years, we used the scores from the years during which they did teach.) We excluded the score from the student teaching period in calculating the overall post-preparation average because we were interested in quality of post-preparation teaching practice during the early career period. We then collapsed the overall average scores for the post-preparation years into three general characterizations of practice: "weak/poor practice" (an overall average between -2 and -0.67 for the post-preparation years), which signaled that a teacher's rated overall performance was unimpressive and inadequate in significant and multiple ways; "adequate practice" (between -0.66 and 1.66), which indicated that a teacher's performance was adequate but largely uninspiring and weak in at least some areas; and "strong/very good practice" (between 1.67 and 12), which meant a teacher's performance was at least adequate in all areas, but also noteworthy and commendable in multiple ways.

The rationale for these cut scores and these labels for characterizing quality of post-preparation teaching practice is both intuitive and numerical, given that the "weak" characterization includes the teachers in the bottom third of scorers, "adequate" represents those in the middle third, and "strong" includes teachers in the top third of scorers. In addition, these cutoff scores are consistent with the natural breaks in the scores for each group of teachers: For example, there is a notable gap in scores between the highest rated "poor" teacher (Susan, -0.75) and the lowest rated "adequate" teacher (Sylvie, -0.31) as well as a natural break in the scores between the highest rated "adequate" teacher (Craig, -0.01) and the lowest rated "strong" teacher (Matt, 1.68). Finally, we linked these general characterizations (weak, adequate, and strong) of each teacher's post-preparation performance with the career decisions he or she had made, as described in the following.

It's Not Just Staying and Leaving: Early Career Decisions

To track teachers' career decisions, we were influenced by expanded concepts of retention/attrition that go beyond the "leaving/staying" dichotomy (e.g., Ingersoll, 2001, 2002; Johnson & Birkeland, 2003; Johnson & The Project on the Next Generation of Teachers, 2004; Quartz et al., 2008). We identified and tracked all career decisions from point of entry into the program through exit from teaching (or from the preparation program) or through continued teaching. We counted as career decisions: entering or leaving a preparation program, seeking or not seeking a teaching position after preparation, staying at a school or moving to another school from one year to the next, and leaving the teaching profession. We also noted: voluntary versus involuntary moves, shifting to a different subject area, leaving teaching but staying in education (e.g., making a role change from teaching to administration or beginning graduate work in education), and leaving teaching with the intention of either possibly returning or planning not to return.

We matched the general pattern of the career decisions the teachers in this study made during the first 3 years of teaching (staying in one school, moving schools, leaving teaching) to ratings of their general quality of teaching (weak, adequate, strong) during the post-preparation years. The result was five distinct configurations of early career decisions

Continuum 3: Pedagogy and Practice				
← -2	-1	0	+1	+2 →
Teacher’s pedagogical strategies assume universality in students’ learning styles and cultural, linguistic, and experiential resources.		Diverse Teaching Strategies		Teacher utilizes pedagogical strategies that acknowledge students’ cultural, linguistic, and experiential resources.
Teacher adheres to the structure of scripted curricula without providing scaffolded support or appropriate teaching strategies.		Support for Student Learning		Teacher employs a range of scaffolding techniques, differentiated instruction, and questioning and assessment strategies at an appropriate pace.
Teacher utilizes resources and technology that are inaccurate, inappropriate, or do not support, scaffold, and extend learning.		Appropriate Resources		Teacher incorporates the use of appropriate, accurate, and engaging resources, materials, technology, and media in lesson planning and presentation.
Teacher presents as uninterested in and unmotivated by teaching, learning, or content knowledge.		Intellectual & Professional Engagement		Teacher evidences genuine interest and curiosity in content, materials, activities, and learning.
Classroom conversations follow an initiate-respond-evaluate format that limits questioning and debate. Discussion focuses on exposure to, and memorization of, facts. Classroom environment does not reflect or encourage collaborative learning.		Student Engagement		Substantive classroom conversations include open-conversations/debate on a range of topics. Discussion supports student reflection on how material relates to their lives. Students construct knowledge individually and collaboratively.
Teacher engages in limited, inappropriate or uni-modal analysis of student learning. Does not inquire into practice or act on classroom data to inform instruction.		Ongoing Assessment & Inquiry		Teacher evaluates and analyzes student progress through multiple forms of formative and summative assessment, acting on student data to inform practice.
Teacher seeks and/or develops pedagogical strategies in isolation from colleagues.		Professional Collaboration		Teacher develops and/or refines pedagogical strategies based on collaborative, critical dialogue with colleagues.

Figure 1. An Example of a Practice Continuum: Pedagogy and Practice

coupled with quality of post-preparation teaching practice; these differing configurations have different implications for policy and practice. We also had one participant in the study who completed the preparation program and was certified to teach but did not seek a teaching job. We have not included this case in the discussion of configurations of practice and career paths that follows since we do not have data for him for any post-preparation years. However, we do comment on his case at the conclusion of the next section because it may shed some light on the relatively large number of teachers nationwide who are fully prepared to teach but never enter the field for a variety of reasons related to the labor market and life circumstances (Ingersoll, 2004).

Coupling Early Career Decisions With Quality of Teaching Practice: Five Configurations

The five configurations of early career decisions coupled with quality of teaching practice were: (a) strong teaching and continuing to teach in the same school, (b) strong teaching and moving schools, (c) adequate teaching and moving schools, (d) problematic/weak teaching and moving schools/ positions in order to continue to teach, and (e) problematic/weak teaching and leaving teaching (not by choice). Labels for career decisions and practice can never be completely fixed since career decisions occur on multiple occasions and practice changes over time (Quartz et al., 2008). For this analysis, we used the labels for overall quality of teaching practice (weak, adequate, strong) and the labels for career decisions (stayed at the same school, moved schools, left teaching) during the post-preparation period since this time period is consistent with most discussions of “early career” teachers. In the following sections, we elaborate the five configurations of career decisions/ quality of teaching practice by highlighting one case for each and then considering the implications for policy and practice.

