2010

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Peter B. Swanson
Georgia State University, peters@tribcsp.com

Recommended Citation

Hispania, Volume 93, Number 2, June 2010, pp. 305-321.

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Hispania, Volume 93, Number 2, June 2010, pp. 305-321 (Article)

Published by Johns Hopkins University Press

Teacher Efficacy and Attrition: Helping Students at Introductory Levels of Language Instruction Appears Critical

Peter B. Swanson
Georgia State University, USA

Abstract: Nationally, there is a shortage of foreign language educators, and the rate of attrition in certain areas of the southeastern part of the United States is startling. The researcher investigated foreign language teachers' (N = 463) perceived efficacy teaching languages in Georgia, and findings suggest there is a link between perceived efficacy and Spanish teachers leaving the profession. Specifically, teacher perception of abilities to help students learn at the introductory levels of language study appears to be a predictor of teacher attrition. This research has implications for teacher preparation and induction into the profession.

Keywords: perception of teacher efficacy, personal efficacy, Spanish instruction, Spanish teachers, teacher attrition, teacher efficacy

Nationally, the number of students enrolled in K–12 public education has been increasing while the number of certified teachers willing to work in US classrooms is decreasing, thus creating teacher shortages in many parts of the nation (American Association for Employment in Education 2006). A surplus of certified teachers who actively choose not to teach compound the shortage. However, several researchers contend that a shortage of teachers in many parts of the country exists regardless of the available teaching pool from which to draw (American Association for Employment in Education 2006); Fideler and Haselkorn 1999; Johnson et al. 2001), particularly because teachers tend not to accept employment in urban schools and small private schools, opting to teach in public suburban schools (Ingersoll 2001a, *Different Approach*). Others suggest that the problem is an uneven distribution of teachers nationally (Wilson et al. 2001). Nevertheless, the literature is replete with declarations that a teacher shortage exists (Draper and Hicks 2002; National Center for Education Statistics 2002).

1. Current State of Affairs

Teachers are leaving the profession at a high rate, and research indicates that "almost a third of America's teachers leave the field sometime during their first three years of teaching, and almost half leave after five years" (National Commission on Teaching and America's Future 2002: 4). For those people who enter the teaching profession through an alternative route (e.g., emergency certification), the attrition rate can be as high as 60% (Darling-Hammond, Berry, and Thoreson 2001), and half of new teachers leave within five years in the United States—22% within the first two years (Johnson et al. 2004). Ingersoll (2001b) suggests that the "revolving door" of teacher attrition is the cause for the teacher shortage. Poor working conditions, lack of on-the-job training, lack of teacher support, and the shortage of teacher candidates at different teacher education institutions throughout the country are also contributing to the shortage (Holmes Group 1986; Johnson et al. 2001). Likewise, the Survey of the American Teacher

(Metropolitan Life Insurance Company 2001) reported that 28% of middle and high school teachers feel alienated at their schools, and that 27% sense that what they think about teaching does not count for much in the eyes of the administrators.

Teacher shortages are prevalent in many different content areas, such as special education, mathematics, science, bilingual education, English as a Second Language (ESL), and foreign language (FL) (US Department of Education 2009). In particular, FL teaching positions are reported to be the most difficult to fill, well above special education, math, and science (Murphy, DeArmand, and Guin 2003). Overall, FL is an area currently facing a critical national shortage of teachers (American Association for Employment in Education 2006), and current research on the shortage of FL teachers indicates that there are at least five factors that explain the shortage: retirement, attrition, increased enrollments, legislation, and perceptions of teaching (Swanson 2008). Each of these is discussed below.

1.1 Retirement

Research indicates that 24% of elementary and 26% of secondary education teachers were fifty-five years old in the late 1990s and that the same percentage of elementary and secondary education teachers can be expected to retire between 2005 and 2010. Further, if student enrollments remain constant, more than 24% of the teachers at each level would need to be replaced in the next ten years (American Association for Employment in Education 2006).

1.2 Attrition

Zoroya and Hartzell (1999) reported that K–12 FL teachers left public school positions at an annual rate of 7% between 1993 and 1995 and that "this percentage will grow with anticipated foreign language teacher retirements" (Long 2000: 1). In the southeastern United States, specifically in North Carolina (22%) and Georgia (11%), the attrition rate for FL teachers was slightly higher than the rate for teachers in other content areas (Georgia Professional Standards Commission 2006; Konanc 1996).

1.3 Increased Enrollments

The US Department of Education (2003) finds that the baby boom echo that occurred starting in the late 1980s and early 1990s is one of two major contributing factors in the increase in current national school enrollments, which has now exceeded the highest enrollments of the original baby boom years. The second contributive factor is associated with the large number of new immigrants to the country and the children born to these individuals. According to a study conducted by the Pew Hispanic Center (Passel 2005), the number of undocumented immigrants is approximately 11 million in the United States, despite current efforts to control illegal immigration. Approximately 1.7 million of the undocumented immigrant population were children younger than eighteen years of age. Close to a third of undocumented immigrants (2.6 million) have arrived since 2000, approximately 57% (6.27 million) came from Mexico, and another 24% (2.64 million) are from other countries in Latin America.

