The Long-Term Effects of a Public School/State University Induction Program

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Abstract

This paper describes a school/university graduate induction program that has provided support to beginning teachers since 1994. A 10-year follow-up study of program graduates was recently conducted to examine these questions: (a) How many graduates are still in the education profession? (b) How many have remained in the classroom? and (c) What are their retrospective perceptions of the induction program on their initial teaching experiences? Quantitative and qualitative data were collected. Findings revealed a high percentage of graduates who are still in the field of education. Graduates reported positive retrospective perceptions of the influence of the program on their initial teaching experiences.

Current statistics reveal that beginning teachers are leaving the profession at an alarming rate. According to Ingersoll (2003), 14% of new teachers leave by the end of their first year, 33% leave within 3 years, and almost 50% leave in 5 years. To ensure quality education for students in the future, it is imperative that the educational community finds ways to support and retain new teachers.

In recent years the importance of providing induction support has received more attention in the teaching profession (Breaux & Wong, 2003; Dangel, 2006; Moir, 2003; Smith & Ingersoll, 2004). Higher retention rates as well as increased teacher effectiveness have been cited as benefits of induction programs. Most studies have examined 1- to 4-year retention rates; few have investigated long-term retention (e.g., beyond 5 years). As faculty in the Teacher Fellows Program (TFP), a school/university induction partnership, we wondered about our graduates' retention rates as well as their perceptions of the support they received. How many were still in the education profession after 5 years? Of these, how many have remained in the classroom? What do they have to say about the influence of an induction program on their beginning experiences? This study attempts to expand on the literature related to induction by examining these issues.

In this paper, we will provide an overview of the TFP and share the results of a recent follow-up study of graduates. First, we will summarize the current literature related to induction and retention.

Literature Review

In *What Matters Most: Teaching for America's Future* (1996), the National Commission on Teaching and America's Future (NCTAF) states that the most important ingredient in education reform is "a caring, competent, and qualified teacher for every child (p. 3)." The report adds that the missing link in school reform has been an "investment in teachers" and concludes, "Student learning in this country will improve only when we focus our efforts on improving teaching" (p. 5). However, the report lists "inadequate induction of beginning teachers" as one of the barriers to improving teaching.

More recently, the No Child Left Behind Act (NCLB) of 2001 also addressed the teacher quality issue. NCLB attempts to help students achieve high academic standards by requiring that every class is taught by a "highly qualified teacher." While the NCLB definition of what constitutes a "highly qualified teacher" remains debatable, no one disputes the need for effective teachers in today's classrooms. Since teacher effectiveness is determined to be an important predictor

of student success, and induction has been shown to help improve teaching practice, the need to continue the education of novice teachers in the first years of teaching through comprehensive induction programs is greater than ever.

Numerous studies have documented the effectiveness of induction programs in helping to support and retain beginning teachers. Ingersoll and Kralik's (2004) comprehensive review of the effects of induction programs is one of the most notable. They conclude that induction programs do have a positive impact on teachers and their retention. They point out, however, that these findings are limited by the fact that most of the studies reviewed were unable to control completely for other factors that may have affected the outcomes.

In a related study, Smith and Ingersoll (2004) examined data from the 1999-2000 *Schools and Staffing Survey* (SASS) and its supplement, the *Teacher Follow-up Survey* (TFS). From this analysis they concluded that the number of teachers who receive some kind of formal induction has increased dramatically in recent years. They found, however, that the type of support these new teachers received varied. They also examined the association between receiving induction support and the likelihood of beginning teacher turnover (i.e., moving or leaving) at the end of their first year on the job. They concluded that induction support did improve the retention rates of beginning teachers at the end of their first year of teaching. Moreover, they found that "getting multiple induction components had a strong and statistically significant effect on teacher turnover" (p. 35). In other words, as the number of induction components increased for teachers the probability of their turnover decreased.