Configuration 1: Going Strong and Staying On

We use the phrase going strong and staying on to refer to the configuration of strong teaching and remaining at the same school. In terms of maintaining a high-quality and stable teaching force, this configuration may be the most desirable outcome for new teachers. Configuration 1 teachers enacted teaching practices on the right side of the teaching continua and continued at the same school throughout our study. Configuration 1 teachers also took on leadership roles and became involved in school change efforts.

Six of the 15 teachers we studied exemplified this configuration. Five worked in urban schools where there were limited resources and high teacher turnover; one worked in a suburban school with full support and development opportunities. Despite challenges, most Configuration 1 teachers worked to acquire resources and dedicated extra hours to planning. We use Flick Webb4 to exemplify Configuration 1. Flick entered the preparation program with an expressed dedication to teaching English to multilingual learners.

This interest, which derived from volunteer work teaching adult multilingual learners, was sustained throughout preparation coursework, and he opted to include the Teaching English Language Learners (TELL) specialization in his program of study. While Flick often voiced frustration with the preparation program for its perceived lack of emphasis on concrete classroom strategies, he implemented many techniques learned in the TELL program.

Beginning with student teaching and continuing throughout his early teaching years, Flick’s practice was consistently rated as strong on all five continua. The ratings were bolstered by his skill devising challenging curricula and assessments and the thoughtful way he reflected on practice. His commitment to remaining in the same urban school coupled with his strong instructional abilities made him a clear Configuration 1 teacher.

In terms of fostering relationships and maintaining a positive classroom environment, Flick’s performance often went beyond expectations even when the conditions in his school were less than ideal. Similar to other Configuration 1 teachers, Flick’s ability to create meaningful learning opportunities for all students was a strong aspect of practice. His mentor commented on his commitment and work ethic. For example, she credited him for staying up late to create separate lessons with differentiated techniques for special education and multilingual students, and she confessed that she would not have differentiated material for the two populations.

Typifying his practice, for one course Flick led senior-level multilingual learners and special education students through a capstone graduation project, helping them identify meaningful research topics that tapped their prior knowledge. Drawing on lessons learned from the inquiry project he completed in the preparation program, Flick elicited unprecedented levels of work from students. Comparing Flick's students' final projects with those of previous teachers with similar students, his mentor remarked that previous teachers lowered expectations for students and diluted the requirements of the capstone inquiry project. In contrast, Flick maintained high expectations similar to those of teachers who taught the mainstream population.

Like other Configuration 1 teachers, Flick sought out professional development opportunities and worked diligently to improve. Acknowledging from the beginning that his practice was not perfect, he viewed teaching as a craft that needed continuous attention over time.

Configuration 1 teachers in this study typified the label of going strong, staying on. They demonstrated a strong commitment to the success of all students, including those traditionally underserved. They persisted in the same school sites even when there were challenges. They sought out support within their schools or outside of it. Most regularly stayed after school to provide additional help to struggling students and keep up with the demanding workload. Over time, every one of the Configuration 1 teachers in this study displayed clear signs of exhaustion and frustration, which many of their schools did little to address. Their deep commitments to students and to teaching kept them in the profession and working to improve schools.

Configuration 1 teachers, who engage in very strong practice and stay on, even when conditions are challenging and demanding, offer schools—and society—a great deal. Teachers who exemplify this configuration minimize staffing disruptions, make long-term collaborations with colleagues and families possible, and let schools avoid the costly and difficult process of hiring and socializing new teachers. Our data suggest that in order for Configuration 1 teachers to flourish, they need meaningful professional development and opportunities to collaborate. Most of them did not find this in their schools. They also need guidance about how to choose their battles and safeguard personal time. Much more attention needs to be given to ensuring the sustainability of these teachers. Otherwise, school leaders are likely to find at least some of these teachers burning out. This was nearly the case with Flick Webb, who was emotionally and physically drained at the end of the first year: "Everybody tells you your first year is your worst, but I don't think you have any idea until you actually do it . . . I mean, if it doesn't get better I won't be teaching very long."

Configuration 2: Going Strong but Moving Along

The expression going strong but moving along refers to the configuration of strong teaching but changing schools. Like Configuration 1, Configuration 2 involves strong teaching practice with ratings on the right side of all five continua. Yet this configuration also involves changing schools by choice at least once, but possibly multiple times, during the early years of teaching. The quality of teaching of Configuration 2 teachers is highly desirable; however, their career mobility can prove troubling. Among the 15 teachers we studied, 3 typified Configuration 2. To illustrate, we concentrate on Lola Werner, who entered teacher preparation after a short stint in environmental consulting.