The greatest increase has been experienced in nontraditional immigrant states, particularly in the Southeast. In Georgia, enrollment of Mexican students increased from 4% in 1990 to 61% in 2005 in the Dalton district alone (Teague 2007). Georgia has an estimated 300,000 undocumented immigrants, or 3.4% of the state's population. Taken collectively, these two factors help explain Georgia's current school overcrowding, and projections indicate that the number of school-aged children is expected to increase steadily for the foreseeable future (National Center for Education Statistics 2000).

Specific to language classes, FL enrollments in public secondary schools are increasing and the number of FL teachers has not increased to meet demand. Draper and Hicks (2002) found that between 1890 and 2000 enrollments in modern FL courses (Spanish, French, German) have increased nationally from 16.3% to 42.5%, with Spanish enrollments steadily climbing since 1964. In Montana for example, one of the states the American Association for Employment in Education (2006) mentions as having a shortage of Spanish teachers, the three mitigating causes for the shortage were increased enrollments, FL teacher attrition, and a high number of teacher retirements (Nielson 2001).

1.4 Legislation

No Child Left Behind (NCLB) requires all teachers in federal core academic areas, which includes FL, to meet the "highly qualified" criteria.[1] This requirement is problematic because FL teachers who were once licensed to teach in their respective states may find they are not "highly qualified" in the eyes of the federal government at a time of a national FL teacher shortage. Researchers have noted that although there is support for high standards and high expectations for every student in the education community, NCLB has prioritized instruction in and the allocation of resources to the core areas of science, mathematics, and reading, thus resulting in a curricular narrowing (Rosenbusch 2005; Rosenbusch and Jensen 2004). For rural schools, the effects of NCLB are intensified.

Members of the US Department of Education traveled throughout the country, listening to teachers and school officials and discovered that the highly qualified teacher provisions mandated by NCLB "don't adequately accommodate the special challenges faced by teachers in small, rural districts" (US Department of Education 2004: 1). Rural educators are often required to teach more than one academic subject, receive lower salaries and benefits, have less access to professional development opportunities, and have multiple extracurricular duties (Jimerson 2005; North Central Regional Educational Laboratory 2003). Additionally, rural school districts face the challenges of high transportation costs for students as well as the difficulty of attracting quality teachers (Phillips, S. 2003).

1.5 Perceptions of Teaching

Teaching, in which nine out of every ten public school teachers are white and more than three out of four are female (Latham, Gitomer, and Ziomek 1999), has been described as being a dead-end job with low salaries, low status, a lack of control over how schools are run, numerous classroom discipline issues, and ineffective administrative support leading to a lack of induction and mentoring (Boles 2000; Boser 2000; Brunetti 2001; Stanford 2001; Weld 1998). This demeaning societal caricature of teaching discourages candidates from pursuing teaching careers in any content field, including FL. And once in the profession, novice teachers are often given the most challenging assignments with little to no professional support. They tend to have few successes, and "their own sense of failure drives them from the classroom" (Ladson-Billings 2001: 17). These perceptions and the resulting outcome (attrition) occur year after year.

2. Implications

Noting the reasons individuals leave the profession, I posit that teacher efficacy, "teachers' belief or conviction that they can influence how well students learn, even those who may be difficult or unmotivated" (Guskey and Passaro 1994: 4), plays a role in teachers' decisions to remain in the classroom or not. Regrettably, many professional teachers begin to develop negative attitudes toward both students and their own work performance. These negative at-

titudes can as a result lead to teacher burnout and low self-efficacy. As educators begin to feel that they are less competent, they are more likely to perceive potential problems as bigger than they actually are (Brouwers and Tomic 2000).

When preservice educators leave initial teacher certification programs and accept employment, these individuals experience a professional jolt that is centered on a conflict between new teacher beliefs and values and the reality of teaching, as beginning teachers are socialized into the culture of the employing school (Flores and Day 2006; Lortie 1975). During this critical professional stage, novice educators are constructing and reconstructing a sense of professional self (the values, practices, and purposes that constitute their vocational identities) and find themselves most vulnerable, especially to a negative environment (Smethem 2007). Therefore, it seems imperative to explore the role of efficacy as it relates to attrition because teachers with a higher sense of efficacy are more likely to remain in teaching (Burley et al. 1991), whereas teachers with significantly lower scores on measures of self-efficacy are more inclined to leave the profession (Glickman and Tamashiro 1982).

3. Conceptual Framework

Self-efficacy is grounded in the theoretical framework of social cognitive theory, emphasizing the exercise of human agency, that is, the notion that people can exercise some influence over what they do (Bandura 2006). According to this theory, people are self-regulating, self-reflecting, self-organizing, and proactive. Individuals set goals, predict likely outcomes, monitor and regulate actions, and then reflect on their personal efficacy. From this standpoint, self-efficacy affects people's goals and behaviors, and it is influenced by environmental factors. Further, efficacy beliefs determine how environmental impediments and opportunities are perceived, how much effort is exerted, and how long people will persist when confronted with obstacles (Bandura 2006); it also affects the choice of activities.