Strong (2005) extended Ingersoll and Kralik's (2004) review by examining several comparative studies. He concluded that, like Ingersoll and Kralik, "the available research does point to a positive effect on retention of comprehensive mentoring and induction programs for new teachers" (p. 193).

The induction program described in this paper represents a 5-year program that provides extended preparation and support for beginning teachers who have received their initial elementary certification through a traditional undergraduate program. This 15-month extended induction process includes opportunities for beginning teachers to serve as the teacher-of-record in a classroom while gaining additional preparation through rigorous, academic coursework on teaching and learning. According to Darling-Hammond (2005), recent studies indicate that

> graduates of extended programs are not only more satisfied with their preparation; they are viewed by their colleagues, principals, and cooperating teachers as better prepared; are as effective with students as much more experienced teachers; and are much more likely to enter and stay in teaching than their peers prepared in traditional undergraduate programs. (p. 11)

Program Description

Established in 1994, the TFP represents a unique collaborative effort between a state university and several school districts located in the southwestern United States. This partnership addresses first-year teacher needs based on a no-additional-cost exchange of resources between the participating university and area school districts. In this model, Teacher Fellows, fully certified teachers who are graduate students, are contracted by the university to serve as first-year teachers in participating school districts. In exchange, experienced classroom teachers (referred to as Exchange Teachers) from participating districts in the surrounding geographical area are released from classroom assignments to serve as on-site mentors to the beginning teachers. For each Exchange Teacher the school district gets three full-time, certified Teacher Fellows who are assigned to available elementary classrooms. The Exchange Teachers, who are certified in the same field as their mentees, are involved in the Teacher Fellow selection process whenever possible. The Teacher Fellows earn a master's degree, tuition free, within a 15-month program and are supported by a $15,000 fellowship in lieu of a district salary.

During its 10-year history, the TFP has partnered with 13 public school districts within a 50-mile radius of the university. The districts range in size from 1,500 to 80,000 students; they include rural, suburban, and urban districts. Data collected during the past 5 years indicate that a majority (69%) of the Teacher Fellows have been placed in

high-needs, low socioeconomic schools that serve 32% to 95% "economically disadvantaged" students. District participation fluctuates from year to year based on hiring needs and the number of candidates who apply for the program.

Methods

A longitudinal survey design was used in this study. This method was selected to determine retention rates and retrospective perceptions of program participants over time.

Participants

In this study, we wanted to identify which TFP graduates were still employed in the field of education as teachers in public or private schools, which graduates were still employed in the field of education but had left school teaching, and which graduates were no longer employed in the education field. We wanted to know how many years they had stayed in education and what their current employment position was. In addition, we were interested in the program graduates' retrospective perceptions of their experiences in the program as well as any perceived influences of the program. We drew our sample, therefore, from the entire population of graduates of the TFP (N = 215) over the first 10 years of the program's existence (1994-2004).

Initial Follow-up Survey

We attempted to locate as many program graduates as possible for inclusion in our study. Through a brief follow-up mail and e-mail survey, current addresses and employment status were determined. Concerted efforts were made to locate non-respondents to this initial survey. These efforts included contacting former mentors, following up with phone calls, consulting school district websites, and checking the state teacher database. Of the 215 individuals who graduated from the TFP from 1994-2004, we were successful in locating 202 (94%) of them. This information was used in determining the teacher retention rates. We were unable to locate 13 program graduates.

We classified the located program graduates into two categories: *employed in education* and *not employed in education*. For the purposes of this study, we defined the field of education as any employment as teachers or administrators in a public or private school (Pre-Kindergarten through 12th grade), school district, or university. For example, classroom teachers, school administrators, university instructors, and child-care directors were classified as being in the field of education.

We further subdivided those who were employed in the education field as *schoolteachers* or *nonschoolteachers*. We defined a *schoolteacher* as a teacher in a public or private school (Pre-Kindergarten through 12th grade). Our definition included classroom teachers, special education teachers, and most other special area teachers. We excluded reading specialists, instructional facilitators, and program coordinators (who were not also classroom teachers) from the schoolteacher category of employment. These people were classified as *employed in education, nonschoolteacher*. This subgroup also included individuals such as school administrators and university instructors.