Lola had a strong commitment to teaching as an act of social justice. She said

Table 3
Ratings of Participants on Five Continua Across Four Time Points

	Student Teaching					First Year of Teaching					Second Year of Teaching					Third Year of Teaching					Average for Post-Preparation period							
	Period					Continua Scores					Continua Scores					Continua Scores												
	1	2	3	4	5	Average	1	2	3	4	5	Average	1	2	3	4	5	Average	1	2		3	4	5	Average	1	2	3
Amanda	.63	1.0	.71	.66	1.43	.89	.88	1.57	1.28	1.16	1.14	.86	.75	1.28	1.28	1.33	1.14	1.16	1	.70	.86	.71	.71	.80	.94			
Elizabeth	.89	1.0	1.1	1.2	.43	.92	1.0	1.6	1.6	1.2	1.7	1.42	1.3	1.7	1.6	1.3	1.7	1.52	1.2	1.7	1.6	1.3	1.7	1.5	1.48			
Flick	.5	.71	.57	.5	.86	.63	1	1.43	.86	1.5	1.29	1.22	Data too limited to evaluate					1.33	1.33	1.25	1.12	1.19	1.24	1.23	1.47			
Mara	1	1	.75	1	1.4	1.03	1.4	1.3	1.14	1.2	1.29	1.27	1.63	1.43	1.6	1.5	1.4	1.51	1.63	1.57	1.6	1.71	1.7	1.64	1.68			
Matt	.63	.43	.43	3	.43	.44	1.0	.71	.43	.5	.57	.64	1.0	.43	1.0	.5	.43	.67	1.3	.71	.71	.5	.43	.73	.86			
Sonia	.63	1	1	.57	.57	.75	.63	.57	.43	.5	.57	.54	.75	1	1	1	.57	.86	1	1.3	1.3	1.3	1	1.18	.86			
Lola	.75	1	1	.83	1.14	.94	.88	1.14	1.57	1.17	1.43	1.24	1.25	1.71	1.71	1.5	1.71	1.58	1.5	1.86	1.71	1.67	1.71	1.69	1.5			
Rachel	.67	.67	.83	0	.67	.57	1.0	.67	1.0	0.3	1.3	.85	1.5	.8	1.2	.30	1.67	1.29	Data too limited to evaluate					1.07	1.07			
Riley	.63	.57	1.1	1	.57	.77	1.3	.57	1.57	1.2	1.43	1.21	1.3	1	1.6	1.3	1.4	1.32	1.3	1.3	1.6	1.3	1.4	1.38	1.3			
Craig	.25	1	.75	3	.43	.55	-.75	.29	.42	-.75	-.43	-.24	-.88	.29	.42	-.33	-.57	-.21	0	.71	.71	.5	.29	.44	.00			
Sylvie	-.37	1	.57	5	-1.14	.11	-.88	.71	.57	-.75	-1.4	-.36	-.88	.71	.57	-.83	-1.4	-.26	-.88	1	.57	-.83	-1.4	-.31	-.31			
Mark	-.25	-.4	-.7	-1.0	-1.1	-.70	-1.1	-1.6	-2.0	-1.5	-1.9	-1.62	-.88	-.6	-1.0	-1.3	-1.9	-1.14	Did not teach until end of year					-1.38	-1.38			
Elsie	-.25	.43	-.43	-1.3	-.57	-.43	-.75	-.57	-1.1	-1.5	-1.4	-1.08						Left teaching						-1.08	-1.08			
Susan	-.37	-.4	-1.4	5	-.57	-.20	-1.1	-.71	-.57	-.5	-.58	-.75						Left teaching						-.75	-.75			
Kevin	-.89	-.6	-.3	-.8	-1.3	-.78	Did not enter teaching																					
Continua Labels																												
Continuum 1: Relationships, Classroom Management, and Environment																												
Continuum 2: Content and Curriculum																												
Continuum 3: Pedagogy and Practice																												
Continuum 4: Student Learning, Responsibility and Opportunities																												
Continuum 5: Professionalism																												

teaching challenged her to think about race and how it influenced students' education and lives; she wanted to learn how to teach in a way that helped students from different backgrounds understand one another. Dissatisfied by the conditions she encountered in some schools, she moved from one charter school to another in search of an environment aligned with her beliefs about education. Over 5 years, Lola worked in four different schools, beginning with her student teaching school.

Lola had solid content background, including an undergraduate degree in geology. She routinely used videos, books, and resources from the Museum of Science and elsewhere to bolster students' learning. She regularly analyzed students' work to refine instruction. This systematic approach, which she learned in the preparation program, continued into her early years. After many students in her seventh/eighth-grade science class failed a test, for example, she examined test responses to evaluate what caused confusion. She then sought supplemental classroom material from a local museum, retaught the material in new ways, and gathered formative assessments. New activities seemed to make a difference, and she surmised that the wider range of activities allowed students to experience content in varied and more effective ways. A resourceful and persevering spirit characterized Lola's teaching—when she did not succeed, she looked to students to ascertain what they needed and then sought additional resources and new ways to access material.

Like Lola Werner, other Configuration 2 teachers approached teaching with high expectations and collaborated with colleagues and students to maintain a positive environment. High expectations were essential to the work of Configuration 2 teachers, and, as in Lola's case, when schools did not hold similarly high expectations, the teachers were disappointed. This was a significant factor in the decisions of Configuration 2 teachers to leave.

Throughout her early years, Lola sought an urban school culture that was consistent, supportive, and stimulating. She was drawn to her first job because a culture of high expectations seemed to pervade every classroom. Faculty and administrators spoke with high regard for students, and many worked beyond the school day to serve students. However, many of the school's practices proved a bad fit with Lola's emerging ideas about what it meant to have high standards for herself and students. For example, in an effort to establish consistent discipline standards, administrators and teachers enforced a schoolwide system of assigning merits and demerits to students. Our interviews with Lola suggested that this system was mismatched with her ideas about teaching for social justice, which centered primarily on showing care and concern for students. The next year, however, even after moving to a new school, Lola was again disappointed. She described the new administration as a "mess" and the school culture as "toxic." She believed that high teacher turnover was a result of the administration's inability to uphold a clear educational vision or support teachers' work, and she was unable to find a supportive network of colleagues.

Despite Lola's critiques of her public student teaching school and her first two charter schools, each of these taught her more about the challenges involved in maintaining high expectations in the context of urban, financially strapped schools. Though difficult, these experiences helped Lola envision more concretely the school environment she needed to match her ideals and expectations. With clearer expectations and with the benefit of easy mobility given her subject area (science) and the active charter school network, Lola moved to a fourth school—again a charter school. There she finally found a culture that matched her conceptions of social justice and high standards for all students

as well as positive norms of teacher collegiality and administrative support. As of this writing, she remains at that school.

Teachers like Lola Werner—young and committed to constant improvement as well as social justice—may well be the kind of teacher needed in many classrooms today. Yet as Configuration 2 teachers, they also pose a challenge to the educational system: They have very high expectations not only for students but for themselves and mentors, colleagues, supervisors, and school cultures generally. It is very clear that some schools support these ideals more than others. Configuration 2 teachers, particularly those who teach in high-demand content areas like science, are also not afraid to leave a school, believing that what they seek is worth the burden of moving.