One's sense of self-efficacy not only affects expectations of failure or success but also influences motivation and goal setting. Tschannen-Moran, Woolfolk-Hoy, and Hoy (1998) hypothesized that if an individual has a high sense of efficacy in any given area, he or she tends to set higher goals, fear failure less, and persevere longer in the face of obstacles. On the other hand, if an individual has a low sense of efficacy, he or she may avoid the task altogether or give up easily when difficulties arise. Thus, teacher efficacy is crucial to understand when examining the issue of the teacher shortage.

Teachers' efficacy beliefs can determine how much effort students exert, how long they will persist in the face of obstacles, how resilient they will be when dealing with failures, and how much stress or even depression they experience when managing demanding tasks (Bandura 1997). This theory predicts that teachers with a higher sense of efficacy work harder with students and persist longer even when students are challenging to teach, partly because these teachers believe in themselves and in the students with whom they work (Tschannen-Moran, Woolfolk-Hoy, and Hoy 1998). Specifically for FL teachers, Chacón (2005) theorizes that if educators' perceived efficacy in the four skills (i.e., reading, writing, speaking, and listening) in the target language (L2) is high, they may be more likely to engage students in mastery experiences that lead to increased communication in the L2. Conversely, a lower perception of efficacy in teaching FLs may lead teachers to exert less effort when motivating students to learn about a foreign language and to value FL learning. Efficacy beliefs—"people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (Bandura 1986: 391)—provide a base of human motivation, well-being, and personal accomplishment because, unless people believe that their actions can produce desired outcomes, they have little incentive to act or to persevere when confronted with difficulties (Erdem and Demirel 2007). Educators with a high sense of teaching efficacy feel that difficult

students can be taught if the teacher exerts additional effort. However, teachers with a low sense of teaching efficacy believe that there is little they can do to teach unmotivated students because students' success depends on the external environment (Gibson and Dembo 1984). Subsequently, as educators begin to feel that they are less competent, they are more likely to perceive potential problems as much bigger than what they actually may be (Brouwers and Tomic 2000) and develop negative attitudes that may lead to attrition.

4. Rationale for the Study

My interest in studying FL teachers stems from concern about the FL teacher shortage. Although the media echoes the need for more math and science teachers, I feel that not enough attention has been given to language educators, who are in great demand in many regions of the United States (American Association for Employment in Education 2006). As previously mentioned about Georgia, the attrition of FL educators in some parts of Georgia is staggering. At a time when there is a critical shortage of language teachers, I wanted to investigate the relationship between teacher efficacy and attrition specifically for FL teachers. The research questions selected for this study were

1. What is the level of efficacy for FL educators in Georgia?
2. What is the dimensionality of FL teacher efficacy?
3. Can teacher efficacy be a predictor of FL teacher attrition in Georgia?
4. Which language has the highest number of teachers leaving the profession?

5. Methods

5.1 Efficacy Instruments Used

After examining a variety of instruments designed to measure teacher efficacy (Ashton, Buhr, and Crocker 1984; Ashton, Olejnik, Crocker, and McAuliffe 1982; Gibson and Dembo 1984; Guskey 1981, 1982, 1988; Guskey and Passaro 1994; Rose and Medway 1981; Rotter 1966), I decided to use two separate surveys for this research—one to gauge personal and general efficacy for construct validity purposes and a second to measure FL teacher efficacy specifically. I selected the first survey, the twelve-item Teachers' Sense of Efficacy Scale (TSES; Tschannen-Moran and Woolfolk-Hoy 2001), because it contains an expanded list of teacher capabilities using researcher-created items as well as items from the Rand (Rotter 1966) and the Gibson and Dembo (1984) scales.

Tschannen-Moran and Woolfolk-Hoy (2001) reported strong reliability coefficients and, even more importantly, positive correlations between their scale and the other measures of teacher efficacy, concluding that the instrument was reliable and valid. Results from their data analysis revealed three dimensions of teacher efficacy: instructional strategy, classroom management, and student engagement. The researchers concluded that the TSES addresses some of the limitations in the other scales because the TSES "assesses a broader range of teaching tasks" (Tschannen-Moran and Woolfolk-Hoy: 801) in a non–content-specific manner.

After reviewing the literature on scale development, I created the second instrument because I found that there was a lack of instruments to measure FL teachers' sense of efficacy in teaching languages. When constructing instruments to measure efficacy, Bandura (1997) warns researchers to avoid the generality of what most measures of teachers' sense of efficacy offer. That is, in order to be useful and generalizable, the measure of teacher efficacy should tap teachers' assessments of their competence across the wide range of activities and tasks they are asked to perform. However, there is a danger concerning specificity. Developing measures that are too specific may cause a loss of predictive power for anything beyond the specific skills

and contexts being measured (e.g., I am confident I can teach Spanish –ir verbs in a suburban setting to middle-income sophomore boys who do not have specific learning disabilities, as long as my class is smaller than twenty students and good scaffolding is available. . .). Therefore, determining the most useful level of specificity depends on the purposes of the research (Bandura 1997). The creation of items that are too general or too specific may pose problems for researchers (Tschannen-Moran and Woolfolk-Hoy 2001).