The category of TFP graduates, *not employed in education*, was defined as those individuals who were not currently employed within the traditional academic education field, even though they might do some teaching in their current employment position. This category included people who were employed in other fields, as well as mothers who had left teaching positions to stay at home with their own young children.

Interviews

In addition to determining which TFP graduates were employed as schoolteachers, which graduates were employed in education but were not schoolteachers, and which graduates were not employed in the education field, we also were interested in learning more about these subgroups' perceptions of the TFP and their experiences after graduating from the program. We decided, therefore, to interview a purposive sample from each of these three groups. In selecting

individuals for the interviews, we tried to select people who would provide information-rich typical cases while also representing a broad cross-section of the diversity within the program: males and females; Caucasians, African-Americans, and Hispanics; urban and suburban teaching experience; first-generation college graduates and not. We interviewed 13 program graduates.

Drawing ideas from Johnson and Birkeland's (2003) interview protocol, we developed an initial interview protocol of open-ended questions for each subgroup of participants. The questions explored areas such as the program graduates' teaching experiences, leadership roles, perceptions of the TFP, and the degree to which they perceived teaching to be (or to have been) a good fit for them. Using a slightly different interview guide for each subgroup of participants, we interviewed 13 individuals. Although most of the interviews were conducted face-to-face, upon request of the interviewees, two of the interviews were conducted by email, and one was conducted over the telephone.

We independently transcribed and analyzed the 13 interviews using open coding (Glaser & Strauss, 1967) to sense broad themes and to inductively identify categories in the data. One researcher then returned to the interview data and used her categories to deductively code the interview data, producing sets of frequency distributions for each of the three groups of respondents. Another researcher used her own inductively generated categories to code the data and used some grounded theory techniques (e.g., open coding, axial coding, selective coding) to identify additional dimensions and relationships (Strauss & Corbin, 1998). As she analyzed the data, she also developed integrative diagrams, which showed relationships among and within the categories and identified areas for further data collection that would enhance conceptual density (Strauss, 1987). The two researchers then met, described independent findings, discussed similarities and differences in the two sets of findings, and identified what kind of data to collect next and how to collect it.

Questionnaire

We used the results of the interview data analysis to develop a new set of open-ended questions. We mailed this questionnaire to the 202 program graduates for whom we had addresses. A unique identification number was placed on each questionnaire for the purpose of monitoring the follow-up process (Rea & Parker, 1997). Two months from the initial mailing, a second follow-up was mailed to all survey recipients who had not yet responded. As of May, 2005, 146 were returned, for a 72% return rate. Ninety-five percent of the respondents were female and 5% male. Eighty-four percent of the respondents were Caucasian, 14% Hispanic, 1% African American, and 1% Other.

As with the interview analysis, we once again read the questionnaire data separately, with each researcher using the same methods as she had used with the previous data set. Then we met to discuss our findings. One researcher represented her findings with sets of frequency distributions, and one researcher represented her findings with common themes and illustrative participant quotes.

Enhancing Credibility

Throughout the study, we made choices to enhance the study's validity or credibility (Lincoln & Guba, 1985). We triangulated through the use of multiple investigators and multiple data collection methods. We looked for negative cases and opposing perspectives.

Both researchers have been instructors in the program for varying numbers of years. Because of this relationship with the program, we were particularly aware of the need to reflect on, and monitor, our own subjectivity through the study (Glesne, 1999). We also tried to follow Feldman's (2003) suggestions for increasing the validity and quality of self-study. For example, within our report we tried to clearly describe our data collection and analysis methods and to clearly explain how we each constructed our data representations. We went beyond the triangulation of multiple data sources to include the use of multiple investigators and of multiple kinds of data representation, which could show how the findings supported each other as well as show areas of difference.