Configuration 2 provides a nuanced sense of the difference between teachers who are “stayers” and “movers,” even though these are sometimes treated as a homogeneous group in policy research. This also challenges the assumption that there are not enough high-quality teachers who stay in teaching. Our Configuration 2 teachers were both strong and committed. They appeared to be doing well, steadily developing practices that engaged students and yielded significant student learning. Yet, the lack of adequate support or the feeling that the school culture did not reflect the values and beliefs that brought them into the profession often drove these teachers to leave their schools in search of others that better matched their expectations and commitments. The experiences of Configuration 2 teachers raise questions about the responsibilities of school leaders to support and develop high-quality teachers, something that is glaringly absent from recent policy conversations focusing on teacher recruitment and quickly firing ineffective teachers.

Configuration 2 also suggests that preparation programs need to help teacher candidates assess potential job placements and determine which school cultures are likely to align with their beliefs and practices. As part of the hiring process, districts and school administrators need to articulate their school’s mission and their enactments of the mission, so candidates can make better informed decisions, although this is seldom the case (Liu, 2002). Our study suggests that in order to retain talented teachers, school administrators will have to do more than articulate a vision—they will also have to enact that vision in ways that enhance the learning of the children and the adults in their schools.

Configuration 3: Middling, Then Moving

The phrase *middling*, then moving refers to two cases in our study where teachers engaged in adequate practice until eventually moving to a different school. In one case (Craig), which is described in the following, the teacher slowly began to improve after moving. In the other case (Sylvie), the teacher moved in order to continue to have a position, since it was evident she would not be rehired in the current position, but continued to perform relatively ineffectively. She eventually left teaching. Configuration 3 is problematic in that it involves generally ineffective teaching practices. In addition, this category involves moving schools, which carries with it all of the Configuration 2 problems of staffing, school instability, and difficulty building a strong school culture. Our two cases here suggest that this configuration may be unpredictable: It may ultimately lead to improved teaching, if the teacher relocates to a school better suited to his or her professional needs and also more demanding in terms of quality teaching; or, it may lead to further difficulties and eventual attrition.

We use Craig Woods to describe the relatively positive side of Configuration 3—where despite inauspicious beginnings, a move eventually led an adequate teacher to

somewhat improved teaching. This is consistent with other research indicating that teaching quality and teacher persistence are often related to the match between teachers' and schools' expectations and responsibilities (e.g., Hammerness, 2008; Jackson, 2010; Liu, 2002).

Dissatisfied with his computer programming career, Craig, a 44-year-old White male, entered the teacher education program to become a secondary science teacher. Although he was satisfied with his preparation experience, Craig's practice did not mirror the program's ideals concerning inquiry as a way to continuously improve practice and teaching to meet the needs of all students. After program completion, Craig took a middle school job and stayed for 2 years, although he was overwhelmed by the challenges of classroom management and planning.

Craig attributed his difficulties to having completed student teaching in a high school, which he felt did not prepare him for setting expectations in middle schools. He also felt burdened by the time demands of curriculum planning, which proved difficult to balance with family life. Craig's difficulties resulted partly from his own reluctance to reflect on and take responsibility for practice, but they were greatly exacerbated by a job that was split between two schools. Although this arrangement is commonly used by school districts to deal with staffing and budget issues, our data suggest that this is extremely difficult for a new teacher. This prevented Craig from becoming part of either school community and limited his mentoring support and common planning time.

With progressively more frustration over 2 years and attributing his troubles to the teaching environment, Craig applied for a sixth-grade math/science position in another district. As he explained, "I've come to the conclusion that [my current school] is a small, urban environment, which is fine, but that wasn't my goal. I wasn't out to save the world." The diverse student population in terms of race, socioeconomic status, and school achievement levels was more "urban" than what Craig had hoped to teach in. He found a school that better fit with his expectations and experience. However, while the new school met his expectations in terms of its student population, school leaders also had higher expectations for students and teachers. For instance, during Craig's first year at the new school, another science teacher was denied "professional status" (tenure) and subsequently not rehired because he had not demonstrated commitment to professional growth or service to the school community. Partly in response, Craig enrolled in a course on skillful teaching and began regular participation in professional development.

Craig's teaching practice during the pre-service year and first 2 years was assessed at the middle to low end of the continua of practice. He preferred to stay at the periphery of social interactions. He resisted professional development and only selectively listened to mentors' advice. The affective distance he maintained had a negative impact on his relationships with students, who tended not to see him as an authority figure. Even in chaotic classroom moments, Craig was passive, which fed classroom management problems.

Additionally, during his first 2 years teaching, our observations of Craig and analyses of his students' work revealed that in contrast to the practices emphasized by the preparation program, he provided students with limited feedback and did not use their work to shape his curriculum or practice. Project work was generally given a score based on a rubric, but Craig offered little comment on students' misconceptions, incomplete work, or how to improve the final product. Although Craig planned lessons based on district/ state standards and frameworks, he did not utilize formative or summative data to modify curriculum or practice.

After moving to a new school, Craig's practice was rated higher on all five con-

tinua because he attended more closely to student learning without distractions from behavior management issues. This was likely because Craig was more comfortable with the student population, who more closely matched his expectations and levels of engagement. As importantly, however, in the new context, the administration pushed teachers to focus on students' learning, an aspect of teaching that was also emphasized in the preparation program. The new school required teachers to meet regularly in teams to examine student work and to share and revise curriculum. Through collaboration, Craig modified classroom practice and began to review student outcomes to enrich his curriculum and instruction.

Craig and teachers like him are problematic due to initially ineffective teaching, escalating job dissatisfaction, and eventually moving to another school. If teachers like Craig continue to teach in contexts that do not demand and support improved practices, then the likely outcomes, which are reflected in the other Configuration 3 case, are teacher frustration and dissatisfaction, student underachievement, and high levels of teacher turnover.

As Craig's case shows, however, schools that demand high expectations from students and teachers while adequately supporting their learning have the potential to improve instruction and retain teachers. Configuration 3 highlights the power that school contexts and cultures have in terms of teacher development and retention.

Configuration 4: Falling Short but Hanging On

The label falling short but hanging on characterizes weak teaching but continuing to teach. The one teacher in our study who exemplified Configuration 4 was rated at the negative end of each of the five continua we identified, yet over time he somehow managed to remain in teaching, which suggests serious problems related to teacher quality and retention. The career path of the teacher in this category was marked by an odd and circuitous route involving multiple positions at the same school, temporary and nontenured positions, and eventual movement to a new school to continue teaching despite poor performance and not being rehired by previous schools.

