

Why teachers leave: Factors that influence retention and resignation

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Abstract

Ajzen's Theory of Planned Behavior is used to examine continuing teachers' plans to remain or resign and the likelihood of resigned teachers to return to teaching in the next 3 years. Specifically, this study examined factors that encourage or hinder resigned teachers from returning to teaching, the importance of such factors, and the importance of those factors for teachers who remained in teaching. We find that family issues are of greatest concern to all teachers, and that leavers place much more emphasis on the time they are able to spend with their families than do stayers. The importance assigned to all factors is influenced by demographic characteristics.

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0. Introduction

Teacher shortages, especially in high demand areas such as mathematics, science, and special education, have become a major concern nationally and regionally (Cochran-Smith, 2004; National Commission on Mathematics and Science Teaching for the 21st Century, 2001). A teacher follow-up study has estimated that one third of America's teaching force of nearly 3,500,000 teachers turns over every year (Ingersoll, 2001; National Center for Educational Statistics (NCES), 2001; National Commission on Teaching and America's Future (NCTAF, 2003). Schools must invest large sums of

money to replace teachers; in Texas alone, that amount is estimated to be at least \$329 million annually (Texas State Board for Educator Certification, 2000). More important even than fiscal costs are instability, last minute hires of under-qualified teachers, inadequate orientation and induction, and the emotional and psychological effects of such change on children that are detrimental to student learning. A substantial portion of the need for new teachers is caused by teacher turnover and attrition, and by a lack of geographic match between supply and demand (Darling-Hammond, 2000, 2001). A subsequent report (NCTAF, 2003) called attention to the magnitude and high cost of teachers leaving after only a few years, and referred to it as a "Teacher Retention Crisis."

The total number of vacancies is generated by growth (new positions) and by teachers leaving specific schools (replacement positions or terminations). Those

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leaving a school may do so voluntarily; this group includes those that resign or retire, or may leave involuntarily because of performance, expiration of temporary certification, reduction in workforce, or for other reasons. Those who resign may move to another teaching position (movers) in the same district (intra-district movers) or in another district (inter-district movers), or leave the teaching profession altogether (leavers). Movers are primarily but not entirely voluntary leavers. Vacancies not filled by movers must be filled with new entrants to teaching or by former teachers returning to the classroom. New entrants may have traditional preparation in a college of education (traditional entrants), or may enter teaching through alternative routes with their college experience in another field or through a career change after a number of years in another profession (alternative entrants). Alternative entrants often teach on temporary certificates until they meet their professional education requirements through university coursework or through school district-provided alternative certification programs. It must be noted, however, that there is overlap among some of these groups, and statistical reports do not always distinguish clearly between them. For example, school-based data collection normally counts vacancies, while district-based collection may not include intra-district movers.

The distribution among these groups varies. NCTAF (2003) defines teacher turnover as the sum of teachers who entered in 1 year and those who left in the immediately following year and suggests that 30% of America's teaching force was in transition in 1999 and 2000. Movers accounted for 46.8% of teachers that left their positions in 2000–2001; 56.6% of vacancies in 1999 were filled with movers, and only 16.0% with newly qualified entrants, (mostly graduates of colleges; Ingersoll, 2000, 2001). Two statewide data sets from Texas (Sparks, 2003) and Florida (Miller, 2002, 2003; Florida Department of Education, 2001, 2002, 2003a, b) illustrate the problem of how data is collected and categorized. In Texas, of the total number of teachers hired, 41% were movers from one district to another (Sparks, 2003). While most of Texas' 1038 districts are very small with average enrollments of less than 4000, the districts in six major metropolitan areas are among the largest in the Nation. Movers from one school to another within each of these large districts are not included in the count, and the percentage of movers in the state must therefore be larger than 41%. The Texas data are consistent with national statistics on

proportion of movers contributing to teacher turnover. Florida requires principals to conduct exit interviews of resigning teachers and the results are collected by districts and provided to the Florida Department of Education (Miller, 2002, 2003), and only teachers leaving a district are included. Many districts in Florida are very large (average district student count is about 37,000, with 6 of the 67 districts enrolling 950,000 students); therefore there is a large unreported fraction of movers who are intra-district movers.

In public schools, attrition (leavers) is greater in small schools rather than in large schools, but otherwise very similar for different types of schools. However, there are almost twice as many movers in high poverty than in low poverty schools. Additionally, there are significantly more movers from small schools rather than from large schools, while movers increase somewhat in the order rural–suburban–urban. Finally, teachers leaving the profession tend to do so early in their career: the retention rate after 5 years is only 61%.

In operational terms, all vacancies are filled by teachers who are new to a school. These new teachers affect continuity, stability, and functioning of the learning community because new working relationships must be established. Vacancies filled by movers typically do not adversely affect student experience as strongly because movers are usually experienced teachers. In contrast, the effectiveness of new entrants is generally lower in the first 2 years as they gain experience (NCTAF, 2003). Also, new entrants coming to teaching via alternative routes often have little or no previous teaching experience and no pedagogical preparation. Their first experience in the classroom may be traumatic for both of them and their students; a significant fraction of such teachers resign before the first semester has ended. There is also concern for long-term effects based on the notion that alternative certification programs may not make up for the lack of several year's preparation and may create teachers that “do not have the fundamental skills needed to support student learning” (Fraser, 2001).

The need for teachers varies not only by geographic region, but also by field taught. Nationally (Ingersoll, 2003) and in Florida (Miller, 2002, 2003) the greatest needs are in mathematics, science, technology, foreign language and exceptional (special) education. This problem is especially severe in mathematics and science where a large fraction of teachers filling vacancies are alternative entrants

(Ingersoll, 2002a). In mathematics and science, content preparation and the availability of well-paying positions in business and industry enable teachers to move into and out of education. Such is not the case in many other areas. In special education attrition is a particularly big problem (NCES, 1997) partly because of the emotional stress it entails. Not only are attrition rates greater here than in most other fields, but more continuing teachers transfer out of special education than into it (Boe, Bobbitt, & Cook, 1997; Boe, Bobbitt, Cook, Whitener, & Weber, 1997). The special needs of students with disabilities (Singh & Billingsley, 1996) require more than teacher retention. They require teachers with a special commitment (Cooley & Yovanoff, 1996) at a time when only a small number of teachers enter this field (Brown & John, 2000).

