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**Title:** Georgia's Rural Foreign Language Teachers' Sense of Efficacy and How It Relates to Teacher Attrition.

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**Abstract:** Foreign language teachers are in critical need in many parts of rural America. Using Bandura's conceptual framework of self-efficacy teaching languages as a theoretical lens, the researchers created a scale to measure foreign language teacher efficacy and administered alongside a well-known efficacy survey to in-service rural teachers ( $N = 167$ ) in Georgia. Data analysis indicates that the new instrument is psychometrically sound and there are two dimensions to language teacher efficacy: Content Knowledge and Facilitating Instruction. Positive correlations between the two surveys suggest that teaching languages is more than just strength of content knowledge and FL teachers may need assistance engaging students. Additionally, it appears female novice Spanish teachers are more prone to attrition than teachers of other languages. This research holds implications for professional development opportunities as well as teacher preparation programs.

Nationally, the number of students enrolled in K-12 public schools in the United States (US) has been steadily increasing while the number of certified teachers willing to work in US classrooms has been decreasing. Such a phenomenon has contributed to a teacher shortage prevalent in many parts of the nation (American Association for Employment in Education, AAEE, 2008). Research on the lack of teachers suggests a lack of consensus regarding the factors associated with the shortage. While Ingersoll (2001, 2003) finds a revolving door of teacher attrition and turnover that helps explain the teacher shortage (Ingersoll, 2001, 2003), Darling-Hammond (2000) indicates that the shortage is exacerbated by a surplus of certified

teachers who actively choose not to teach. Yet, others argue that a shortage of teachers in many parts of the country exists regardless of the available teaching pool from which to draw (AAEE, 2006; Fideler & Haselkorn, 1999), because these professionals tend to avoid employment in urban schools and small private schools. Further investigation reveals that an uneven distribution of teachers nationally appears to contribute to the current teacher shortage (Wilson, Darling-Hammond, & Berry, 2001). Nevertheless, the literature clearly indicates there is a teacher shortage throughout the nation and among the areas of critical need are special education, bilingual education, math, science, and foreign languages (AAEE, 2008, Draper & Hicks, 2002; National Center for Education Statistics, 2002).

While there is an abundant literature base describing the shortage of math and science teachers, there is a paucity of research discussing the lack of foreign language (FL) teachers, especially in rural schools. Such a finding is alarming because approximately half of the nation's 80,000 public elementary and secondary schools are located in rural areas or small towns, and nearly one in three of America's school-aged children attends public schools in rural areas or small towns (Johnson, 2003). Research indicates that in four states (Maine, Mississippi, Vermont, and West Virginia) the majority of their population lives in rural areas. Two others, South Dakota and Arkansas, come very close to having most of their inhabitants residing outside of suburban areas (Beeson & Strange, 2003). Characteristically, rural districts tend to have declining student populations, lower property value assessments and increased transportation expenses, a higher proportion of residents in or near poverty as compared to metropolitan areas, and difficulty attracting quality teachers (Deweese, 1999; Phillips, 2003).

In this article, the authors highlight the current situation facing FL teachers specifically and advance five factors that help explain the FL teacher shortage in the context of rural schools.

Afterwards, the researchers describe the quantitative and qualitative methods and survey used to assess rural FL teachers' sense of efficacy teaching languages in Georgia. The article concludes with a discussion of the results and the implications from the findings. The purpose of this research is to call attention to the lack of language teachers and investigate how rural FL teachers' sense of efficacy plays a role in their decision to remain or leave the teaching profession at a time of critical shortage (Swanson, 2008).

### **Current State of Affairs**

Three decades ago researchers warned of a severe shortage of teachers in America (Boe & Gilford, 1992; Darling-Hammond, 1984; Haggstrom, Darling-Hammond, & Grissmer, 1988; National Academy of Sciences, 1987; National Commission on Excellence in Education, 1983) due to increased student enrollment and teacher attrition. Unfortunately, the prediction was correct and there is a shortage of teachers in America's classrooms today (AAEE, 2006; Draper & Hicks, 2002; National Center for Education Statistics, 2002). Current research indicates that the shortage is not uniform across content areas and severe shortages are reported in special education, mathematics, science, bilingual education, English as a Second Language, and foreign language (AAEE, 2008; U.S. Department of Education, 2010).