Further, because of his mobility, the Configuration 4 teacher took his poor teaching skills with him to new settings, thereby masking or delaying identification of his weaknesses and undermining the possibility of relationship building, which depends on the stability of a school's teaching community. Clearly, this represents an undesirable configuration for students, administrators, colleagues, teacher educators, policymakers, and the public.

One teacher in this study, Mark Roberts, typified the configuration of falling short but hanging on. He exhibited poor practice, moved schools and changed positions to stay in the profession, and demonstrated low expectations for students and himself.

Mark entered the preparation program in secondary history after spending a number of years in the restaurant business. He was and continues to be a competitive cyclist, which demanded nearly all of his after school and weekend time. Though critical of his preparation coursework because he felt it was not adequately rigorous, he was not very successful in his fieldwork placements. His student teaching supervisor found it difficult to coach Mark because he rebutted all her suggestions. The reflective criticism Mark expressed about the program was not mirrored in Mark's reflections on his own practice. In many ways, he was not open to improvement and often took the path of least resistance. These were red flags in Mark's development as a teacher. However, the preparation pro-

gram did not act on these warning signals. Mark was neither counseled out of teaching nor denied endorsement for the state teaching credential.

Mark's professional career began late in the summer following his student teaching year when he was offered a high school science position as a "long-term substitute teacher" at the school where he had student taught, despite the fact that Mark was not certified in science nor did he have science content background. But Mark wanted to teach at this school, in part to work with urban youth, which was his stated reason for teaching, and in part because of the school's convenient location near his apartment. However, Mark's was not a permanent position, which would have carried the expectation that he work toward tenure and would have given him a certain amount of support as a new teacher. It is not entirely clear why the school hired Mark in this out-of-field position, although there was a shortage of science teachers. But it is clear that this was problematic: In his position as a long-term substitute, Mark had no formal mentoring, no induction program, limited support to develop his practice, which was weak from the start, and less accountability than a permanent teacher. Mark's first year was not a success in terms of effective practice or supporting high levels of student achievement. At the end of the year, Mark had no job lined up.

The following year, well after the school year started, Mark secured another non-permanent teaching position at the same school, this time in the area of history, in which he was certified. During that year, however, Mark decided he actually preferred being a science teacher because of what he perceived as enhanced marketability. He also preferred the almost entirely scripted science curriculum. At the end of the second year, the history position was not offered to Mark because it was promised to a more senior teacher. Mark did not secure a full-time position during the following school year (his third year out of the preparation program) until the last 6 weeks of the year when a science position became available due to a teacher's maternity leave. While unemployed, Mark had studied for and passed the state exam necessary for certification as a secondary chemistry teacher. This shift in subject area certification was possible because once a teacher is certified to teach in Massachusetts, the only additional requirement for certification in another content area is passing a content area exam. Four years after earning his master's degree and certification in secondary history and having moved from one position to another, Mark was certified as a science teacher and began a new full-time position working in a small program for at-risk youth located within a large urban high school. At the end of a year in this position, he was extended a contract for the next year, and for the first time, 5 years after graduation, he had remained in a teaching position for longer than one year.

Over the 5 years of this study, Mark's practice was consistently rated low, and he maintained low expectations for students' learning. This influenced content and curriculum, his general pedagogical approach, and the extent to which he functioned as a professional. Our observations revealed that Mark's classrooms were chaotic, and his teaching approach generally included disorganized lectures followed by seatwork and rote worksheets. He felt little individual responsibility for student learning, as he remarked during his first year, "The students are just really low skilled. . . . But it's not necessarily what I'm doing. It's just that these kids are terrible." Mark failed to see the connection between students' poor learning outcomes and his lack of preparation, limited knowledge of content and pedagogy, and overall attitude.

Mark typifies a very undesirable aspect of Configuration 4 wherein a teacher fails to see the disconnect between beliefs and actions. Although Mark claimed he supported students through personal relationships, our data consistently indicated that his percep-

tions did not match reality. Mark did not meet with students before or after school, and in reality he developed close relationships with very few students.

Configuration 4 exposes the complexity involved in ensuring high-quality teachers for all students. Despite consistently low levels of practice, Mark moved in and out of teaching for 5 years, and although the district did not offer him permanent positions, their hiring and out-of-field placement practices made it possible for a poor teacher to keep on working. Ironically, as of this writing, Mark is working in a special program for struggling students who, we imagine, would benefit from expert teaching rather than the low level Mark consistently exhibited. Mark's case exposes many problems in the overall system of teacher preparation and induction, not the least of which are out-of-field teaching assignments and the need for greater oversight of temporary or short-term teachers (who often end up being long term in reality). This configuration also exposes issues in preparation programs that may not adequately detect and deal with problematic cases. Despite cooperating teachers' and supervisors' concerns about Mark, these issues were not adequately addressed, and Mark neither received a failing grade for student teaching nor was counseled out of the profession.

Configuration 5: Falling Short and Getting Out

We use the expression *falling short and getting out* to refer to two teachers in our study who exhibited weak and/or problematic practice, were fired or not rehired by their schools during the first year, and then chose to leave teaching with no intention to return. Like Configuration 4, Configuration 5 involves teaching practice rated negatively on the five continua of practice. However, unlike Configuration 4, wherein a weak teacher persisted by maneuvering through multiple positions, Configuration 5 involves weak teachers who were asked to leave. In a certain sense, then, this configuration is less troubling than Configuration 4 in that weak teachers were rightly asked to leave their jobs. But of course this is much more complicated. We highlight the case of Elsie Reynolds to illustrate.

Elsie had a distinguished academic history with deep knowledge of English literature and a degree from an Ivy League college. The preparation program's commitment to social justice resonated with Elsie. She aspired to make rich literature accessible to all students and planned to make teaching a lifetime career. Elsie was outstanding on many of the criteria required for program admission, but it was her performance on the job that mattered most and impressed the least.