Findings

Where Are They Now? Employment Status of the TFP Graduates

Data from the initial survey were used to determine teacher retention rates. Qualitative data from the interviews and open-ended questionnaire were used in discussing themes in the program graduates' perceptions and experiences.

As of May, 2005, 177 (82.3%) of the 215 TFP graduates were still employed in the field of education. The majority (n = 156) of these were employed as schoolteachers (see Table 1). Years of school teaching experience for these individuals ranged from 2 to 10 years. The majority of these TFP graduates were teaching in kindergarten through third grade at the time of the study. Figure 1 depicts retention data for the 10 Teacher Fellow cohorts who participated in the program between 1994 and 2004.

Table 1

Teacher Fellow Follow-Up Study Categories (Spring, 2005)

Cohort Year	Number in Cohort	Schoolteacher	Education Related Nonschoolteacher	Not Employed in Education	Not located
1994-1995	17	8	3	4	2
1995-1996	27	12	8	3	4
1996-1997	24	13	2	4	5
1997-1998	31	17	3	9	2
1998-1999	24	20	2	2	
1999-2000	15	15			
2000-2001	15	10	3	2	
2001-2002	15	14		1	
2002-2003	26	26			
2003-2004	21	21			
Total	215	156	21	25	13

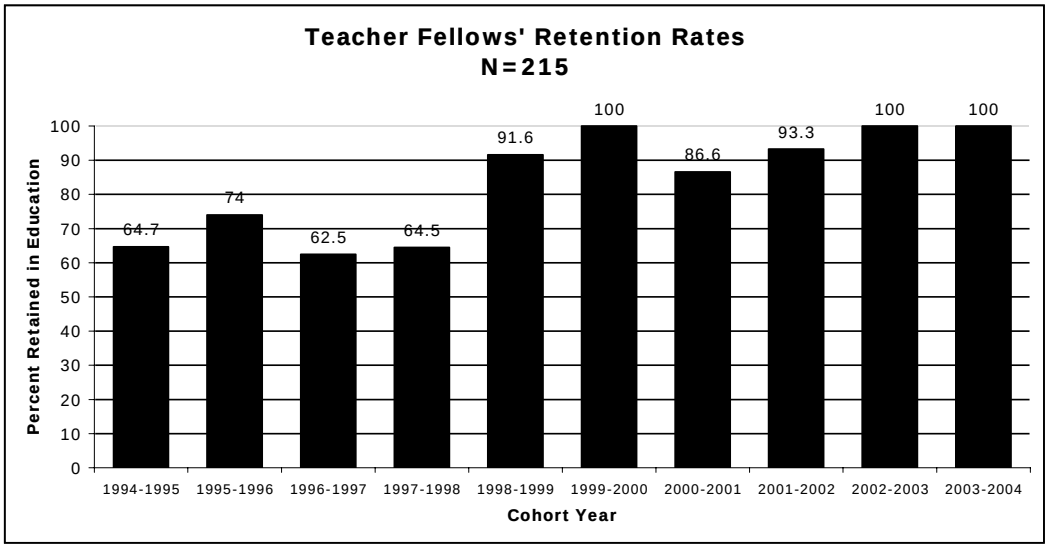

Figure 1. Follow-up Study (Spring, 2005)

Twenty of the 25 people who were not employed in the education field perceived their current employment position as one in which they were still "teaching," although they were not teaching in the traditional, academic definition. These people were not employed as schoolteachers in public or private Pre-K through 12th grade schools, but they perceived aspects of their jobs to be teaching. Many of the respondents explained that they were training adults as part of their current positions and commented on the transferability of the skills that they had developed. For example, one graduate now working in the staffing field wrote,

> I modify, develop, and implement systems to increase production just as I modified, developed, and implemented lessons to increase learning with my students. In addition, I can say with confidence that I am probably the most organized, multi-tasking person in the office, and I owe that all to teaching.