FL teaching positions are found to be the most difficult to fill, much more so than math, science, and special education (Murphy, DeArmand, & Guin, 2003). Moreover, rural schools continually have problems locating skilled teachers and now these schools are faced with a teacher shortage (Barley & Brigham, 2008; Darling-Hammond, Berry, & Thoreson 2001; North Central Regional Educational Laboratory, 2003). Additionally, FL is an area currently facing a national shortage of teachers regardless of educational context (AAEE, 2009). Research on the

shortage of FL teachers points to at least five factors that explain the shortage: retirement, attrition, increased enrollments, legislation, and perceptions of teaching (Swanson, 2008).

### ***Retirement***

The AAEE (2006) reported that 24% of elementary and 26% of secondary teachers in the US were at least 55 years of age in the late 1990s and that the same percentage of elementary and secondary teachers could be expected to retire between 2005 and 2010. Findings of the report indicated that if student enrollments remained constant, more than 24% of the teachers at each level would be needed in the next ten years. In a similar study, Radner (1998) found that 29% of the US population is considered part of the Baby Boomer generation and these individuals should be eligible to retire in the next ten years. Adding to Radner's work, Blair (1999) found that this generation of teachers "who entered the profession 30 years ago are able to retire in masses" (p. 22). Assuming that FL teachers are dispersed evenly from elementary to secondary contexts as well as in urban, suburban, and rural areas, a large number of FL teachers can be expected to retire soon.

### ***Teacher Attrition***

A factor equally serious as teacher retirement is teacher attrition. Nearly one-third of America's teachers leave the profession within their first three years of teaching, and almost half leave after five years (National Commission on Teaching and America's Future, 2002). Educators cite factors such as inadequate classroom management skills, large classes, work schedules, feelings of isolation in the classroom, social and disciplinary problems, low standardized test scores, serious financial budget issues, high dropout rates, higher absenteeism, and low salaries as reasons to leave teaching (Predmore, 2004; Schwartzbeck, Redfield, Morris, & Hammer, 2003; Strange & Silverman, 2005; Wilcox, 2004). For those people who enter

teaching through an alternative route such as emergency certification, the attrition rate can be as high as 60% (Darling-Hammond, Berry, & Thoreson, 2001). In rural schools, part of the attrition problem has been associated with larger school districts, primarily in urban areas, recruiting rural teachers to suburban and urban schools by offering them substantial salary increases and better job benefits (Rebore, 2004).

While the research highlighting the attrition rates for FL teachers from a national perspective remains scant, researchers have reported double digital attrition statistics in two southern states. FL teacher attrition in North Carolina (22%) and Georgia (11%) was found to be higher than the rate of attrition for teachers in other content areas (15-18%) (Georgia Professional Standards Commission, 2006; Konanc, 1996). In North Carolina, FL teachers had the highest rate of attrition after the second year (21%), the fifth year (38%), the tenth year (49%), and the fifteenth year (57%) (Konanc, 1996). Further west in Wyoming, Stowers (2004) reported that 10.95% of all FL teachers are non-certified and classified as teaching outside of their areas.

### ***Student Enrollments***

While retirement and attrition certainly begin to explain the teacher shortage, there is evidence that student enrollments play a role. Research indicates that the total number of FL educators is declining while student enrollments in FL classes in public secondary schools are increasing. Draper and Hicks (2002) analyzed student enrollments in modern FL courses (Spanish, French, and German) over a one hundred and ten year period, from 1890 to 2000, and reported that enrollments have increased nationally from 16.3% to 42.5%. Interest in Spanish courses account for a steady climb since 1964. Regrettably, an increase in the number of FL teachers has not been reported to meet this demand. In Montana, one of the many states cited by

the AAEE (2008) as having a shortage of Spanish educators, Nielson (2001) reported that the causes for the shortage were increased enrollments combined with a high number of teacher retirements and FL teacher attrition.