Similar to the other teachers rated unfavorably on the five continua, Elsie lacked teaching strategies and skills and made poor teaching decisions. For example, even when teaching an appropriate literary text, Elise often glossed over potentially meaty themes and missed opportunities to ask deep questions to lead students beyond recalling plot points and sequence. Rather, she centered discussions on students' discrete and disconnected reactions and was unable to help students see the depth of ideas in texts.

Elsie had begun her teaching career with something very different in mind. In fact, Elsie's desire to create engaging learning opportunities and introduce students to challenging texts showed initial promise. Yet, early on in her first year as a teacher, fissures began to emerge between what Elsie had described as desirable practice and what she enacted in the classroom. Like many novices, Elsie struggled, and she was aware that her practice was not meeting her own ideals. The Configuration 1 and 2 teachers we observed also dealt with this sense of disequilibrium at times; but they dealt with it in a proactive manner by taking ownership for students' learning and seeking out colleagues with whom they could

work collaboratively to improve practice. In contrast, with no support from mentors or colleagues and a school culture that could best be described as isolating, Elsie drew inward when she faced difficulties. Over time, as her students failed to meet her expectations and Elsie herself failed to live up to her ideals about teaching, Elsie's practice and her commitment to teaching appeared to disintegrate.

Elsie's struggles were exacerbated by her need to guard her personal time to keep an existing medical condition in check. Of course personal needs and boundaries are always part of long-term sustainability and commitment of quality teachers. However, for Elsie, her health condition governed many of her career decisions, including her initial request during the preparation period for a student teaching placement near home, which in effect meant a site not partnered with the preparation program. Later she also decided to apply for teaching positions only at schools near home. Some aspects of Elsie's situation were the result of her own choices. On the other hand, however, Elsie's difficulties in the classroom were also strongly influenced by a school culture that offered her almost no support as a new teacher. Faculty and administrators at Elsie's school, who could have been instrumental in helping, appeared to buy in to the "sink or swim" credo for new teachers. In addition, Elsie's classroom could be reached only by descending into the basement of the main building, walking down a long corridor and up a flight of stairs into an annex. This physically isolated Elsie from all the teachers in her department and made collaboration virtually impossible. Elsie's department chair, her officially designated mentor, admitted to us in an interview at the end of the school year and after Elsie had been informed she would not be rehired that the school offered few induction and support opportunities for new teachers.

In interviews early during her first year of teaching, Elsie criticized school administrators for expecting her to instruct the class in a teacher directed manner, which she said she was morally opposed to and professionally unprepared for. Over time, however, she abandoned most of her alternative ideas about small groups and interactive discussions in favor of an uneven and self-conscious teacher-directed classroom. Over time, the disconnect between Elsie and her colleagues grew as she became increasingly distrustful of the administration, coworkers, and her so-called mentor, all of whom maintained their distance and thereby allowed her to "sink." After she was informed that her contract would not be renewed for the next school year, Elsie asked for and received permission to cover with brown butcher paper all the windows that looked into her classroom from the hallway. Covering up the windows was a perfect metaphor for the situation: No one could see into Elsie's classroom to judge her, but Elsie could also not see out and thus could not reach out for help or learn how to improve.

Like other teachers with weak practice, Elsie failed to develop essential skills, including the ability to reflect on teaching beliefs and practice. Several factors prompted Elsie to give up in the face of difficulties, including the student teaching site, which the program had reluctantly permitted in order to accommodate Elsie's health condition despite the fact that the school was not involved in a partnership with the teacher preparation program. Although it is difficult to know for sure, we think Elsie would have improved with a mentor who helped her open up her teaching practice and reflect on ways to change. As it happened, she received limited support from the program and almost no support from her appointed mentor. Sadly, Elsie's teaching career ended soon after it began, and a young teacher with a stellar academic background and the intention to teach for a lifetime left teaching undeveloped, crestfallen, and defeated.

Preparing to Teach but Never Teaching

We comment on the final case in our study to speak to the experiences of those who become credentialed as teachers but never actually teach. In our study of 15 teachers, only 1 teacher did not enter teaching, although this is a larger phenomenon nationwide (Ingersoll, 2004), which suggests that this is likely not simply an aberrant case. Kevin Ryan completed the teacher preparation program, obtaining both his master's degree in education and state licensure as a science teacher. However, he chose not to enter teaching; instead he returned to engineering, his undergraduate field.

At the beginning of the preparation program, Kevin said he had not enjoyed the two summer engineering positions he held while an undergrad in college and felt that teaching might be more fulfilling. However, by the end of the program, Kevin had decided that because of the low salary and high demands on personal time, teaching was not for him. Following graduation, he moved across the country to an engineering position.

During student teaching, Kevin's practice was rated at the low end of the continua. He struggled to manage the classroom, align assessments and curriculum, and differentiate instruction in support of all learners. Nevertheless, Kevin had some success at student teaching because of his strong content knowledge and his charming personal demeanor. Despite this glimmer of hope, Kevin's practice overall was weak. His lessons were quickly thrown together with short lectures followed by individual seatwork. Because Kevin assumed that all students would grasp the material as easily as he had, his lessons rarely included scaffolding or supports for struggling students. Ultimately, Kevin's choice of engineering over teaching was probably desirable.

Obviously the experiences of teacher candidates like Kevin who prepare but never enter teaching have many implications for policy and practice. Kevin's case is a classic example of the potential teacher in a marketable area who chooses a more lucrative career. But this may also be an example of the valuable natural attrition that occurs when would-be teachers realize the mismatch between their own interests and the demands of teaching and choose not to enter the profession. Further research about those who prepare for but then do not enter teaching is needed to tease out whether this attrition improves the profession by weeding out ineffective teachers or represents a tragic loss of teacher capacity in key areas.

While potentially expensive in terms of time and material resources, in the long run it seems that it might be beneficial for teacher candidates, schools, and students if not all of those who are credentialed as teachers actually enter the profession. Our data suggest that Kevin reached the decision not to teach more or less on his own as a result of his experience in the classroom where his limited success was unfulfilling and where he realized the tremendous time commitment entailed. This suggests that teacher preparation programs should help teacher candidates understand the challenges of full-time teaching and provide them with multiple opportunities to reflect on whether teaching is an appropriate career choice.