A skin care instructor noted, "I'm still teaching but in a different way. [I enjoy] making people feel good about themselves [and] making a difference in people's lives."

Several were no longer employed as schoolteachers because they had decided to stay home as full-time mothers. These people also remarked that they were still teaching, even though the children they taught were now their own. "In so many ways," wrote one respondent, "I use a lot or the same techniques I did with students and can see all of the child development stages firsthand. That's really neat!"

The sole respondent who did not describe herself as still teaching, though in another context, had been an attorney for the past two years. She noted that her current position was not as rewarding as being a schoolteacher. She stated that she was looking for "a more satisfying job incorporating my skills as an attorney and possibly as an educator."

As noted previously, we were unable to locate 13 of the Teacher Fellows. Since we were not able to verify their employment status, we assumed they were no longer teaching and included them in the overall attrition rate of 17.6%.

Teacher Fellows' Perceptions

All of the respondents selected "yes" to the survey question "Do you feel the Teacher Fellows Program had a positive influence on your experience as a beginning teacher?" Five (3%), however, answered both "yes" and "no" to this survey item. In follow-up comments, all five explained the negative response was due to a less than positive relationship with their mentor.

The responses on the open-ended questionnaire described a variety of ways in which the Teacher Fellow graduates retrospectively perceived that the program had affected them. The major categories of perceived effects were: (a) the receiving of support, (b) the development of relationships, (c) the development of knowledge and skills for teaching, (d) the development of attitudes and dispositions, and, to a lesser degree, (e) the development of leadership skills.

Receiving support. Program graduates described the positive influence of receiving both professional and emotional support from their participation in the program. Professional support was discussed both in terms of having a support system (in the form of their mentor teacher, their program peers, and their university instructors) but also in terms of receiving guidance from their mentor teachers in understanding various systems that affected them as teachers. Looking back on their first year of teaching, many program graduates identified how beneficial their mentor teachers were in helping them to figure out district- and school-specific system details, in guiding them through the effective organization of a classroom, and in helping them learn how to work with parents and families. For example, one program graduate wrote, "I was so blessed to have someone who knew the 'system' and how to get things done. She showed me what my resources were, how to involve my parents, and how to organize my teaching life." Another wrote, "I had the support I needed to feel comfortable enough to take risks, ask questions, and try new things. I have more confidence now due to the Fellow's year." Other respondents used the terms "life saver" and "safety net" to describe their mentors.

Although professional support was mentioned more often, some program graduates also mentioned the positive benefit of receiving emotional support through the program. Several remembered shedding tears during their first year of teaching and remembered "how hard" the TFP had been. These teachers spoke of the emotional toll of participating in a master's degree program as a beginning teacher, while also expressing appreciation that the program afforded them support that other beginning teachers did not have. The following excerpts from three different teachers illustrate these perceptions:

- Teacher Fellows was grueling at times, but hands-down the best educational training I have received in preparation for being a teacher. I know that the teacher I am today is in direct relation to the Fellows program.
- Teacher Fellows was a very difficult program for a first-year teacher. However, no matter how stressful, I learned more about myself, my occupation, and my goals for life in one year than I did in the previous four years of college. I am very proud of my achievements and myself.
- The Teacher Fellows program was intense. It was a lot of work, but the research we did and learned about was invaluable. I felt more educated to walk into teaching with enough preparation for success. [In] my second year of teaching, and thereafter, I have **not** taught to the [state] test but had at times 100% [student] passing and other times 90% passing [on the state assessment]. Learning how to develop those critical thinking skills in young children is essential. The Teacher Fellows program really prepared me for that role.

Relationships. This emotional support was linked to another perceived effect of the program: the development of relationships. Some program graduates noted that they had developed important relationships through their participation in the program. For example, a 1996 graduate stated, "I still keep in touch with one of my cohorts from Fellows. I count her as one of my dearest friends, partly because of the bond we formed during our year in the Fellows program." Although most of these respondents mentioned meaningful friendships that they had developed, some also noted that they had developed important professional contacts or networks through the program.