Given the research questions, I developed the FL Teacher Efficacy Scale (FLTES, ten items) to measure FL teachers' sense of efficacy in general terms, avoiding the microscopic inspection of FL teacher instruction. I anchored four of the survey items on teachers' perceived abilities with respect to the three modes of communication (interpersonal, interpretive, and presentational) outlined in the national standards developed by the American Council on the Teaching of Foreign Languages (National Standards in Foreign Language Education Project 1999). Formerly conceptualized as the four skills (reading, writing, listening, speaking), communication is now reconfigured as the three modes of communication, with a focus on the interactive process rather than any one skill being addressed in isolation. Research indicates not only that FL educators need a high level of language proficiency using the aforementioned four modalities in the L2 (Peyton 1997) but also that they need "the ability to comprehend contemporary media in the L2, both written and oral, and interact successfully with native speakers" (Phillips, J. 1997: 12).

Survey items specifically designed to measure the teaching of culture were not included because many times culture is imbedded in instruction. Kramsch (1993) states that culture in language learning is not an expendable fifth skill, attached to the teaching of speaking, listening, reading, and writing. It is always in the background—from the first day of instruction, ready to unsettle the good language learners when they expect it least—making the limitations of their hard-won communicative competence evident, challenging their ability to make sense of the world around them. Moreover, Thanasoulas (2001) states that language teaching is culture teaching, and someone involved in teaching language is also involved in teaching culture at the same time.

Six additional items were written that addressed helping students learn at the introductory (e.g., French 1) and at advanced (e.g., French 4) levels as well as reducing student anxiety, fostering interest in learning FLs, and increasing student achievement and motivation. Once I completed the scale, I added questions to gain understanding about perceived support from each of the three entities: administrators, students, and parents/guardians. The final item asked participants to give their overall perception of efficacy in teaching languages.

Following the suggestions from the literature, I used a scale beginning at 0 (cannot do at all) to 100 (highly certain can do) because social-cognitive researchers have typically used a rating scale that ranges from 0 to 100 (Pajares, Miller, and Johnson 1999; Shell, Murphy, and Bruning 1989), arguing that thinking in 0–100 terms is congruent with the manner in which students are typically graded in school, which is grounded in Bandura's (1997) guidelines for instrument construction. Further, such scales allow greater discrimination than scales with narrower response options because they are psychometrically stronger than a scale with a traditional Likert-type format (Pajares 1997).

In addition to answering the ten items, participants were requested to offer information on their age, gender, ethnicity, highest educational level attained, language(s) taught, years of teaching, study abroad and length of time studying abroad (if applicable), type of teaching certificate currently held, if they are currently enrolled in a teacher certification program, and their intentions for the next school year (remain teaching, retire, or quit teaching altogether). A final open-ended question solicited participant comments. Formatted in concert, the two instruments sought to measure efficacy in the areas of classroom management, student engagement, instructional strategy, and FL teaching.

5.2 Sample

A total of 463 in-service FL educators from Georgia participated voluntarily in this study. Women (83%) outnumbered men and the majority reported being Caucasian (71%) followed by Latino (21%), African American (4%), Asian (1%), and other (3%). The average age for the participants was 42.15 years (SD = 11.64), and the participants' length of time teaching a FL ranged from seventeen first-year teachers to one forty-year veteran (M = 12.50, SD = 9.16), with 6% of the participants having taught FLs for more than thirty years. Twenty-eight percent of the participants reported being in their first five years of language teaching. The sample mirrors the demographics for the state and the national teaching population in general in terms of gender, ethnicity, and age (Georgia Professional Standards Commission 2008; National Center for Education Statistics 2006; Swanson 2008).

With regard to education and language taught, 39% percent reported having only a bachelor's degree and more than half of the participants reported having earned a master's degree (55%) or a doctorate (6%). The majority of the teachers reported teaching Spanish (61%), French (15%), or two or more different languages (11%). Other languages taught by participants were German (7%), Latin (4%), Japanese (1%), and Chinese (1%). Seventy-four percent of the participants reported having studied FLs outside of the United States, and the average amount of time spent studying abroad was 11.59 months.

Finally, from the perspective of vocational persistence, 84% of the participants (n = 379) reported that they foresaw teaching FL at their respective schools, whereas 11% indicated that they would continue teaching FL but at a different school during the 2008/2009 school year. However, 6% of the total number of participants reported that they would quit the profession (n = 28) by the end of the 2007/2008 academic year. Of those who reported that they would discontinue teaching FL at the end of the school year, 89% were Spanish teachers, 53% were between twenty-two and twenty-seven years of age, 87% were female, almost two-thirds (60%) held only a bachelor's degree, 47% had taught FLs for five years or less, and 60% were certified teachers holding a valid Georgia teaching certificate.