Missing Configurations, Changing Categories

There are some missing configurations of early career decisions coupled with quality of teaching practice among the five we have identified here in terms of what readers might expect to find in a study like this. For example, we do not have a configuration that captures the experiences of strong teachers who leave the profession—perhaps to take up

administrative positions or enter graduate school or because they are so dissatisfied with their teaching situations that they exit. Here it is important to note, as we mentioned earlier, that we identified the aforementioned five configurations at the end of the first 3 years of post-preparation teaching. However, it is clear that labels that describe teaching practice and career decisions are not fixed; rather, as we noted earlier, they change over time as career decisions continue to be made and practice varies with context and experience. For example, since the time that we completed this analysis, we now have one strong teacher who has “left” teaching in the sense that he has taken on an administrative role, one strong teacher who has “left” teaching because she was extremely dissatisfied at her new school with both the principal’s top-down and narrow administrative approach and also in order to enter a doctoral program, and one strong teacher who has entered a doctoral program but continues in her same teaching role. In addition, as noted earlier, the adequate teacher who moved but did not improve has also now left teaching. This confirms that the timing of studies like this one are central, and as Quartz et al. (2008) have suggested, careers are “in motion” over time.

Implications for Policy, Practice, and Research: A Cautionary Tale

Coupling Early Career Decisions and Teaching Practice

This study confirms that early career teachers who are “stayers” or “leavers” should not be understood as homogeneous groups, as is sometimes assumed in research, policymaking, and school-related practices related to retention/attrition. Clearly, different configurations of staying, leaving, moving, and migrating schools have different consequences for school organizations, teachers’ professional development, and community building. Further, career decisions occur at multiple points in time, and it is important to examine how such decisions relate to one another and to the cultures and conditions of schools.

The major contribution of this study, however, is the coupling of teachers’ early career decisions with quality of teaching practice, aspects of beginning teaching that have often been de-coupled in research and policy. Our study highlights the importance of linking gradated ways of assessing and representing teaching practice with differentiated career decisions. This study confirms that this is important and also shows how early career teachers varied in terms of classroom practice, including curriculum planning and instruction, the learning opportunities teachers construct, how their students respond to those opportunities, and how teachers work with communities, build on students’ existing resources, and learn from practice. Accordingly, neither teacher attrition/retention nor teaching practice should be treated as broad, undifferentiated policy and practice goals. Rather, as this study shows, we need to understand how quality of practice coincides with career decisions—and why, under what conditions, and with what consequences. This study makes it clear that there are multiple configurations of teaching practice and career decisions, which suggests that different teachers need different forms of support both to improve their teaching and enhance the likelihood of remaining at particular schools. While our participants could in some ways be thought of as either strong or weak, understanding these configurations as a binary overlooks their nuances and how they were embedded in school conditions, just as the stayer/leaver binary does. Some strong teachers, for instance, stayed at their schools despite a notable lack of institutional support, while other strong teachers in comparable circumstances moved schools. Further, some weak teachers remained at their schools largely because of

a lack of administrative oversight, while other comparably weak teachers were fired or not rehired. Acknowledging these nuanced differences among apparently similar early career teachers alters how we think about who has ownership and responsibility for teacher quality. At the very least, those with responsibility include the programs that prepare teachers, the schools and districts that employ them, and the policymakers and accreditors who govern their work. We return to this point in the following.

Of course our study has a very small number of participants, and their distribution across the five configurations of teaching practice and early career decisions that we have identified is not intended to generalize to the larger population of early career teachers. However, it seems very likely to us, based upon our collective experience and the related empirical literature cited throughout this article, that the five configurations do indeed occur in the larger population of new teachers, along with what we termed the “missing” configuration that emerged after our analysis was completed—strong teaching practice coupled with leaving teaching. While it is very likely that these configurations do exist in the larger population of new teachers, it is difficult to make conjectures about the extent or proportions of these configurations in part because in many ways, the participants in this study were not “typical” of new teachers, given that all were prepared in a highly selective university, were extremely well qualified in terms of academic credentials, and were fully prepared in a master’s level pre-professional program with strong school partnerships. Despite these similarities, as the case studies show, experiences across participants were not uniform; rather, quality of teaching practice varied considerably, as did decisions about career trajectory. Future research that explores the distribution of these configurations in the larger population of new teachers will be very valuable, especially given that the media (and some policy discourse) tends to headline sensational cases of new teacher failure along with extremely precipitous exits from teaching and also tends to lump “stayers,” “leavers,” and increasingly, “movers” together as if they were homogeneous groups. This study suggests that these groups are not homogeneous and that we need to look much more closely at how quality of practice and career decisions are related.

The Value of Qualitative Longitudinal Studies About Practice and Early Careers

This study also confirms the need for qualitative longitudinal studies of new teachers’ practices and career decisions with enough information about preparation and early career experiences to untangle how preparation, qualifications, school contexts, conditions, and local labor markets interrelate. This kind of research is labor intensive, requiring great outlays of time and energy; patience; electronic data management systems that can store, code, and connect multiple data sources over time; and the analytic ability to tack back and forth between decontextualizing and recontextualizing complex data. This study illustrates that qualitative research is essential to producing in-depth understandings about how beginning teachers learn to teach and make career decisions over time.

Clearly, this study reveals the value of conceptually coupling career decisions with teaching practice and also emphasizes the importance of subject-specific and other local labor market factors in explaining quality of practice and career decisions. For example, in the shortage areas of science and math, we found that there was more tolerance and leeway among school administrators regarding quality of practice, including allowing weaker teachers to stay on or switch into high-need subject areas despite weak practice and lack of content knowledge. This study also reveals, however, that the re-

cruitment problem in science and other shortage areas was also a retention problem because strong teachers in high-need subject areas could more easily move from one school to another, having the luxury of searching for a culture that was a good fit. In contrast, in subject areas with a steady stream of applicants (e.g., English, social studies, elementary education), we found that there was a tendency not to rehire weak teachers rather than to continue to work with them over time to support their development.