The majority of program graduates perceived the mentor-mentee relationship to be one of the most positive aspects of the induction experience. The following responses from three different graduates illustrate this point:

- The mentor-teacher [mentee] relationship was the most important and helpful aspect of the program.
- It [Teacher Fellows Program] was a positive influence because I had a wonderful Exchange Teacher [mentor] who guided me through the lesson plans and had great tips for classroom management.
- Having a mentor to be with me during my first year was an awesome experience!

As noted previously, not all of the program graduates perceived the mentor-mentee relationship in such a positive light. Five respondents indicated the relationship with their mentor was a negative aspect of the program. One wrote, "I had a horrible mentor/mentee experience." She adds, however, "Otherwise, the program was amazing—cohort members pulled me through and taught me tons—most are still my best friends." Another stated, "I did not find my Exchange Teacher [mentor] to be a positive influence, in fact, quite the opposite." She also added that working with her cohort members was "extremely helpful" and the university faculty "superb." These comments suggest that various types of support, in addition to having a mentor, are important during the induction process.

Knowledge and skills. Another aspect that emerged from the responses was related to the development of specific teaching knowledge and skills. For example, numerous respondents shared how the program coursework helped them learn how to integrate curriculum, conduct action research, implement effective teaching strategies, and create a positive learning environment. One respondent shared how program support helped her implement an effective reading program

in a bilingual classroom. "You learn how to teach reading in college," she stated, "but not how to actually do it in the classroom." She credits the support of her Exchange Teacher with helping her bridge the gap between theory and practice. Others mentioned how they felt the program helped them be on the "cutting edge" of effective teaching practices.

One described how the "rigor of the program" helped her seek out professional development opportunities (e.g., Gifted/Talented and English as a Second Language certification) in the years following her graduation. This 1996 graduate has remained in a low-income, urban school throughout her teaching career. She recently became a National Board Certified Teacher and credits the program with playing an integral part in "developing this thirst for knowledge."

Attitudes and dispositions. Many program graduates mentioned how they had developed certain attitudes and dispositions through the program. Two of the most frequently mentioned attitudes or dispositions were the development of confidence and self as life-long learner. For example, one respondent wrote, "The Teacher Fellows program established my roles as a LEARNER (life-long) first, teacher second. I'm always excited to learn innovative ways to think about education." Also mentioned by some of the program graduates was the development of an inquiry disposition in teaching. These respondents commented on how much they enjoyed observing their students, in the educational "kid-watching" sense.

Leadership. Finally, some program graduates spoke of the program's influence in developing leadership within them. The least number of respondents specifically cited this category, although the majority of the program graduates (across all subgroups) had held leadership positions within their schools and school districts.

In summary, we found that a majority (82.3%) of the TFP graduates were still employed in education. While most were employed as schoolteachers, 21 were employed in other positions in the education field, such as school administrators and university instructors. The attrition rate, which includes those not located, was 17.6%. All of the TFP graduates who responded to the open-ended questionnaire perceived that the TFP program had positively affected their teaching experience in some way. Five indicated disappointment in the mentor-mentee relationship.

Conclusion and Discussion

This follow-up study describes a school/university induction program that has successfully addressed beginning teacher needs for the past 10 years. Results of the study suggest strengths of this partnership as well as areas that could be improved.

Perhaps the strongest aspect of this program is the multiple layers of support it provides beginning teachers. These supports include a mentor from the same field who is released from classroom responsibilities, university coursework that encourages the implementation of effective teaching strategies, and a cohort group who are provided opportunities to work together in solving problems associated with the first year of teaching. As Smith and Ingersoll (2004) point out, it is this combination of supports that has the greatest impact on teacher retention. In their research on teacher induction they found that some activities appeared to be more effective than others in reducing teacher turnover. These include having a mentor in the same field, collaborating with other teachers on instruction, and being part of an external network of teachers. While some of these components did not have an impact individually, they found that most did collectively. We found this to be the case in the present study. For example, the respondents who did not view their mentor-mentee relationship to be a positive influence still perceived the overall induction experience to be effective based on other aspects of the program.