Recent research on immigration into the US suggests that part of the increased enrollment can be explained by illegal immigration. Passel (2005) reported that undocumented workers account for approximately 11 million people in the US. Of this number, about 1.7 million are individuals less than 18 years of age and nearly one-third of these individuals (2.6 million) arrived since 2000. Approximately 57% (6.27 million) came from Mexico and another 24% (2.64 million) are from other countries in Latin America. While the research tends to support the notion that rural communities suffer from decreased student enrollments, some states like Nebraska have reported substantial increased enrollments in public schools (Rural School and Community Trust, 2006). The largest increase has been found to reside in non-traditional immigrant states, particularly in the Southeast. In Georgia, enrollments of Mexican students swelled from 4% in 1990 to a 61% in 2005 in the rural Dalton district alone (Teague, 2007). Georgia has an estimated 300,000 undocumented immigrants, or 3.4% of the state's population. Future projections indicate that the number of school-age children is expected to increase steadily for the foreseeable future (National Center for Education Statistics, 2000).

### ***National and State Policy***

Adding to the aforementioned factors, the *No Child Left Behind* (NCLB, 2001) initiative appears to contribute to the shortage of FL educators as well. NCLB requires all educators in federal core academic areas, which includes FL, to meet the "highly qualified" criteria<sup>1</sup>. This requirement is complex because FL teachers who were once licensed to teach in their respective states may discover they are not highly qualified under the NCLB act at a critical time of a

national FL teacher shortage (Swanson & Moore, 2006). Additionally, NCLB has prioritized instruction in the core areas of science, mathematics, and reading as well as the allocation of resources to these content areas (Rosenbusch, 2005; Rosenbusch & Jensen, 2004).

***Rural schools.***

Rural schools tend to have large concentrations of minority children and rapid ethnic diversification (Jimerson, 2005a) and enrollments have increased by 15%, a total of 1.3 million students (Johnson & Strange, 2007). Between 2003 and 2004 among all regions in the United States, the largest percentage of public school students enrolled in rural schools was found in the South (28%), followed by the Midwest (25%), Northeast (16%), and West (13%) (Provasnik et al., 2007). NCLB (2001) has been shown to complicate teaching in rural schools because it is basically a suburban-urban law (Jimerson, 2005a). Members of the U.S. 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” (U.S. Department of Education, 2004, p. 1).

Several aspects of NCLB (2001) are particularly problematic for rural districts. First, NCLB requires that all schools make adequate yearly progress. That is, test scores in each grade and in each subject must improve year to year. Results are reported as the percentage of students who meet state-defined proficiency targets in each subject and grade level. Student testing in rural schools becomes challenging because these districts tend to cater to small numbers of students. And when those small numbers in any particular grade take exams, subgroup sizes become even smaller. For example, a cohort effect can appear when the scores of a group that contain several students with extraordinary talents in one year’s 4th grade are compared to the

previous year's 4th grade class. Such circumstances can radically skew average scores and make judgments unreliable (Jimerson, 2005b).

A second notable problem for rural school districts under NCLB (2001) is attracting highly qualified teachers, who many times are required to teach more than one academic subject. Researchers conducted a nationwide survey of rural school superintendents and suggested that three main factors can be associated with the difficulties of hiring and retaining teachers in rural areas: social, geographic isolation, and low salaries (Schwartzbeck et al., 2003). Johnson and Strange (2009) maintain that recruiting and retaining high quality teachers in rural schools is inextricably tied to teacher salaries. That is, it is more difficult to recruit and retain high quality teachers when a school district cannot offer a competitive salary. Among the areas where teachers encounter the lowest salary expenditures is the southeastern part of the United States. Furthermore, even if districts are successful in hiring such individuals, research indicates that these teachers have less access to professional development opportunities and more multiple extracurricular duties, which can have serious consequences for teacher quality as well as teacher retention (Jimerson, 2005a; North Central Regional Educational Laboratory, 2003).

However, near the beginning of 2004, the federal government modified the law and allowed teachers in eligible rural districts, who are highly qualified in at least one subject area, an additional three years to become highly qualified in the other subjects they teach (Rural School and Community Trust, 2004). Unfortunately, some find the definition of those rural schools too narrow and many of the poor rural schools in the southern part of the United States do not qualify because they are a part of centralized, countywide school districts. To qualify,

a school district must either have fewer than 600 students in Average Daily

Attendance or be located in a county with fewer than 10 people per square mile.

Also, all schools in the district must be located in communities with fewer than 2,500 residents (p. 2).

Regrettably, the flexibility rules effectively exclude about 75% of the nation's rural and small-town schools and show racial, regional, and poverty bias by excluding some of the highest need rural schools in the country (Rural School and Community Trust, 2004).