Comparison of teacher resignation rates with job change rates in other professions shows that teachers are not unique and that, in fact, their resignation patterns in general are similar to or show longer retention than most other professions at least in the early years. College graduates who went into teaching were as likely to still be teaching 4 years after graduation than college graduates who went into any other occupation were to still be in that profession (National Center for Educational Statistics (NCES), 1993). Relatively high early job turnover is clearly related to general characteristics of young professionals, and it is erroneous and misleading to single out teaching as a career where retention is a special problem. Such misidentification is also likely to lead to ineffective strategies to reduce turnover, which is a very worthwhile goal because what makes the turnover of teachers of such great concern is its effect on malleable and vulnerable children, coupled with the large impact each teacher has on literally hundreds of young lives.

There is a large body of literature that addresses why teachers may leave the profession. Reasons include a lack of administrative support (Ingersoll, 2000; Liu & Meyer, 2005; Macdonald, 1995; Madsen & Hancock, 2002; Tye & O'Brien, 2002), insufficient mentoring (Kelley, 2004), poor facilities (Buckley, Schneider, & Shang, 2005), and low pay (Ingersoll, 2000; Liu & Meyer, 2005; Macdonald, 1995; Stinebrickner, 2001; Tye & O'Brien, 2002). Still others suggest that the increased focus on assessment and accountability has deterred some teachers from continuing in the profession (Darling-

Hammond & Sykes, 2003; Tye & O'Brien, 2002). Ingersoll (2002b) report that among the reasons teachers provide, 39% include family or personal reasons, 28% include school staffing actions, and 25% leave to pursue another job. Only 26% include dissatisfaction among their reasons; among those, salary, poor administrative support, and student discipline are listed as primary factors.

Although the aggregated data in the literature provide information regarding why teachers have left the profession after the fact, there is a need for studies that further explain causes for such action so that recommendations for proactive measures can be made. For example, attrition during the first 5 years of service could reflect young teachers starting families and finding it not cost effective to place their toddlers in daycare centers, which would require a very different remedial action than job discouragement. We do not know whether early leavers come primarily from elementary schools or from middle and high schools. Finally, we have no clear understanding of why some teachers resign while others with identical demographic characteristics do not. Therefore, studies that are not retroactively descriptive but analyze motivation and intent are important because they have the potential of identifying especially vulnerable populations and guiding intervention strategies while teachers are still on the job.

1. Theory of planned behavior

Using the Theory of Planned Behavior (Ajzen's, 1991, 2004) as the foundational framework, we phrased our inquiry in terms of continuing teachers' plans to remain or resign in the next 3 years, or the likelihood of resigned teachers to return to teaching in the next 3 years. The Theory of Planned Behavior (Ajzen, 1991) is a predictive model based on beliefs about a target behavior. Ajzen's model sorts these beliefs into three constructs that shape an individual's intentions toward the target behavior and, ultimately, whether or not the individual carries out the target behavior. First is the attitude toward the behavior, which refers to the extent to which the individual has a favorable appraisal of the behavior. Second is the subjective norm toward the behavior, which encompasses the individual's perception of social pressures or social attitudes regarding the behavior. Finally, the perceived behavioral control describes the individual's perception of the relative ease or difficulty of engaging in the behavior. This is

relevant to our study because we are examining teacher motivation in an attempt to understand the major factors that contribute to the decision to leave or remain in the profession, or would encourage the return to teaching of those who have left. Our goal was to answer the following questions:

1. What factors encourage or hinder resigned teachers from returning to teaching in the next 3 years? Which ones are most important? Is the importance of these factors the same for teachers who stay as for those who have left?
2. Is the importance of these factors influenced by demographic characteristics (e.g. gender, grade level, years teaching, etc.)?

We assumed that answers to these questions would provide the fundamental understanding necessary to identify interventions and programs that can be designed to be effective in retaining quality teachers in each of these groups. Additionally, differences between groups could determine whether such programs should be customized for each of the groups; for example, should retention programs contain components that are different for teachers at the elementary, middle school, and high school levels? Our intent is to inform the education community of steps that could be taken could take to reduce the number of teachers leaving their schools and districts.

2. Method

We conducted an exhaustive study that targets ALL teachers who have left two large Florida districts during a 2-year period, asking a set of 36 questions that pair teachers' reaction to the question with the importance it has in their decision-making. The same questions, slightly modified in language to reflect differences between stayers and leavers, were then asked of a stratified randomized sample of continuing teachers that is matched by major demographic characteristics. For example, survey question R4 reads "A return to teaching would allow me to experience the joy of teaching again" for leavers and "Remaining in teaching allows me to continue to experience the joy of teaching" for stayers. Phone interview responses from stayers and leavers are compared using quantitative and qualitative methods.

2.1. Participants

The population for this study was teachers from two large school districts in Florida who had left teaching in 2002–2003 and 2003–2004. The districts have a combined enrollment of 276,000 students taught by approximately 20,000 teachers in 130 elementary, 75 middle, and 42 high schools. The average annual resignation rate in each of these districts is 6.2%. The districts provided the names and contact information from their files for each teacher who resigned during and at the end of the 2002–2003 and 2003–2004 school years (District 1, $n = 1661$; District 2, $n = 1197$) as well as contact information for teachers who are continuing to teach during the 2004–2005 school year.

Schools in these districts are in four of the seven locales defined by the US census bureau (NCES Core of Common Data). These locales are: large central city (LCC), mid-size central city (MSCC), urban fringe of large city (UFLC), and rural inside Central Metropolitan Statistical Area (RI). There are no schools in: rural outside CMSA, small town, or urban fringe of mid-size city. Florida's schools are assigned letter grades (A–F) based on a complex system that includes student performance in reading and mathematics on the high-stakes Florida Comprehensive Assessment Test (FCAT) and rate of improvement. Participants came from schools that were well represented across school grades and Socio-Economic Status (SES). Schools were grouped into quartiles of SES as defined by the NCES Core of Common Data. The demographic characteristics of the sample of teachers who participated in the study are presented in Table 1. Teacher race was considered for only three groups, White, Hispanic and Black, with the other groups omitted due to low representation (less than 1% of the sample). Years experience comprised four groups: less than 5 years teaching, 5–9 years teaching, 10–19 years of teaching, and 20 or more years teaching, as reported by participating school districts. School level was considered among three groups: elementary, middle school, and high school, with teachers who taught at multiple schools omitted from the analysis of school level effects.