5.3 Procedure

Following institutional review board approval, I began by examining Georgia's Department of Education Web site to obtain school district Web site addresses for each county in the state. Then, I searched each public school district's Web site for individual school web page addresses. Once these were located, I explored each school's web page, looking for teacher contact information. School district by school district, school by school (elementary, middle school, high school), I attempted to gather the email address for every FL teacher in the state. I chose an electronic survey design because research indicates that email surveys have demonstrated superiority over postal surveys in terms of response speed, cost efficiency, and heightened response quality (Bachman, Elfrink, and Vazzana 1996, 1999; Sheehan and McMillan 1999; Weible and Wallace 1998). Next, I composed a letter inviting the 1,243 FL teachers listed on schools' web pages to participate in the research. I explained to these individuals that I was a veteran public school Spanish teacher and that I was interested in studying FL teachers in the state. I encouraged the recipients to click on the link upon reading my email and take the survey (ten to fifteen minutes). Additionally, I instructed them to add any comments that they felt were pertinent to the study at the end of the survey. Finally, I requested interested participants to send me an email if they would like to know the results of the study. Data collection began on April 16, 2008 and ended on June 1, 2008.

6. Results

6.1 Preliminary Data Analysis

Data from the online survey were entered into a statistical software program (SPSS 17.0). The data met all of the methodological and statistical criteria in order to conduct all of the calculations reported here. Additionally, to minimize Type 1 testing errors,[2] I conducted a statistical power analysis and found that the sample size was adequate for interpreting the results with a 95% confidence interval.

First, reliability coefficients were computed, and I found coefficients similar to those reported by Tschannen-Moran and Woolfolk Hoy (2001) for the twelve-item TSES scale (.92). Next, reliability coefficients were calculated for the ten-item FLTES. A coefficient of .86 was found, indicating satisfactory consistency. Next, I examined the individual items for both instruments to answer the first research question. I calculated means and standard deviations, and Table 1 shows the rank order for the FLTES.

Table 1. Means and Standard Deviations for Survey Items by Instrument

FL Teacher Efficacy Scale	M	SD
How much confidence do you have in your ability to...		
(9) write a personal letter in the language(s) you teach to a pen pal who is living in a foreign country?	94.45	9.07
(8) read and understand a newspaper printed in another country in the language(s) you teach?	92.91	10.21
(1) help students learn at the first-year level of the language(s) you teach?	91.64	10.45
(7) have a conversation with a native speaker in the language(s) you teach?	90.54	14.17
(10) fully understand a movie that only uses the language(s) you teach?	88.49	13.47
(2) help your students learn at the most advanced levels of the language(s) you teach?	87.67	13.97
(3) lower your students' anxiety about learning the language(s) you teach?	87.51	11.57
(5) foster your students' interest in learning the language(s) you teach?	86.49	12.46
(6) increase student achievement in your classes?	86.35	11.55
(4) motivate your students to learn about the language(s) you teach?	85.71	13.72

Overall, means at the higher end of the scale were found for all of the items on both scales. However, even with the data set being negatively skewed (the mass of the distribution of means is concentrated to the far extreme of the measurement scale, closer to the end of 100), the data were considered statistically fit for accurate analysis. The participants indicated that they felt confident teaching languages with a mean range for all items measuring FL teaching efficacy from 85.71 to 94.45. The two highest ratings on the FLTES were found for perceived confidence

in writing a personal letter in the FL(s) the participant teaches and reading and understanding a newspaper printed in another country in the language(s) taught. The two lowest ratings were found for perceived confidence to increase student achievement in the teacher's classes and motivate students to learn about the language(s) taught. Of the ten items measuring FL efficacy, teachers rated the four that measured perceived confidence in the four skill areas the highest, suggesting that they felt highly confident in their ability to use the language being taught. Conversely, the items constituting the dimension called "teacher as facilitator" were rated the lowest.

For the TSES items (see Table 2), the participants' means ranged from 73.80 to 91.63.

Table 2. Means and Standard Deviations for Survey Items by Instrument

Teachers' Sense of Efficacy Scale		M	SD
How confident are you that you can...			
(10)	provide an alternative explanation or example when students are confused?	91.63	9.50
(9)	use a variety of assessment strategies?	89.39	11.33
(5)	craft good questions for your students?	87.13	12.18
(12)	implement alternative strategies for your classroom?	85.49	13.33
(6)	get children to follow classroom rules?	85.23	11.87
(8)	establish a classroom management system with each group of students?	85.19	13.69
(1)	control disruptive behavior in the classroom?	84.92	14.59
(7)	calm a student who is disruptive or noisy?	83.91	14.52
(3)	get students to believe they can do well on school work?	81.01	14.85
(4)	help your students value learning?	79.18	16.22
(11)	assist families in helping their children do well in school?	77.27	19.54
(2)	motivate students who show low interest in school work?	73.80	19.28

Participants expressed confidence in such a manner that the items that measured each of the three dimensions were grouped in rank order (from highest to lowest). Perceived confidence in instructional strategy (items 10, 9, 5, and 12) was the strongest, followed by classroom management (items 6, 8, 1, and 7) and student engagement (items 3, 4, 11, and 2). On both scales, the participants perceived the least amount of confidence motivating students.

Next, the data were examined by perceived confidence to use the L2 and levels of support from different entities. Table 3 shows that participants expressed confidence in teaching languages and rated the level of support from students much higher than their support from administrators and parents/guardians. However, the large standard deviations for perceived support from the three groups indicated that the participants' perceptions were not homogeneous.