However, the federal government is not solely responsible for legislation that contributes to the shortage. State legislatures and policymakers have contributed to the increased need for more FL teachers. In 1999, the Wyoming Legislature passed the Wyoming School Improvement law that states: "Not later than the 2002-3 school year, all school districts shall provide instruction in foreign language to all students in kindergarten through grade two in accordance with standards promulgated by the state board of education" [*sic*] (School Improvement Act, 1999, p. 3). Later, Wyoming House Bill 0170 extended the 1999 legislation to include grades 3-6. This new legislation requires elementary educators to teach an additional subject in an area for which many are not certified (Swanson & Moore, 2006).

### ***Perceptions of Teaching***

Lastly, teaching has been described for years as a dead-end job with a perceived low status, low salaries, a lack of control over how schools are run, many 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). For future educators, this undignified description can serve to discourage adolescents and career changers from investigating and pursuing a career in teaching any subject, including FL. The same appears to be true for novice in-service educators because many times these individuals are assigned the most challenging duties with little to no professional support. These individuals tend to have few successes and a

sense of failure drives them out of the classroom (Ladson-Billings, 2001). For rural districts, the perceptual problems appear more pronounced. Schwartzbeck, Redfield, Morris, and Hammer (2003) reported that the perception of low salaries, social isolation, and geographic isolation made it extremely difficult to attract and retain teachers in rural schools. Taken collectively these five factors clearly help explain the shortage of FL educators. Noting the five reasons people leave the teaching profession, it seems conceivable that one additional factor can play a serious role.

### **Conceptual Framework**

Efficacy is defined as an individual's belief or conviction that he or she can influence how well students learn, even those who may be difficult or unmotivated (Guskey & Passaro, 1994). It influences the personal decision to remain working in the classroom or not. Self-efficacy is grounded in the theoretical framework of social cognitive theory, underscoring the notion of human agency, that is, that people can exercise some influence over what they do (Bandura, 2006). According to this theory, people are self-reflecting, self-regulating, self-organizing, and proactive. People set goals, predict likely outcomes, monitor and regulate actions, and then reflect on their personal efficacy. From this perspective, self-efficacy affects people's goals and behaviors, and it is influenced by environmental factors. Furthermore, efficacy beliefs determine how environmental impediments and opportunities are perceived and affect choice of activities, how much effort is exerted, and how long people will persist when confronted with obstacles (Bandura, 2006).

Perception of self-efficacy affects expectations of failure or success as well as an individual's personal motivation and goal setting. Researchers hypothesize that individuals who have a high sense of efficacy in any given area tend to set higher goals, fear failure less, and

persevere longer in the face of obstacles. On the other hand, individuals possessing a low sense of efficacy may avoid the task altogether or give up easily when difficulties arise (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998). Additionally, efficacy beliefs can determine how much effort people 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). Theory predicts that educators 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 et al., 1998).

In the case of FL teachers, Chacón (2005) postulated that if educators' perceived efficacy in the four skills (i.e., reading, writing, speaking, and listening) in the target language is high, they may be more likely to engage students in mastery experiences that lead to increased communication in the target language. On the other hand, a lower perception of efficacy in teaching FLs might possibly lead teachers to exert less effort when motivating students to learn about an FL and to value FL learning. Subsequently, as these individuals start 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 & Tomic, 2000).

When pre-service educators leave initial teacher certification programs and accept employment, they experience a professional jolt. Such shocks to the system are centered on a conflict between new teacher beliefs and values and the reality of teaching when beginning teachers are being socialized into the culture of the employing school (Flores & 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 in a negative environment (Smethem, 2007). Therefore, it seems imperative to explore the role of efficacy as it relates to attrition because teachers with higher senses of efficacy are more likely to remain in teaching (Burley, Hall, Villeme, & Brockmeier, 1991) whereas teachers with significantly lower scores on measures of self-efficacy are more inclined to leave the profession (Glickman & Tamashiro, 1982). Thus, the following research questions guided this study:

1. What is the perceived level of efficacy among rural FL educators in Georgia?
2. What is the identity of the FL teachers planning to leave the profession in terms of self-efficacy and the demographic data?