2.2. Initial survey development

The target behavior under investigation was "return to teaching in the next 3 years." Based on Ajzen's (1991) theory, specific beliefs about each

Table 1
Percentages of teachers leaving in 2002–3 or 2003–4 and those continuing in 2004–5 school year

Demographic category	All teachers 1799	Leavers 901	Stayers 898
Gender			
Female	80.38	81.58	79.18
Male	19.62	18.42	20.82
Race			
Black	10.67	10.32	11.02
Hispanic	4.95	4.11	5.79
White	83.27	84.24	82.29
Asian	0.78	0.89	0.67
Other	0.33	0.44	0.22
Years experience			
Less than 5 years	27.81	32.44	23.16
5–9 years	17.41	16.45	18.38
10–19 years	20.8	14.11	27.5
20 or more	33.98	37	30.96
School district			
District 1	59.53	57.82	61.25
District 2	40.07	42.18	38.75
School level			
Elementary	46.8	45.11	48.49
Middle	22.56	23.33	21.79
High	24.4	25.89	22.91
Other	6.24	5.67	6.82
School SES			
Lowest quartile	91.3	25.97	31.85
2nd quartile	2.72	22.2	22.27
3rd quartile	2.96	24.75	23.61
Highest quartile	3.02	27.08	22.27
School locale			
LCC	21.4	22.13	20.62
MSCC	17.03	18.62	15.35
RI	10.61	8.29	13.07
UFLC	50.96	50.96	50.96
School grade			
A	40.82	39.34	42.36
B	23.89	23.77	24.01
C	26.29	26.93	25.62
D	8.16	8.9	7.39

construct were determined via an open-ended pre-survey conducted with a sample of 51 teachers from the study population. The sample was randomly selected, but stratified based on sex and race to match the characteristics of all teachers who had left those two districts. For attitude toward the behavior, participants in the sample were asked about the advantages and disadvantages associated with a return to teaching within the next 3 years. For subjective norm toward the behavior, the questions

asked for the identification of any individuals or groups who might approve or disapprove of a return to teaching in the next 3 years. For perceived behavioral control the participants were asked to describe factors that would make it easy or difficult to return to teaching in the next 3 years. Respondents were also asked to discuss any additional factors that might affect their decision to return to teaching.

The responses to the pre-survey were transcribed and coded using an open coding scheme for data reduction and categorization (Neuman, 2003). This process resulted in several beliefs related to a return to teaching. For attitude toward the behavior, six beliefs were identified: three positive (joy of teaching, financial benefits, and helping school children learn and grow) and three were negative (allow less time with family, hinder ability to care for own children, and hinder ability to care for elderly or ill family member). For subjective norm toward the behavior, three beliefs were identified: colleagues, administrators, and family as people whose opinions would play a role relative to a return to teaching. Regarding perceived behavioral control, four positive beliefs emerged: support by school administrators, opportunity to teach part-time, benefits such as health insurance or retirement pension, and support by district administrators. Five negative beliefs also emerged: emphasis on assessment; paperwork, and other non-teaching responsibilities; financial responsibilities; family responsibilities; and personal stress.

2.3. Final survey development

A final survey was constructed using the information obtained from the initial survey. Two separate statements were developed for each of the 18 identified beliefs, one to address the presence of the belief and the other to capture the importance of the belief (Ajzen, 1991) as it plays a role in the context of a return to teaching. For example, two such linked statements were “colleagues in my former school would like me to return to teaching” and “the opinions of colleagues in my former school are important to me.” The resulting 36 statements were placed in random order on the survey. Respondents were asked to rate each statement on a Likert-scale with 1 representing strongly disagree and 7 representing strongly agree. Respondents were also given the option to choose not applicable (N/A) or to skip the question by providing no

response (NR). Additional survey items included three statements concerning the likelihood of a return to teaching (also on a Likert scale) and questions about certification and current employment. The entire survey is provided in Appendix A and Table 2 lists the 18 beliefs with their corresponding survey item numbers.

An open-ended item, “Is there anything you would like to add?,” was included at the end of the survey to gain further insights into teachers’ beliefs. The assumption is that by asking an open-ended question, teachers would be provided an opportunity to either emphasize beliefs or to add beliefs they feel were not addressed in the survey instrument, thus adding richness to the data.

2.4. Data collection

A team of staff and graduate students called each resigned teacher. In many instances, contact information was incomplete, inaccurate or no longer valid, without forwarding information. Such tea-

chers were unreachable. Of those with valid contact information, some still could not be reached and did not return phone calls, while others declined to participate. Of the 2858 teachers who left teaching in 2002–2003 and 2003–2004, 1131 teachers were reached and 901 teachers completed the survey during a telephone interview. Of the 20,148 teachers who continued to teach during the 2004–2005 school year, we identified a stratified random sample of 1145 teachers who matched the demographic characteristics of those who resigned. A total of 898 of these individuals completed the survey.

2.5. Data analysis

2.5.1. Survey scores

The first issue for data analysis was the presence of missing data in the form of N/A and NR answers. The most frequent case of missing data was the use of N/A for items related to “ability to care for children” or “ability to care for elderly or ill family members,” with 155 respondents choosing N/A for one or the other. We inferred that a response of N/A represented a lack of relevance in terms of the target behavior, and therefore the N/A responses were converted to “1” to assign minimal importance to these issues for the respondents who found them not applicable. No such inference could be made in cases where respondents simply declined to respond (NR) to an item, so those particular items were omitted from the analysis.

The survey was constructed so that each belief is associated with two survey items, each with a 1–7 scale. For each respondent, an initial belief score is calculated by multiplying the responses to the two items together, thus creating a score for each belief with a range of 1–49. The square root of this score (taking the square root ensures uniform variance across the range of scores) provides the actual belief score. Seven of the eighteen beliefs (PB2, PB6, CB5, CB6, CB7, CB8 and CB9) (see Table 2) were worded to describe a belief that may discourage a return to teaching, so these beliefs were reverse scored (reverse_belief = 8–belief) in order to facilitate direct comparison between all belief scores. Ultimately, a respondent received 18 scores ranging from 1 to 7, one for each belief.

2.5.2. Factor analysis and factor scores

Among the 18 belief scores, we expected that responses to some beliefs would correlate closely.

Table 2
Teacher traits identified from pre-survey for each theory of planned behavior constructs

Traits	
Positive	Negative
<i>Attitude towards behavior</i>	
PB1: Joy of teaching (R4, R37)	PB4: Help school children (R10, R21)
PB2: Care for my children (R5, R13)	PB5: Spend time with family (R20, R15)
PB3: Financial benefits (R36, R7)	PB6: Care for elderly or ill family (R27, R23)
<i>Subjective norm toward behavior</i>	
NB1: Administrators (R6, R14)	
NB2: Colleagues (R19, R8)	
NB3: Family (R28, R26)	
<i>Perceived behavioral control</i>	
CB1: Support by school administrators (R11, R32)	CB5: Financial responsibilities (R16, R39)
CB2: Opportunity to Teach part-time (R12, R18)	CB6: Emphasis on assessment/evaluation (R17, R30)
CB3: Benefits (e.g. health insurance) (R34, R24)	CB7: Paperwork (R9, R22)
CB4: Support by district administrators (R35, R38)	CB8: Family responsibilities (R25, R29)
	CB9: Personal stress (R31, R33)

Note: PB = personal beliefs, NB = normative beliefs, and CB = control beliefs.