Our analysis of the longitudinal qualitative data in this study also makes it crystal clear that strong subject matter knowledge alone is not enough to produce strong teaching practice or enable teachers to stay at the same school or in teaching. Two of the strongest subject matter teachers in this study (Elsie and Craig), both of whom had perfect scores on the Massachusetts teacher licensure exam and very high GRE scores, were among the weaker teachers in terms of quality of practice. Our study suggests that quality of practice and teachers' career decisions need to be tracked over time within the contexts of school cultures, local labor markets, and larger accountability systems.

Reexamining Local University-Sponsored Teacher Education Programs

Our analysis also has implications for local policy and practice at university-sponsored teacher preparation programs, including the program that was the site for this study. For university teacher preparation, there is a need to reevaluate recruiting processes, admissions requirements, evaluation criteria, and procedures for recommending teacher candidates for licensure. All 15 teachers in this study successfully completed the program and were certified to teach. They passed coursework, completed fieldwork and supervised student teaching, and conducted classroom research projects. The majority (9 of the 15 participants) became strong new teachers, and 1 who started out weak improved over time. But 2 were fired or not rehired during the first year, 2 maneuvered through the system to hang on to teaching positions despite weak performance, and 1 decided not to enter teaching.

Especially given current national attention to the future of university teacher education, our study underscores some of the critical tensions involved in improving these programs. Nearly all university programs entail some combination of subject matter courses, education courses (including teaching methods), and fieldwork in schools. Most base their evaluations of teacher candidates on performance in both academic courses and in classrooms. However, there are many tensions between university cultures that emphasize academics and school cultures that value professional practice and teacher candidates' ability to succeed under challenging conditions. In addition, many university-sponsored programs work from a developmental view of learning to teach over time that may not coincide with increasing school demands that new teachers immediately demonstrate on-the-job performance.

When university-sponsored preparation programs are evaluated, the focus tends to be on their compliance with standards and whether they meet their own and external expectations. This study suggests that preparation programs also need to know how their graduates perform after they leave the program, including knowing about those who fail, which requires teasing out and owning the role in teachers' failures of a program's recruitment and admissions policies, curriculum, fieldwork arrangements, and assessment systems. In many university programs, given the common division of labor between teaching courses and supervising fieldwork, few teacher education personnel see candidates in depth, across contexts, and over time. Those with the richest under-

standing of how candidates actually perform in classrooms are often adjunct personnel with limited institutional influence. This study suggests the need for more alignment between coursework and fieldwork and more communication between those who teach courses and those who work with candidates on the job.

Further, university-sponsored programs may need to take more responsibility for selecting, supervising, mentoring, evaluating, and ultimately endorsing (or not endorsing) teachers for licensure, rethinking their ideas about who can learn to teach in light of current school and policy emphases on immediate on-to-job performance. One central tension concerns whether programs should turn away candidates whom they deem unlikely to do well at teaching because they lack particular attributes and dispositions or whether they should continue to assume that most people with the necessary academic credentials and the desire to teach can learn to do so with appropriate support.

Ownership and Responsibility for Teacher Quality

As we note earlier, this study raises many complex questions about who should be responsible for improving teacher quality. Certainly university-sponsored programs need to reexamine and revise policies. However, preparation programs are by no means the single entity responsible for teacher quality. Indeed, school contexts dramatically shape teaching practice and teachers' career decisions. Some of the teachers in this study who received little school site support were able to secure district funding for professional development opportunities that allowed them to create a support network external to their schools. Others moved schools until they found one where a collaborative culture and administrative structure helped teachers realize high expectations for all students. In contrast, several of the teachers in this study received virtually no support their entire first year of teaching.

It is absolutely clear that in order to succeed in the classroom and remain at their schools, early career teachers need support. Every strong teacher in this study struggled with the demands of teaching and talked about leaving. In fact, the most capable and committed teachers seemed to be at particular risk of burnout—facing enormous demands with few boundaries in place to protect their time. They succeeded through individual effort, long hours, determination, and figuring out ways to continue to learn from and about teaching, despite difficulties. This is admirable, but neither sustainable nor wise. In fact, we think it is a recipe for early attrition. Early career teachers need opportunities for ongoing and intensive professional development built into the work day, and schools and school districts should assume this responsibility.

Just as teacher preparation programs are not the single entity responsible for teacher quality, this study suggests that teacher quality is not the single answer to improving schools. The quality of teaching practice coupled with career decisions is a multilayered phenomenon shaped by the agency of individuals in interaction with the structures of schools, local and state accountability contexts, and labor markets. School organization and school leadership are critical. Policies aimed at improving teacher quality by manipulating singular policy levers—such as recruiting only top-third college graduates or allowing streamlined preparation programs for those with strong academic credentials—are unlikely to succeed. Rather, it will require a systems approach that attends to the multiple interacting pieces of the teacher education system.

Notes

1. Two groups of teacher candidates were recruited into the study in 2 consecutive years, using the same data collection strategy for each. Thus, the first group of teachers has 5 years of data, while the second group has 4 years.
2. For an exploration of early career teacher self-efficacy derived from the study reported in this article, see Welch, Cannady, and McQuillan (2011).
3. Data gathering instruments (i.e., classroom observation protocol, sample interview protocols, TAPL protocol for collecting teachers' assessments and pupils' work, and complete survey contents) are available at http://tne.bc.edu/?tpl=research_initiatives&nodeID=197. Although a few now well-known observation protocols were being used when this study began in 2003, many were not. For this study, we developed a new observation protocol because of our desire to emphasize both teaching for social justice and teaching that focused on students' learning, areas that were mostly missing from existing observation tools that focused on the teacher; our observation protocol was informed by much of literature at the time that focused on teachers creating rich learning opportunities for students and social justice teaching (e.g., Biggs & Collis, 1982; Cochran-Smith, 1999; Newmann & Associates, 1996).
4. All names for schools and teachers are pseudonyms.

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