### **Methods**

In the following section, the researchers describe the design of a new measure to gauge FL teachers' sense of efficacy specifically, including the use of more extensive rating scale typically used to measure efficacy. Afterwards, the authors discuss the construct validity of the new instrument. The section concludes with a description of the data collection procedures, the study's participants, and the initial data analysis.

#### ***Instrument Development***

Given that "among the components of content knowledge, none is more important to FL teaching than language proficiency" (Lafayette, 1993, p. 135), the Foreign Language Teacher Efficacy Scale (FLTES) was created to measure FL teachers' sense of efficacy in general terms. In an effort not to focus on the minutia of FL teacher instruction, four of the survey items were based on teachers' perceived abilities using The American Council on the Teaching of Foreign Languages concept of the Three Modes of Communication (Interpersonal, Interpretive, and Presentational) in the target language (National Standards in Foreign Language Education

Project, 1999). Formerly conceptualized as the Four Skills (reading, writing, listening, and speaking), the Three Modes of Communication are three parts of the single goal of communication rather than any one skill in isolation.

However, survey items specifically designed to measure the teaching of culture were not included because research indicates, and the authors agree, that culture is imbedded in instruction. Kramersch (1993) states that culture in language learning is not an expendable fifth skill, attached to the teaching of speaking, listening, reading, and writing. Culture is always in the background, from the first day of instruction, ready to unsettle the good language learners when they expect it least, making evident the limitations of their hard-won communicative competence, challenging their ability to make sense of the world around them. Echoing these thoughts, Thanasoulas (2001) reminds us that language teaching is culture teaching and someone involved in teaching language is also involved in teaching culture at the same time.

Additionally, survey items were added that addressed helping students learn at beginning and at advanced levels as well as reducing student anxiety, fostering interest in learning FLs, and increasing student achievement and motivation. The instrument contained 10 items that were used to measure efficacy teaching languages. Four additional items to measure overall confidence teaching languages, perceived support from administrators, perceived support from students, and perceived support from parents/guardians were added afterwards. In order to ensure construct validity, Tschannen-Moran and Woolfolk Hoy's (2001) 12-item scale, the Teacher Sense of Efficacy Scale (TSES) was used alongside the FLTES because this instrument is known for its robust validity and reliability. The TSES scales was validated against other well-known measures of teaching efficacy, the Gibson and Dembo Teacher Efficacy Scale (Gibson & Dembo, 1984) and the Rand measures (Rotter, 1966). In fact, the Gibson and Dembo instrument

has been “the most popular of the teacher efficacy instruments to date” (Tschannen-Moran & Woolfolk Hoy, 2001, p. 789).

In order to focus on the discrete measurement of teacher efficacy, the researchers followed recommendations found in the literature to use a rating scale that ranges from 0 to 100 (Pajares, Miller, & Johnson, 1999; Shell, Murphy, & Bruning, 1989). Social-cognitive researchers argue 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 guidelines (1997) for instrument construction. Thus, participants were requested to rate confidence on survey questions using a scale from 0 (cannot do at all) to 100 (highly certain can do) and give information regarding age, gender, ethnicity, highest educational level attained, language(s) taught, years of teaching, having studied abroad, if enrolled in a degree program for certification, type of teaching certificate held, and their future vocational plans. The final question on the survey solicited participant comments regarding the study.

### ***Examining Construct Validity***

The researchers conducted an exploratory factor analysis procedure<sup>ii</sup> to identify the latent constructs underlying the items on the FLTES following factor analysis guidelines recommended by Fabrigar, Wegener, MacCallum, and Strahan (1999) to investigate the construct validity of the FLTES. Following recommendations found in the literature (Henson & Roberts, 2001; Thompson & Daniel, 1996), the researchers used multiple criteria for selecting the number of factors: (1) Cattell's (1966) scree test, (2) Kaiser's (1960) rule for Eigenvalues greater than one, (3) parallel analysis (Horn, 1965; Turner, 1998), (4) the percentage of common variance explained by each factor using the weighted reduced correlation matrix, and (5) the interpretability of the rotated factors. Parallel analysis was chosen because “it has been shown to

be among the most accurate methods for determining the number of factors to retain (Zwick & Velicer, 1986) and generally superior to the scree plot and Eigenvalue greater than one rule” (Henson, 2001a, p. 14).