For example, a teacher's rating of the ability to care for children and the time spent with family upon returning to teaching may be highly related. Combining these beliefs would assist in the making of more general recommendations and in reducing the probability of error by reducing the total number of statistical tests. Rather than make an a priori judgment regarding commonality, a factor analysis was performed on the 18 beliefs for that purpose. Factors were extracted from the 18 beliefs using a principal axis factor method and rotated with the orthogonal equamax procedure, which minimizes the number of factors and the number of beliefs associated with each factor (Tabachnick & Fidell, 1989). The extraction and rotation resulted in six factors with an eigenvalue greater than one and accounted for 61.0% of the overall variance. For further analysis, factor scores for each respondent were estimated using the basic variable estimates procedure (Rummel, 1970). This approach considers each factor as a simple arithmetic function of the beliefs that it loads upon, and was chosen so that the factors could be easily related directly back to the beliefs. For this procedure, factor scores were calculated by adding the belief score for any belief with a loading over 0.3, which is considered a positive loading ($\text{trait_score}_{\text{positive}}$), and subtracting the belief score for any belief with a loading less than -0.3 , which is considered a negative loading ($\text{trait_score}_{\text{negative}}$). The resulting value was divided by the difference between the number of factors with a positive loading and the number with a negative loading to put the factors on a similar scale. Symbolically the factor scores can be represented as

$$\text{factor_score} = \frac{\sum \text{trait_score}_{\text{positive}} - \sum \text{trait_score}_{\text{negative}}}{n_{\text{positive}} - n_{\text{negative}}}$$

The result of the basic variable estimates procedure was the creation of a set of factor scores for each respondent.

2.5.3. Differences in factor scores between and within groups

Respondents' factor scores for each of the six factors were evaluated by ANOVA with follow-up Tukey comparisons (overall alpha of .05) for differences between leaving and staying teachers and for overall differences within demographic groups. Demographic categories considered were chosen based on the following three criteria: prior

findings in the research literature showing a relationship between departure rates and the demographic category, an appropriate representation of each group within the sample studied, and the availability of appropriate categorization schemes. As a result, the demographic categories that will be considered in this report are three relating to teacher characteristics (gender, race, and years experience) and four relating to school characteristics (school district, school level, school SES, and school locale). Finally, a MANOVA analysis with follow-up Tukey comparisons (overall alpha of .05) was done in order to determine whether or not there were significant differences in factor scores between leavers and stayers within demographic groups. For example, did male leavers consider the same factors important as the male stayers?

2.5.4. Analysis of open-ended responses

Participant responses to the open-ended questions were transcribed and then coded with the use of HyperRESEARCH software. Of the 1799 people who completed the survey, 1073 made comments, including 637 leavers and 436 stayers. Themes addressed by at least 5% of respondents who made comments were explored further. In order to establish inter-rater reliability, two researchers were used to independently examine themes and compare them to the six factors found in the quantitative portion of this study. Themes were further studied by comparing the proportion of comments from leavers versus stayers for each theme.

3. Results

3.1. Factors

Six factors emerged from the analysis procedure described above. Factor scores ranged from 3.04 to 6.44, with a maximum possible range of 1.0–7.0 (see Table 3). A low score for a particular factor reflects that it is of high importance in shaping teachers' decision not to return to teaching. In short, considering an overall goal of increasing teacher retention and facilitating the return of former teachers to the classroom, low factor scores signal issues that require attention. A description of each factor is presented below in terms of the traits that were used to determine the score on that factor for each respondent.

Table 3
Overall factor scores for leavers and stayers

Demographic category	All respondents	Leavers vs. stayers		
		Leavers	Stayers	<i>p</i> -value
All factors	4.75	4.44	5.06	<.0001
Family responsibility	3.08	3.11	3.04	.35
Time with family	4.31	3.52	5.04	<.0001
Paperwork and assessment	4.54	4.54	4.54	.92
Financial benefits	5.15	4.76	5.54	<.0001
Administrative support	5.29	4.82	5.77	<.0001
Joy of teaching	6.13	5.82	6.44	<.0001

Note: Significant differences ($p < .05$) between leavers and stayers for each factor are in bold.

1. Administrative support (NB1, NB2, CB1, CB4): This factor is related to the support provided from administrators and colleagues to return to teaching.
2. Financial benefits (PB3, CB3): This factor addresses financial incentives that are inherent in a return to the classroom. This includes items such as health insurance or pension. A low score on this factor may be an indication that a respondent was able to obtain employment that is more lucrative than teaching. In addition to the perceived lack of financial and other benefits, a low score on this factor also means little perceived support from district administration or family for a return.
3. Paperwork/assessment (CB6, CB7, CB9): This factor is related to the volume of paperwork that must be completed and/or the additional stress that is associated with high stakes accountability or other assessment measures.
4. Family responsibilities (PB2, PB6, CB2, CB8): This factor is related to influence of family responsibilities, such as caring for children or elderly family members, on a teacher's ability to return to teaching. There is indication that teachers may be interested in part-time positions.
5. Joy of teaching (PB1, PB4): This factor related to the perception of teaching as an enjoyable occupation and teachers' ability to help school children learn. In addition, there is a perceived lack of support from family and district administrators for a return, and little interest in a part-time position.

6. Time with family (PB5, NB3, CB5): This factor is related to perceived support from family to return to teaching. Within this category, returning to teaching is associated with spending less time with family, but financial considerations would support a return.

3.2. Factors within and between groups

Considered together, the factor scores for demographic groups for the overall sample and by leavers and stayers reveal the following key points:

1. *Time with family* is of high importance to leavers and low importance to stayers. This indicates that teachers may leave the profession in order to spend more time with their families. When comparing within demographic groups for leavers versus stayers, this is particularly true for leavers that are female, from one of the school districts, elementary schools, low SES schools, schools earning a grade of A, and respondents with 20 or more years experience. There were no significant differences between leavers and stayers with respect to race or location (see Table 4).
2. *Administrative support* is of medium importance to leavers and of low importance to stayers. This indicates that a lack of administrative support may play a role in teachers leaving the profession. When considering the entire sample, this was more important to females than males, and high school teachers considered it significantly more important than elementary teachers. However, when comparing leavers and stayers within demographic groups, a different picture emerges. Administrative support was of more importance to male leavers than females leavers, African-Americans and White leavers more than Hispanics leavers, and leavers in one of the districts' leavers more than in the other. There were no significant differences between leavers and stayers with respect to school level, SES, school grade, location, or years of teaching experience (see Table 5).
3. *Financial benefits* are of medium importance to leavers and of low importance to stayers. This indicates that a lack of financial benefits may play a role in teachers leaving the profession. The only difference within the demographic categories is that this was not a strong factor for Hispanics (see Table 6).