Another strength of the TFP that is evident from this study is the university/school partnerships that have existed for the past 10 years. Since 1994, several public school districts within close proximity of the university have participated in the program. While district participation fluctuates from year to year based on staffing needs, four districts, including three suburban and one urban, have consistently partnered with the university program since its inception. Through this collaboration, the university and partner districts are better able to share resources to meet the needs of beginning teachers. For example, the respondents frequently mentioned effective teaching strategies and inquiry-oriented assignments they were required to implement in their classrooms as part of the university coursework. In

addition, most described the positive impact of having a "real time" public-school mentor who was able to assist them in the actual implementation of these strategies. Collaborations such as these serve to link university preparation with actual teaching practice.

This study also revealed an aspect of the program that continues to be a challenge: what to do when the mentor-mentee relationship is not working well. While this has not been a frequent problem, it can be extremely intense when it does occur. The mentor-mentee relationship is a major component of the TFP, and we want to ensure that this is a positive experience for both parties involved. Therefore, we continually seek ways to strengthen these relationships. In recent years, we have encouraged each cohort group to create a social contract at the very beginning of the relationship (Flippen, 2005). Through this agreement they establish expectations for how they will treat one another and create guidelines for resolving conflicts that may occur. Furthermore, we have discussed ways to work effectively with different personalities and teaching styles in the weekly mentoring seminars. When needed, university faculty and/or school administrators have served as mediators between mentors and mentees. In rare cases where the previous interventions have proved unsuccessful, we have replaced the mentor with other program faculty and/or public-school teachers. While this is a more costly alternative, we have found it to work effectively and that it maintains the goals and integrity of the program for both the beginning teacher and his or her mentor.

A limitation of this study is the participants themselves. All are fully certified and working on a graduate degree during their first year of teaching. Additionally, most completed their teacher preparation in an undergraduate field-based program that incorporated numerous hours working in public schools. These factors may contribute to the Teacher Fellows' higher retention rates and success as beginning teachers. Several studies, however, have found that the more academically qualified graduates, the "best and brightest," appear to be those most likely to leave the profession in their first years of teaching (Henke, Chen, & Geis, 2000; Murnane, Singer, Willett, Kemple, & Olsen, 1991; Schlecty & Vance, 1981).

The academically talented teachers in our study wrote about the value of the support system the TFP provided in the early years of their career. They described the advantage of having a mentor who was readily available to assist them, the benefit of university coursework that challenged them to use best teaching practices, and the significance of being part of a network of teachers who collaborated in solving problems. Their responses testified to the importance of extending teacher preparation into beginning teachers' "own" classroom experiences. As one aptly put it, "Instead of wallowing in isolated, survival mode, I was able to connect with a support system and continue to grow despite first-year teaching struggles."

As a result of the present study, we are examining the influence this school/university partnership has on beginning teachers' classroom practices and student achievement. Further studies are needed to investigate these areas that go beyond the teacher retention issue. At present, we are conducting a comparative study that examines the difference between Teacher Fellows and other first-year teachers who are matched on several characteristics (e.g., teacher preparation program, grade level, and school demographics). Another area of interest is the mentor-mentee relationship. As Huling (2006) points out, looking beyond program effects to what actually happens in mentor-mentee pairs may help researchers "truly get at the effects of induction support" (p. 97).

Finally, this study describes one induction model that has successfully influenced teacher effectiveness and retention during the past 10 years. It demonstrates that school districts and universities can combine resources to make a difference in the professional lives of beginning teachers. Ultimately, such partnerships may keep promising new teachers in the profession thus benefiting schools and the children they serve.

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