The authors submitted the data to principal axis factor analysis with a Direct Oblimin oblique rotation because items were assumed to be related. Factor analysis of the TSES items indicated that three factors with Eigenvalues greater than one were present, accounting for 74.33% of the total variance. Eigenvalues for the subsequent factors ranged from 0.13 to 0.70. The three factors were those identified by Tschannen-Moran and Woolfolk Hoy (2001). The first factor (Classroom Management) accounted for 51.95% of the variance while the student engagement and instructional strategy factors accounted for 11.75% and 10.63% of the total variance respectively. The overall commonalities for the three factors ranged from .58 to .81 (Classroom Management, .76-.79 Student Engagement, .58-.80; and Instructional Strategy, .64-.64). In order to follow suggestions found in the literature about interpretation of the factors (Graham, Guthrie, & Thompson, 2003), both factor pattern and factor structure coefficients were interpreted. Inspection of the matrices confirmed that the three factors were present and that each survey item loaded on only one of the three factors.

A second factor analysis was conducted next on the FLTES items only and two factors emerged with Eigenvalues greater than one, accounting for 68.01% of the variance. The remaining factors had Eigenvalues from 0.14 to 0.79. Here, 45.02% of the variance was explained by the Teacher as Facilitator factor and 22.99% of the variance was explained by the Content Knowledge factor. Overall commonalities for these two factors ranged from .35 to .73 for the Teacher as Facilitator factor and from .68 to .82 for the Content Knowledge factor. Again

each of the items loaded cleanly on one of the two factors when examining both the structure and pattern matrices.

Once the factors were identified, the researchers conducted correlation analysis<sup>iii</sup> and found positive coefficients ranging from .60 to .63 indicating that the three subscales were intercorrelated. Further, the three subscales were highly correlated with the instrument itself ( $r = .81$  to  $.89$ ). These results were similar to those reported by Tschannen-Moran and Woolfolk Hoy (2001), which support their earlier findings.

Next, to examine the construct validity of the FLTES, the researchers conducted correlation analysis (see Table 1) between the FLTES and the TSES and found a positive relationship ( $r = .67, p < .001$ ), which suggests that not only did the FLTES measure the construct of teacher efficacy; it also measured a different aspect of teacher efficacy not assessed by the TSES.

Table 1

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*Zero-order correlations for the Teachers' Sense of Efficacy Scale, The FL Teacher Efficacy Scale, and their subscales.*

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	Instructional Strategy	Classroom Management	Student Engagement	TSES	FL Teacher Content Knowledge	FL Teacher as Facilitator
Classroom Management	.60	-	-	-	-	-

Student Engagement	.63	.61	-	-	-	-
TSES	.83	.87	.87	-	-	-
FL Teacher Content Knowledge	.40	.20	.29	.35	-	-
FL Teacher as Facilitator	.91	.56	.64	.75	.43	-
FLTES	.81	.49	.57	.68	.80	.88

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All correlations significant at  $p < .001$

Afterwards, the researchers conducted correlation analysis between the subscales of the two instruments and the FL Teacher as Facilitator subscale was more related to the Tschannen-Moran and Woolfolk Hoy instrument than the Foreign Language Teacher Content Knowledge subscale. Statistically significant correlations were found between the Foreign Language Teacher Content Knowledge subscale measuring the four skills (reading, writing, listening, and speaking) and the three TSES dimensions (ranging from  $r = .40$  to  $.81$ ,  $p < .001$ ) with the highest coefficient between the dimensions of Instructional Strategy and Foreign Language Teacher as Facilitator.

Next, the researchers correlated data from the two subscales of the FLTES and found the two moderately correlated, suggesting that the two factors were measuring two different aspects of FL teacher efficacy. Finally, reliability coefficients were computed and satisfactory Cronbach

alphas for both the Foreign Language Teacher as Facilitator subscale (.90) and Foreign Language Teacher Content Knowledge subscale (.93) were found. Research indicates that alpha values above .80 are acceptable for research purposes, whereas values above .90 are preferred if scores are to be used for clinical or educational decisions (Henson, 2001b).