Table 4
Factor scores for time with family

Demographic category	Number	Total sample		Leavers and stayers		
		Score	<i>p</i> -value	Leavers	Stayers	<i>p</i> -value
All	1799		n/a	3.52	5.04	<.0001
Gender						
Female	1446	4.24	<.0001	3.52	5.26	.6
Male	353	4.61		3.88	4.98	
Race						
Black	192	4.65	.0009	3.93	5.10	.02
Hispanic	89	4.60		3.90	5.01	
White	1498	4.25		3.52	4.38	
Years experience						
0–4 years	395	4.54	<.0001	4.1	5.27	.04
5–9 years	370	4.53		3.67	5.25	
10–19 years	396	4.69		3.66	5.3	
20 or more	638	3.80		3.14	4.56	
School district						
District 1	1071	4.37	.03	3.63	5.08	.9
District 2	728	4.22		3.52	4.98	
School level						
Elementary	840	4.25	.4	3.47	4.98	.5
Middle	405	4.37		3.69	5.11	
High	438	4.36		3.72	5.07	
School SES						
1st quartile	520	4.34	.6	3.5	5.02	.4
2nd quartile	400	4.38		3.63	5.12	
3rd quartile	435	4.28		3.54	5.07	
4th quartile	444	4.25		3.67	4.95	
School locale						
LCC	367	4.40	.1	3.73	5.17	.1
MSCC	292	4.17		3.43	5.12	
RI	182	4.42		3.75	4.87	
UFLC	874	4.27		3.54	5.03	
School grade						
A	680	4.26	.1	3.46	5.03	
B	398	4.28		3.60	4.99	.5
C	438	4.32		3.67	5.05	
D	136	4.56		4.02	5.75	

Note: Values within the same category that are significantly different from each other ($p < .05$) are in bold.

4. *Family responsibility* is of high importance.

Though it was of high importance for both genders, males placed greater importance on family responsibility than females. Overall, both leavers and stayers considered it important; however, when considering differences between leavers and stayers within demographic groups, Hispanic leavers had given this low importance.

This indicates that family responsibility did not play as much of a role in Hispanic teachers leaving the profession as other factors (see Table 7).

5. *Paperwork/Assessment* is of medium importance across all demographic groups for leavers and stayers. Overall, males considered this more important than females, and elementary teachers

Table 5
Factor scores for administrative support

Demographic category	Number	Total sample		Leavers vs. stayers		
		Score	<i>p</i> -value	Leavers	Stayers	<i>p</i> -value
All	1799		n/a	4.76	5.54	<.0001
Gender						
Female	1446	5.21	<.0001	4.84	5.60	.5
Male	353	4.88		4.43	5.29	
Race						
Black	192	5.34		4.86	5.79	.2
Hispanic	89	5.49	.001	5.18	5.71	
White	1498	5.11		4.73	5.50	
Years experience						
0–4 years	395	5.01	<.0001	4.58	5.73	.001
5–9 years	370	5.21		4.97	5.42	
10–19 years	396	5.37		4.94	5.63	
20 or more	638	5.05		4.72	5.44	
School district						
District 1	1071	5.18	.14	4.73	5.62	.02
District 2	728	5.09		4.81	4.41	
School level						
Elementary	840	5.30	<.0001	4.94	5.64	.8
Middle	405	5.06		4.65	5.50	
High	438	4.93		4.56	5.35	
School SES						
1st quartile	520	5.18	.8	4.76	5.53	.99
2nd quartile	400	5.11		4.72	5.49	
3rd quartile	435	5.18		4.80	5.58	
4th quartile	444	5.12		4.77	5.55	
School locale						
LCC	367	5.08	.2	4.59	5.63	.1
MSCC	292	5.08		4.83	5.40	
RI	182	5.31		4.84	5.63	
UFLC	874	5.16		4.80	5.53	
School grade						
A	680	5.24	.2	4.89	5.58	.8
B	398	5.13		4.76	5.51	
C	438	5.03		4.62	5.49	
D	136	5.19		4.80	5.67	

Note: Values within the same category that are significantly different from each other ($p < .05$) are in bold.

considered this less important than middle and high school teachers (see Table 8).

6. *Joy of teaching* is of low importance across all demographic categories for leavers and stayers. However, stayers considered this of even lower importance than leavers. Teachers in the two districts differed somewhat in their assessment of this factor (see Table 9).

3.3. Responses from the open-ended question

Table 10 shows the most common themes and gives examples of participant comments that correspond to them. It is interesting to note that four of the six factors appear in the top 12 qualitative themes. However, the factors *time with family* and *family responsibility* were represented in the

Table 6
Factor scores for financial benefits

Demographic category	Number	Total sample		Leavers vs. stayers		
		Score	<i>p</i> -value	Leavers	Stayers	<i>p</i> -value
All	1799		n/a	4.82	5.77	<.0001
Gender						
Female	1446	5.33	0.045	4.88	5.79	.1
Male	353	5.15		4.53	5.69	
Race						
Black	192	5.40	.2	4.90	5.88	.98
Hispanic	89	5.58		5.01	5.93	
White	1498	5.27		4.8	5.75	
Years experience						
0–4 years	395	5.06	<.0001	4.74	5.58	<.001
5–9 years	370	5.12		4.87	5.33	
10–19 years	396	5.39		4.85	5.71	
20 or more	638	5.48		4.84	6.21	
School district						
District 1	1071	5.28	.6	4.81	5.73	.5
District 2	728	5.31		4.83	5.84	
School level						
Elementary	840	5.36	.3	4.95	5.75	.05
Middle	405	5.24		4.76	5.75	
High	438	5.22		4.74	5.76	
School SES						
1st quartile	520	5.34	.7	4.84	5.76	.9
2nd quartile	400	5.31		4.75	5.86	
3rd quartile	435	5.30		4.87	5.75	
4th quartile	444	5.22		4.81	5.72	
School locale						
LCC	367	5.28	.8	4.87	5.75	.7
MSCC	292	5.34		4.95	5.86	
RI	182	5.28		4.84	5.58	
UFLC	874	5.25		4.76	5.78	
School grade						
A	680	5.30	.8	4.83	5.77	.9
B	398	5.26		4.83	5.71	
C	438	5.27		4.85	5.75	
D	136	5.39		4.86	6.05	

Note: Values within the same category that are significantly different from each other ($p < .05$) are in bold.

comments of less than 5% of the individuals who responded to this item. Additionally, some of the themes identified did not directly correspond to any of the identified factors. Most notably are the themes “stress”, “discipline problems”, and “general lack of support for teachers”.