Afterward, I set out to answer the second research question investigating the dimensionality of FL teacher efficacy. To do so, I conducted factor analysis[3] separately for each instrument. Factor analysis of the FLTES revealed that two factors could be extracted. The first factor (a.k.a., dimension), FL teacher as facilitator, consisted of six items (numbers 1, 2, 3, 4, 5, and 6) and items 7 through 10 formed the content knowledge dimension. Factor analysis of the TSES in-

Table 3. Means and Standard Deviations for Survey Items by Instrument

Perceptions of Confidence and Support	M	SD
What is your perceived confidence to use the language(s) you teach?	90.49	12.64
Rate the level of support you feel you receive from your students.	79.75	17.00
Rate the level of support you feel you receive from your administrator(s).	78.16	22.26
Rate the level of support you feel you receive from your students' parents/guardians.	74.10	20.85

dicated that three dimensions could be extracted: classroom management (items 1, 6, 7, and 8), student engagement (items 2, 3, 4, and 11), and instructional strategy (items 5, 9, 10, and 12). These were the same factors reported earlier by Tschannen-Moran and Woolfolk-Hoy (2001).

After establishing the factor structure of the two instruments, I conducted correlation analysis to establish construct validity for the FLTES because it is a new scale and needed to be validated. Correlation analysis of the two instruments showed that the three TSES dimensions were interrelated ($r = .54–.63$) with coefficients similar to those reported by Tschannen-Moran and Woolfolk-Hoy. The TSES was related to the FLTES ($r = .71$, $p < .001$) and its two subscales ($r = .35$, $p < .001$ for content knowledge and $r = .75$, $p < .001$ for teacher as facilitator), supporting the notion that the FLTES is a valid instrument for measuring teacher efficacy because the FLTES was strongly related to the TSES, which was reported by its creators to be related to the other field-tested instruments of teacher efficacy.

6.2 Efficacy as a Predictor of Attrition

To answer the third research question, I conducted a one-way analysis of variance (ANOVA)[4] to investigate a relationship between the ten FLTES items and the participants' future vocational plans (See Table 4). The ANOVA was significant for teachers' perceived ability to help students to learn at the introductory level of language instruction ($F[3, 433] = 5.86$, $p < .01$, $\eta^2 = .03$), which suggested that there is a relationship between helping students learn at the beginning stages of language learning and teacher attrition. That is, those planning to leave the profession feel less confident helping students learn FL at the introductory level of language instruction.

I performed a second ANOVA on the TSES items, and a statistically significant difference

Table 4.
Means and Standard Deviations for Helping Students at the Introductory Level of Foreign Language Taught by Future Vocational Plans

Future Vocational Plans	M	SD
Remain teaching at same school	91.93	9.57
Remain teaching but at different school	92.43	7.39
Retire from teaching	89.08	16.57
Quit teaching	80.57	25.53

emerged for the item asking about providing an alternative explanation or example when students are confused ($F[3, 433] = 4.57$, $p < .01$, $\eta^2 = .03$). Here, those who stated that they planned to return to teaching the next year felt more efficacious in providing explanations/examples than those who stated that they planned on quitting teaching at the end of the school year.

Next, to answer the fourth research question, I conducted a stepwise multiple regression procedure to investigate if any of the FLTES items could serve as a predictor of FL teacher attrition. Of the ten items, only helping students to learn at the introductory level of language instruction was a statistically significant predictor ($\beta = .19$, $p < .001$) of teacher attrition, accounting for 4% of the variance. This finding confirmed the ANOVA where FL teachers who felt less efficacious with students in the beginning FL classrooms were more likely to leave the profession. A second multiple regression analysis including the TSES items was conducted, and the item asking about providing an alternative explanation or example when students are confused was a statistically significant predictor of teacher attrition ($\beta = .18$, $p < .01$).

Finally, I conducted a discriminant analysis to differentiate between those who would remain and those who would quit teaching on the ten FLTES items to verify the findings from the multiple regression procedure. Again, only helping students learn at the introductory level of language instruction was a statistically significant predictor, and 96% of the group membership was grouped correctly, intensifying the notion that FL teacher attrition as related to teacher efficacy is best predicted by helping learners at the introductory levels of instruction. Figure 1 shows the mean differences graphically for the ten FL items for stayers and leavers in the profession.