### ***Data Collection Procedure and Sample***

After receiving Institutional Review Board approval for human subjects testing and school district permission to conduct a quantitative research study in the spring of 2008, the survey instruments were placed online. Then, using an equal probability sampling technique to gather participants for the study, the researchers searched the school district web pages of Georgia's 109 rural counties for email addresses for each FL teacher. In this case, rural school districts are defined as counties that have a population of "35,000 people or less or as defined by the state legislature" (State of Georgia Government, 2010, p. 1). Six hundred and eleven email addresses were found. Then, the researchers sent an email to the teachers requesting participation in the present study and a link to the survey was embedded in the email.

One hundred sixty-seven FL teachers volunteered to participate in this study accounting for a rate of return of 27%. Their average age was 40.62 years ( $SD = 11.44$ ) and 53% of the participants reported being in their first 10 years of teaching FLs. One reported having taught languages for 39 years. Females (82%) outnumbered males and the majority reported to be Caucasian (71%) followed by Latino (21%), African American (2%), Asian (1%), and 5% reported to be multiracial. Forty 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 (5%). Over three quarters of the sample reported teaching either Spanish (59%) or French (17%) and 19 participants reported teaching at least two different languages last year. Sixty-eight percent of the

sample reported having studied FLs outside of the United States. All of the participants in the study held clear renewable teaching certificates<sup>iv</sup>.

**Data Analysis**

The data were copied from the online database and copied in to a statistical software program (*SPSS 17.0*). The researchers began by first calculating reliability coefficients for both the TSES (.91) and the FLTES (.86). Both instruments were found to have satisfactory consistency. The reliability coefficient for the Tschannen-Moran and Woolfolk Hoy instrument was the same as reported by the authors.

Findings

To answer the first research question regarding the level of perceived efficacy of rural FL educators in Georgia, the researchers analyzed each item by calculating means and standard deviations for the FLTES, the TSES, and the Perceptions of Support from various entities. Afterwards, differences in efficacy among the participants were examined.

Table 2 reflects the mean confidence rating for each survey item and the range for all items measuring FL teaching efficacy were from 87.21 to 93.82.

Table 2

*Means and Standard Deviations for Survey Items by Survey*

	Sample		Females		Males	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Foreign Language Teacher Efficacy Scale						
How much confidence do you have in your . . .						
ability to write a personal letter to a pen pal in the language(s) you teach who is living in a foreign country? [CK]	93.82	10.56	94.15	9.06	95.71	10.15

ability to help students learn at the first year level of the language(s) you teach? [TF]	93.33	7.81	92.57	8.03	94.57	10.07
ability to read and understand a newspaper printed in another country in the language(s) you teach? [CK]	93.01	10.59	92.14	11.22	95.71	10.02
ability to have a conversation with a native speaker in the language(s) you teach? [CK]	90.18	14.38	91.42	11.12	93.46	13.82
ability to help students learn at highest levels of the language(s) you teach? [TF]	89.06	12.64	88.77	14.26	93.39	6.96
ability to fully understand a movie that only uses the language(s) you teach? [CK]	89.04	13.99	88.57	9.87	91.21	14.41
own knowledge of the language(s) you teach that you can lower your students' anxiety about learning the language(s) you teach. [TF]	88.76	10.01	88.42	11.06	90.48	12.20
own knowledge of the language(s) you teach that you can increase student achievement in your classes? [TF]	88.00	10.38	88.07	11.36	91.15	7.84
own knowledge of the language(s) you teach that you can foster your students' interest about learning the language(s) you teach. [TF]	87.78	11.17	87.46	13.96	89.30	11.08
own knowledge of the language(s) you teach that you can motivate your students to learn about the language(s) you teach. [TF]	87.21	12.39	87.03	10.96	89.69	14.43