When comparing leavers and stayers (see Table 11), there was a significant difference in the

number of comments made about the following themes: “pay or benefits inadequate or inappropriate”, “emphasis on testing and accountability”, “excessive paperwork”, “lack of administrative support”, and “discipline problems”. Stayers were more concerned with pay and benefits, the emphasis on testing and accountability, and excessive paperwork. Leavers were more

Table 7
Factor scores for family responsibility

Demographic category	Number	Total sample		Leavers vs. stayers		
		Score	<i>p</i> -value	Leavers	Stayers	<i>p</i> -value
All	1799		n/a	3.11	3.04	.35
Gender						
Female	1446	3.13	.0012	3.18	2.87	.4
Male	353	2.84		2.81	3.08	
Race						
Black	192	3.13	.5	3.00	3.25	.3
Hispanic	89	3.30		5.60	3.10	
White	1498	3.06		3.10	3.02	
Years experience						
0–4 years	395	3.05	<.0001	3.01	3.11	.1
5–9 years	370	3.42		3.62	3.25	
10–19 years	396	3.17		3.32	3.08	
20 or more	638	2.83		2.83	2.83	
School district						
District 1	1071	3.10	.3	3.08	3.13	.04
District 2	728	3.03		3.15	2.91	
School level						
Elementary	840	3.15	.1	3.18	3.11	.3
Middle	405	3.03		2.97	3.09	
High	438	2.95		3.07	2.81	
School SES						
1st quartile	520	3.01	.6	3.04	3.00	.4
2nd quartile	400	3.07		3.04	3.11	
3rd quartile	435	3.08		3.16	3.00	
4th quartile	444	3.14		3.19	3.08	
School locale						
LCC	367	3.09	.8	3.01	3.11	.7
MSCC	292	3.04		3.14	2.92	
RI	182	3.02		3.10	2.96	
UFLC	874	3.10		3.14	3.05	
School grade						
A	680	3.06	.7	3.08	3.04	.9
B	398	3.17		3.19	3.15	
C	438	3.03		3.12	2.94	
D	136	3.07		3.03	3.12	

Note: Values within the same category that are significantly different from each other ($p < .05$) are in bold.

concerned with lack of administrative support and discipline.

Although the comments provided by the participants provide further insights into some of the factors addressed in this study, they do not provide the level of detail necessary to fully understand the intent and nature of particular statements. This suggests that these issues warrant further examination and

clarification in order to find means to address them.

4. Discussion

Enhancing teacher retention requires effective intervention strategies. Ideally, one would identify teachers most likely to resign while they are still teaching, and then meet their needs. This approach

Table 8
Factor scores for paperwork/assessment

Demographic category	Number	Total sample		Leavers vs. stayers		
		Score	<i>p</i> -value	Leavers	Stayers	<i>p</i> -value
All	1799		n/a	4.54	4.54	.92
Gender						
Female	1446	4.65	<.0001	4.66	4.64	.5
Male	353	4.09		4.05	4.14	
Race						
Black	192	4.26	.0053	4.15	4.36	.1
Hispanic	89	4.31		4.74	4.00	
White	1498	4.60		4.59	4.60	
Years experience						
0–4 years	395	4.24	<.0001	4.18	4.34	.2
5–9 years	370	4.40		4.36	4.42	
10–19 years	396	4.70		4.77	4.66	
20 or more	638	4.71		4.80	4.61	
School district						
District 1	1071	4.47	.011	4.47	4.46	.8
District 2	728	4.65		4.64	4.66	
School level						
Elementary	840	4.73	<.0001	4.71	4.74	.9
Middle	405	4.45		4.49	4.41	
High	438	4.35		4.36	4.34	
School SES						
1st quartile	520	4.50	.3	4.53	4.48	.9
2nd quartile	400	4.56		4.53	4.60	
3rd quartile	435	4.46		4.45	4.47	
4th quartile	444	4.64		4.66	4.62	
School locale						
LCC	367	4.52	.2	4.47	4.57	.7
MSCC	292	4.63		4.58	4.69	
RI	182	4.33		4.35	4.32	
UFLC	874	4.58		4.62	4.55	
School grade						
A	680	4.64	.0078	4.70	4.58	.7
B	398	4.65		4.65	4.65	
C	438	4.35		4.32	4.34	
D	136	4.35		4.45	4.23	

Note: Values within the same category that are significantly different from each other ($p < .05$) are in bold.

is cost effective because it does not have to be applied to all teachers. It is feasible to a limited extent based on factors where attitudes of leavers and stayers differ substantially. Other factors are very important but equally so to leavers and stayers. Such a condition requires an overall strategy for all teachers, but knowing what is important makes it possible to focus effort on those aspects. Finally, some aspects, such as public perception of teachers,

may be important but may not be within the power of administrators to address.

This study revealed six factors that influence teacher retention. *Time with family* and *family responsibility* are of greatest importance to teachers who have left the profession. This is closely followed by *administrative support*, *financial benefits*, and *paperwork/assessment*. In comparison, teachers who remain in the profession placed less

Table 9
Factor scores for joy of teaching

Demographic category	Number	Total sample		Leavers vs. stayers		
		Score	<i>p</i> -value	Leavers	Stayers	<i>p</i> -value
All	1799		n/a	5.82	6.44	< .0001
Gender						
Female	1446	6.14	.5	5.84	6.44	.4
Male	353	6.09		5.71	6.42	
Race						
Black	192	6.31	.046	5.98	6.62	.1
Hispanic	89	6.29		6.03	6.48	
White	1498	6.09		5.79	6.41	
Years experience						
0–4 years	395	6.16	.022	5.89	6.61	.6
5–9 years	370	6.10		5.78	6.37	
10–19 years	396	6.26		5.93	6.45	
20 or more	638	6.03		5.74	6.38	
School district						
District 1	1071	6.19	.0025	5.88	6.49	.9
District 2	728	6.03		5.74	6.35	
School level						
Elementary	840	6.21	.024	5.93	6.47	.6
Middle	405	6.11		5.79	6.46	
High	438	6.03		5.72	6.38	
School SES						
1st quartile	520	6.12	.8	5.79	6.38	.8
2nd quartile	400	6.16		5.83	6.48	
3rd quartile	435	6.15		5.82	6.50	
4th quartile	444	6.09		5.84	6.39	
School locale						
LCC	367	6.15	.3	5.86	6.47	.9
MSCC	292	6.03		5.75	6.39	
RI	182	6.22		5.91	6.43	
UFLC	874	6.14		5.85	6.45	
School grade						
A	680	6.18	.4	5.93	6.43	.4
B	398	6.04		5.76	6.35	
C	438	6.17		5.84	6.52	
D	136	6.08		5.70	6.56	

Note: Values within the same category that are significantly different from each other ($p < .05$) are in bold.

importance on *time with family*, *administrative support*, and *financial benefits* than those who left the profession. It is important to note that teachers with 20 or more years of experience represented approximately 31% of the participating stayers in this study. Female teachers, elementary school teachers and teachers with more than 20 years experience all reported that a return to teaching would lead to less *time with family* more than other

groups in the sample. Please note that teachers with 20 or more years of experience represented approximately 31% of the participating stayers in this study.