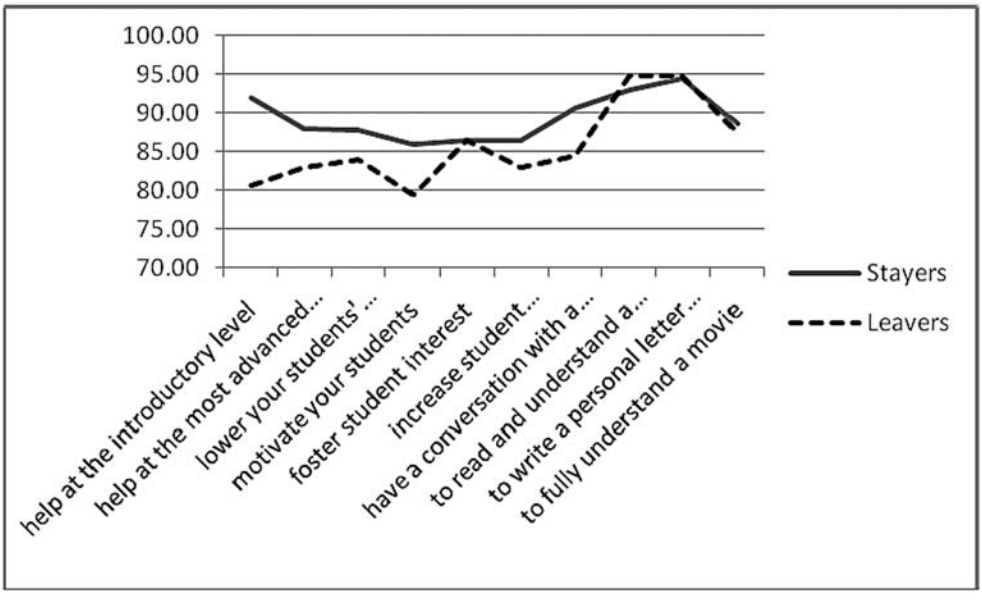

Figure 1. Means of Stayers and Leavers on FLTES items

As noted earlier, the majority of the participants (twenty-five of the twenty-eight) who stated that they planned to quit the teaching profession were Spanish teachers. The remaining three FL teachers reported teaching French (two persons) and German (one person). Therefore, the predictors of attrition speak predominantly to Spanish teachers.

7. Discussion

Many factors appear to play a role in teacher attrition, and the purpose of this research was to investigate the level of teaching efficacy among Georgia's FL teachers, determine the dimensionality of FL teaching, examine the relationship between FL teaching efficacy and teacher attrition, and investigate attrition by different languages taught. A representative sample of Georgia's FL teacher population ($N = 463$) responded to the online survey investigating their sense of efficacy teaching languages. The participants' demographics were similar to Georgia's teaching population and the national teaching population. The reliability coefficients and correlations between the two instruments offer evidence of satisfactory instrument reliability and validity.

Overall, the participants expressed a high sense of efficacy teaching languages, especially in the area of the four communication skills. They felt more support from students than from either parents/guardians or administrators. The participants appeared to be more confident in their instructional strategy and classroom management skills than they were for student engagement, an area of concern when investigating attrition. Additionally important and what the literature has not revealed up to this point is the importance of FL teachers being able to help students to learn at the introductory level of language learning. Although exact difficulties associated with teaching the first levels of language learning are not clear from this study, it appears that Spanish teachers more than other language teachers are in need of improved skills working with these learners. The data support earlier findings explicating why individuals in the early part of their careers leave teaching (National Commission on Teaching and America's Future 2002) because the majority of the individuals planning to leave teaching were novice educators of Spanish (in their first five years of teaching) who have only a bachelor's degree, and only 60% held a valid Georgia Clear and Renewable teaching certificate.

Although the number of Spanish teachers in this study who responded that they were going to leave the profession may appear relatively low, these twenty-eight individuals represent 6% of the sample, which is over half the number of FL teachers (11%) reported by the Georgia Professional Standards Commission in 2006 to be leaving teaching. This study is important because it begins to answer some of the questions surrounding the attrition of Georgia's FL teachers and it underscores the relevance of investigating FL teacher attrition for several reasons.

First, the number of students affected is considerable. Assuming each of the twenty-eight teachers is responsible for teaching 192 students daily (32 students times six class periods), 5,376 students would possibly be affected by such attrition because Georgia recently increased its maximum class size in January 2009 to 32 students in high school. Second, FL teaching positions are reported to be the most difficult to fill (Murphy, DeArmand, and Guin 2003), and FL is an area currently facing a national shortage of teachers (American Association for Employment in Education 2006). The need of finding, attracting, and eventually hiring twenty-eight Spanish teachers presents a significant challenge. Third, from a humanistic perspective, each one of these individuals is important to the educational system as a whole. Finally, the recent increase in immigration to Georgia represents a situation whose related implications need to be addressed.

The recent rise in numbers of Spanish-speaking individuals in Georgia and the serious shortage of bilingual and ESL teachers may explain part of the Spanish teacher attrition (Bradley 1999). Due to the lack of ESL teachers, many native Spanish speakers are placed in the beginning levels of Spanish classes, and they can become a serious challenge for teachers and even a potential stumbling block for novices who have little experience working with students. Having such a broad spectrum of abilities in the already crowded classrooms may be frustrating these FL instructors who are attempting to teach true beginners Spanish (National Center for Education Statistics 2000). The data suggest that the participants have strong content knowledge but have less confidence in the areas of classroom management and student engagement.

Perhaps the "false beginners" (native speakers) disturb the educational flow in the classroom enough that teachers begin to sense a lack of confidence managing the classroom and motivating students to learn about a language with which they are already familiar. Although a positive finding was that the participants expressed a higher sense of efficacy in the area of instructional strategy, problems in maintaining the continuity of instruction may have been due to the respondents lacking the skills to differentiate instruction in order to engage the fluent Spanish speakers. Working collectively, the novice Spanish teacher must deal with circumstances that do not allow optimal vocational performance, which can lead to a declining sense of job satisfaction and ultimately leaving the profession.