The results of this study suggest a need for a-priori targeting of especially vulnerable groups of teachers for intervention strategies. To be effective, policy makers and school administrators need to find ways to garner information about these factors

Table 10
Themes emerging from responses to the open-ended question and representative comments

Theme	Representative comments
Pay or benefits inadequate or inappropriate	Education doesn't pay enough given the amount of work, responsibility, & stress Pay and cost of living incompatible
Emphasis on testing and accountability	FCAT should not be a punishment Tying FCAT to passing is not fair to students
Excessive paperwork	Paperwork is redundant Too much paperwork, overwhelming
Lack of administrative support	Admin doesn't listen to teachers Admin lacks respect for teachers
Stress	Stress from parents is a big factor FCAT stresses kids, teachers, and parents
Joy of teaching	Love teaching and the kids Teaching is very rewarding
Retired	I retired
District bureaucracy	School district needs to be smaller. Too impersonal. Less efficient & effective. Need more district-wide cohesion
Discipline problems	Unable to teach because of lack of discipline, 90% of teaching time spent on discipline. No effective discipline system in place
Negative remarks about administration	Admin has no idea what goes on in the classroom. It's amazing what we are expected to get done with so little funding Mgmt at my school rules by fear & intimidation
General lack of support for teachers	Teachers need admin, community, parent, & student supp Teachers need more resources (supplies & equip, aides)
Positive comments about district, school, or administration	School board and admin doing the best they can but legislation hinders their ability to do their best

for each teacher and use that information to identify teachers with the greatest need, and then devise flexible strategies to meet their need. Below we discuss the major factors and suggest possible means for addressing them.

4.1. Family issues

This study found two major categories relating to family issues. One of these was family responsibil-

ities. *Family responsibilities* are of high importance to both leavers and stayers. *Family responsibilities* include caring for children or elderly family members. This finding is consistent with Ingersoll (2002a) that found that personal reasons such as pregnancy, childrearing, and family moves accounted for a significant amount of teacher turnovers. Because this factor is equally important for stayers and leavers, it does not lend itself to identification of especially vulnerable teachers. However, its importance suggests that general strategies should be developed for all teachers that will facilitate continuation of or a return to teaching. For example, comments provided during the phone interview indicated that teachers leave due to issues related to the high cost of insurance for dependents. In order to increase teacher retention, methods could be explored for reducing the cost associated with insurance for dependents.

The other category relating to family issues was *time with family*. The results reveal that many teachers leave in order to either find work that is less time consuming or to stay home altogether. Flexible strategies such as job sharing and part-time employment could be devised for teachers who need more family time. Additionally, organizational strategies could be explored to allow teachers to complete more of their work during the school day (e.g. more time for planning, grading papers, etc.) so that their job does not interfere with family time.

4.2. Administrative support

Consistent with several other studies (Liu & Meyer, 2005; Madsen & Hancock, 2002; Tye & O'Brien, 2002; Ingersoll, 2000, 2002a; Macdonald, 1995), our findings suggest that increased administrative support may positively influence teacher retention. However in our study, *Administrative support* was of more importance to leavers than it was to stayers. This was particularly true for males and high school teachers. This finding is further supported by our qualitative analysis where a significantly higher number of leavers reported a lack of administrative support and problems with discipline. In fact, student discipline was identified as an important indicator of job satisfaction here and in Ingersoll (2002a). Comments made by participants in our study indicated that student discipline was associated with how well school

Table 11
Percentages of responses that relate to factors by number of respondents

Factor	Themes (total number of comments made)	Leavers	Stayers
Financial benefits	Pay or benefits inadequate or inappropriate* ($n = 243$)	15.5	33
Paperwork/assessment	Emphasis on testing and accountability* ($n = 237$)	18.2	27.8
Paperwork/assessment	Excessive paperwork* ($n = 146$)	9.9	19
Administrative support	Lack of administrative Support* ($n = 118$)	12.1	9.4
Relates to all factors	Stress ($n = 115$)	11.1	10.1
Teaching as a joy	Joy of teaching ($n = 99$)	9.9	8.3
Administrative support and paperwork/assessment	District bureaucracy ($n = 71$)	7.5	5.3
Joy of teaching	Discipline problems* ($n = 63$)	8	2.8
Administrative support	Negative remarks about administration ($n = 59$)	5.8	5
Administrative support	General lack of support for teachers ($n = 56$)	5.3	5
Administrative support	Positive comments about district, school, or administration ($n = 55$)	5.8	4.4

An * indicates a significant difference between leavers and stayers.

administrators supported an effective discipline plan. Other studies link administrative support to student discipline as well as to school governance and professional support (Liu & Meyer, 2005). Therefore, interventions aimed at teacher retention should employ measures to help teachers better address and solve discipline problems. Specifically, programs can be developed to enhance teachers' classroom management skills, school policies can be developed that provide clear, coherent, and consistent rules and consequences for student behavior, and administrators can support teachers in the enforcement of disciplinary policies.

Kelley (2004) showed that retention is increased when teachers experience expert mentoring and networking in a comprehensive induction program. Cochran-Smith (2004) further suggests that teachers should be afforded the opportunity to work in professional learning communities rather than in isolation and have prospects for advancement during the course of their career. Our study indicates that a large proportion of leavers that are not retiring have been teaching less than 5 years. It is our belief that there should be a stronger focus on retention rather than recruitment, and we recommend a 3-year mentoring program for new teachers. In addition, we suggest additional mentoring, professional development opportunities, and retreats for experienced teachers who desire it. Finally, Buckley et al. (2005) suggest improving school facilities. Support of teachers in the form of necessary supplies and functional equipment should be increased.