Clearly, these results have significant implications for both preservice and in-service FL educators. Because the sample was composed of in-service educators and the participants felt least efficacious in the area of student engagement, it helps identify an area neglected by NCLB. Under the NCLB guidelines, public elementary and secondary school teachers who teach core content areas are required to be "highly qualified." That is, teachers must have full state certification (which may be attained through alternate routes as specified by the state), hold a bachelor's degree, and have demonstrated subject matter competency as determined by the state under NCLB guidelines.

Without reservation, teacher proficiency in the L2 is imperative. However, teacher effectiveness and teacher retention may be compromised at the expense of content knowledge. Students need teachers with strong content expertise; however, teaching languages is more than subject matter expertise. Knowledge and skill in how to teach FL are also crucial. All teachers must have thorough knowledge of strategies and how to apply them in the classroom. Further, educators need in-depth knowledge of child and adolescent development in their efforts to promote student engagement and motivation. Moreover, teachers need to demonstrate competence in ascertaining individual learning needs and creating a positive atmosphere conducive for learning. Certainly, finding individuals with native-like linguistic competence and circumventing the current educational system through alternative routes of certification is not the answer. Instead, more focused attention needs to be directed toward accredited certification programs based on best practices and sound pedagogical procedures.

The Center on Education Policy (2007) conducted a comprehensive study of the effectiveness of NCLB that included data from an annual survey of the fifty states. Of the key findings, NCLB was found to not have a significant impact on teacher quality or on student achievement. Additionally, many state and district officials felt that the NCLB definition of a "highly qualified" teacher was "too narrowly focused on content knowledge" (5). It was suggested that in defining "highly qualified," other attributes such as classroom performance and the ability to relate to students be considered. Clearly, findings from the present study bolster such ideas because results indicate the need to increase focus on strategies for engaging student motivation, encouraging students to value FL learning and the manifold benefits of FL learning, assisting families to help their children succeed in school, and increasing student confidence to do well in school.

According to efficacy theory (Tschannen-Moran, Woolfolk-Hoy, and Hoy 1998), the proficiency of a performance creates a new mastery experience, which provides new information that will shape future efficacy beliefs. Greater efficacy leads to greater effort and persistence, which leads to better performance, which in turn leads to greater efficacy. However, the reverse is also true according to this theory. A lesser sense of efficacy leads to teachers exerting less effort and giving up easily, which leads to poor teaching outcomes, which, in turn, can then produce decreased efficacy. Such outcomes, both negative and positive, tend to influence teachers' sense of efficacy and become a source of future efficacy beliefs. Thus, teachers' positive and negative experiences in promoting learning will increase or decrease the likelihood of future successes or failures. Over time this process stabilizes into a relatively enduring set of efficacy beliefs. As preservice and novice FL teachers begin to feel more and more efficacious in different areas of

FL teaching, teacher attrition may decrease and more well-prepared FL educators will remain in the teaching profession.

Although the present study highlights new and interesting phenomena in the profession, it does have its limitations. The data were self-reported and although efforts were made to have a representative sample, the data set may not include FL teachers from every corner of the state. The limitation of self-reported data is that researchers have no way of verifying the accuracy of the respondents' answers to the survey. Thus, observing teachers in the classroom may help improve the correspondence between an individual's perception of his or her teaching prowess and his or her observed teaching performance. An additional limitation is that novice educators are less prepared than their veteran counterparts (Ladson-Billings 2001) and subsequently have less experience in the classroom. Therefore, I call for more research in this area. Nevertheless, the methods to conduct the study were sound, efforts were made to invite every FL teacher in the state to participate in the study, and the sample size was large and satisfactory for the statistical procedures conducted.

Notwithstanding the limitations of this study, questions remain and further research in the area of FL teacher efficacy is clearly warranted. It would be helpful to know why Spanish teachers are much more prone to leaving the profession than teachers of other languages. Further, understanding which aspects of teaching-learning for FL students at the introductory level are the most difficult for novice educators to master would offer additional insight. It would also be helpful to know if there is something problematic about the introductory level—that is, is there a structural problem (administrators assigning first-year educators to teach introductory classes) or if it is just that beginning teachers, who are generally more likely to quit, are assigned these introductory courses and therefore feel less efficacy in teaching them. Clearly, the beginning levels of language instruction are particularly important because getting more students to continue FL study is key to increasing the global knowledge in our society.

Last, it would be informative to learn more about the chain of events that take place in teacher efficacy that leads teachers to quit the profession. As teachers begin to feel less efficacious, what starts this downward spiral of efficacy and what fuels it? This study provides support to the belief that attrition is related to teacher efficacy. Further study is needed in order to understand the difficulties of teaching students at the introductory levels of language learning to help retain more FL educators.

ACKNOWLEDGMENTS

This article benefitted greatly from the reviewers' and editor's comments. I express my gratitude to Drs. Martin Agran and Phill Gagne for consulting with me on the development of this article.

NOTES

[1]To be considered highly qualified, teachers must have a bachelor's degree, full state certification or licensure, and proof that they know each subject they teach (US Department of Education 2004).

[2]Concluding that there is an effect, when in reality there is not.

[3]A statistical procedure that explores which variables in a data set are most related to each other and groups them by factors or dimensions.

[4]A statistical method that makes simultaneous comparisons between two or more means to verify if a significant relationship exists between variables being tested.

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