4.3. Financial benefits

Our results also show that teachers who left place significantly more importance on financial responsibilities than teachers who remain. Leavers may have found better paying positions or positions with similar pay but less responsibility and stress, as suggested by our qualitative analysis. This finding is consistent with a large body of literature which states low pay as a major source of dissatisfaction among teachers (Ingersoll, 2000; Liu & Meyer, 2005; Macdonald, 1995; Murnane & Olsen, 1989; Murnane & Olsen, 1990; Stinebrickner, 2001; Tye & O'Brien, 2002). However, it has also been found that teachers are less likely to resign because of salary when other working conditions are satisfactory (Liu & Meyer, 2005). Because of this, it may be more important to focus attention on providing teachers needed administrative support rather than focus solely on increasing teacher compensation.

4.4. Paperwork/assessment

Paperwork/assessment was considered an issue by both leavers and stayers. This factor is also linked to an increase in personal stress. Our qualitative analysis indicated that the recent emphasis on high-stakes testing and associated paperwork plays a role in increased stress for all teachers, which supports our factor analysis showing no significant difference between stayers and leavers for the paperwork/assessment factor. However, because leavers and stayers assign importance equally, our

findings indicate that this factor should be addressed for the general teaching population rather than focusing on those that leave. This finding is not consistent with other studies that identify accountability and the increasing use of high-stakes tests as a primary reason for teacher resignations (Tye & O'Brien, 2002; Darling-Hammond & Sykes, 2003) and warrants further exploration.

4.5. Joy of teaching

As mentioned earlier, *joy of teaching* relates to the perception of teaching as an enjoyable occupation. Compared with the other factors, *joy of teaching* was found to be of relatively low importance. However, it is reasonable to assume that if the other factors were adequately addressed teachers would find teaching more enjoyable. Considering the importance of maintaining the joy of teaching, particular for teachers in their early years, it may be important for consideration to be provided regarding the assignments (courses and student population) teachers are given early in their career. For example, new teachers who are assigned all low-end courses, students with known behavior difficulty, or excessive class preparation may not find teaching as enjoyable as others with different assignments and students. Each teacher should be provided a course load that allows them to experience the joy of teaching during the course of their work day.

In sum, the findings from this study provide an initial basis for considering and developing intervention programs and strategies that can be used to retain teachers, particularly teachers in difficult to staff areas such as mathematics and science. The need for highly qualified teachers demands a focus on developing and retaining teachers currently in the workforce.

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Appendix A

Survey Questions

Direction: I'd like you to respond to some statements using a scale of 1–7.

- R1. Using a scale of 1–7, how would you complete this sentence if 1 is extremely unlikely and 7 is extremely likely: For me to return to teaching in the Bay area within the next 3 years would be... .
- R2. Using a scale of 1–7, how would you complete this sentence if 1 is harmful and 7 is beneficial: For me to return to teaching in the Bay area within the next 3 years would be... .
- R3. Using a scale of 1–7, how would you complete this statement if 1 is enjoyable and 7 is not enjoyable: For me to return to teaching in the Bay area within the next 3 years would be... .

Directions: I'm going to read some more statements to you. Some of them may sound similar to each other. Please indicate your agreement or disagreement with each statement, using a scale of 1–7 where 1 means you strongly disagree and 7 means you strongly agree. Your response may be "n/a" or "not applicable" only if the statement is not relevant at all. An example would be a statement about your children, but you have no children.

- R4. A return to teaching would allow me to experience the joy of teaching again.
- R5. A return to teaching would hinder my ability to care for my children.
- R6. The administrators in my former teaching position would like me to return to teaching.
- R7. Financial benefits are important to me.
- R8. The opinions of colleagues in my former school are important to me.
- R9. Paperwork and other non-teaching responsibilities discourage me from returning to teaching.

- R10. A return to teaching would allow me to help school children grow and learn.
- R11. The support provided by school administrators encourages me to return to teaching.
- R12. The opportunity to teach part time would encourage me to return to teaching.
- R13. Caring for my children is important to me.
- R14. The opinion of my former administrators is important to me.
- R15. Spending time with my family is important to me.
- R16. My financial responsibilities do not allow me to return to teaching.
- R17. The emphasis on assessment and evaluation, such as the FCAT, is an important factor in my thinking about returning to teaching.
- R18. The opportunity to teach part time is important to me.
- R19. Colleagues in my former school would like me to return to teaching.
- R20. Returning to teaching would allow me to spend more time with my family.
- R21. Helping school children learn and grow is important to me.
- R22. Paperwork and other non-teaching responsibilities are important factors in my thinking about returning to teaching.
- R23. Providing care for elderly or ill family members is important to me.
- R24. Benefits such as health insurance and a retirement pension are important to me.
- R25. My family responsibilities do not allow me to return to teaching.
- R26. The opinions of my family are important to me.
- R27. A return to teaching would hinder my ability to care for elderly or ill family members.
- R28. My family would like to see me return to teaching.
- R29. My family responsibilities are important to me.
- R30. Emphasis on assessment and evaluation, such as the FCAT, discourages me from returning to teaching.
- R31. Returning to teaching would increase my personal stress level.
- R32. Support from school administrators is important to me.
- R33. Avoiding personal stress is important to me.
- R34. Teaching provides benefits, such as health insurance and a retirement pension, that encourage me to return to teaching.

- R35. The support provided by district administrators encourages me to return to teaching.
- R36. Returning to teaching would provide me financial benefits.
- R37. The joy of teaching is important to me.
- R38. Support from district administrators is important to me.
- R39. My financial responsibilities are important to me.
- R40. Is there anything else you'd like to add before I get some information about you?

Directions: We're almost finished. I just need to ask a few questions about you.

- R41. What subject did you teach at your last school? (science, mathematics, reading, special education, other)
- R42. Do you have a degree in education? YES (go to R45) NO (go to R43)
- R43. Do you have a teaching certificate? YES (go to R44) NO (go to R45)
- R44. Did you complete a formal program to prepare for your certification exam? YES (go to R45), NO (go to R45)
- R45. Are you currently employed? YES (go to R46), NO (go to Thank You message)
- R46. Are you employed in education? YES (go to R48), NO (go to Thank You message)
- R47. What is the name of your school district? _____
- R48. What is the name of your school? _____
- R49. What subject do you teach? Or, if not teaching, what is your position? _____

Directions: [Caller will end with thank you message unless subject call card is coded to indicate 5 years or less teaching experience. Subjects with such code will be asked questions 50–52, then the caller will end with Thank You message.]

Thank You message: Thank you for taking the time to participate in our research. If you want a report of the results of our study, please call and leave a message with your mailing address.

Additional Questions for Subjects with 5 years or less teaching experience:

- R50. Did you participate in an orientation or induction program when you began teaching?

- R51. Did you have a mentor or other formal support that continued for 1 year or longer?
- R52. Who was the most important support person for you as a new teacher?

(open response—less than 256 characters).

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