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Teachers' Sense of Efficacy Scale	Sample		Females		Males	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
How confident are you that you can . . .						
provide an alternative explanation or example when students are confused? [IS]	91.58	8.64	91.10	8.88	91.69	10.35
use a variety of assessment strategies? [IS]	88.75	11.80	88.45	12.36	90.71	11.47
craft good questions for your students? [IS]	86.63	12.06	86.67	11.71	89.90	11.10
implement alternative strategies in your classroom? [IS]	86.47	13.35	85.75	14.03	87.42	11.79
establish a classroom management system with each group of students?[CM]	86.37	12.45	86.15	12.31	88.84	13.89
get children to follow classroom rules? [CM]	85.81	12.75	86.42	10.77	85.93	12.41
control disruptive behavior in the classroom? [CM]	83.67	15.24	83.05	14.46	90.27	12.01
calm a student who is disruptive or noisy? [CM]	83.27	12.50	83.05	11.36	87.12	13.89
get students to believe they can do well on school work? [SE]	82.79	14.45	82.50	14.06	83.18	14.35
help your students value learning? [SE]	81.59	13.78	81.21	13.31	81.90	16.08
assist families in helping their children do well in school? [SE]	81.01	16.10	81.70	14.32	80.96	21.07
can motivate students who show low interest in school work? [SE]	75.77	15.47	75.24	14.78	79.09	18.04
Perceptions of confidence and support						
What is your perceived confidence to use the language(s) you teach?	91.23	11.03	90.78	11.30	95.33	9.14
Rate the level of support you feel you receive from your students.	84.99	12.14	84.21	12.21	83.87	12.21

Rate the level of support you feel you receive from your administrator(s).	80.70	19.34	75.54	20.04	83.33	17.55
Rate the level of support you feel you receive from your students' parents/guardians.	76.52	20.01	76.75	18.26	80.15	20.66

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CK = Content Knowledge. TF = Teacher as Facilitator. IS = Instructional Strategy. CM = Classroom Management. SE = Student Engagement.

Overall, the sample felt rather confident teaching languages ( $M = 91.23$ ), especially in the areas of writing ( $M = 93.82$ ) and reading ( $M = 93.01$ ) in the target language. While the entire group felt highly confident in their ability to read, write, speak, and listen in the target language, they felt less confident motivating students to learn about the language(s) being taught. In fact, the four skills were found in the top six items on the FLTES and male participants expressed more perceived confidence on every item of the FLTES. Additionally, those with graduate degrees felt more efficacious on every item of the two scales.

Data analysis of the TSES items indicated that the sample felt most efficacious for the items that measured Instructional Strategy (means ranging from 86.47 to 91.58) followed by Classroom Management (means ranging from 83.27 to 86.37). The lowest perceived confidence was found in the area of Student Engagement (means ranging from 75.77 to 82.79). Next, the researchers investigated the sample's feelings of support from students, administrators, and parents/guardians. Males felt the most support from all three entities. The same was true for those who reported having a graduate degree.

### ***Group Differences***

Noting that mean differences in perceived efficacy between the two genders and for those who had earned graduate degrees were discovered, analyses of variance<sup>v</sup> (ANOVA) were conducted to evaluate the relationship between the other independent variables and the items

from the FLTES and the TSES. No significant differences of efficacy were found for the variables of study abroad, highest level of degree attained, and future vocational plans. However, statistically significant differences were found for two items of the FLTES for gender. The ANOVAs indicated that males had more confidence helping students to learn at the highest level of language,  $F(1, 162) = 4.48, p < .05, \eta^2 = .02$ , and more perceived confidence to use the language they teach,  $F(1, 162) = 4.92, p < .01, \eta^2 = .02$ .

### ***The Identity of Teachers Leaving the Profession***

To answer the second research question about the identity of the FL teachers planning to leave the profession in terms of self-efficacy and the demographic data, the authors began by computing frequencies to see how many FL teachers planned to remain in the classroom the next year and how many planned to leave the profession. Eleven teachers stated that they planned to leave the profession at the end of the academic year. Nine of these individuals reported having a clear renewable teaching certificate. One was going to retire after 30 years of teaching and ten stated that they were going to quit teaching. Of those ten stating that they intended to quit the teaching profession, all were female Spanish teachers with two-thirds (67%) of them between the ages of 24 and 27, holding only a bachelor's degree, and in their first five years of teaching.

In order to investigate differences in perceived efficacy between teachers who stated that they were going to remain in the profession and those who reported to be quitting teaching, the researchers conducted an ANOVA. While the efficacy tended to be lower on all items for the people leaving teaching than those remaining, there were not any statistically significant differences between the two groups. Such a finding can be attributed to such a small group of individuals intending to leave the profession.

### ***Qualitative Comments***

The final question of the survey requested participant comments. The researchers followed Patton's (1990) suggestion whereby "the first decision to be made in analyzing interviews is whether to begin with case analysis or cross-case analysis" (p. 376). The authors began with cross-case analysis of the interviews, using a modified version of the "constant comparative analysis" (Glasser & Strauss, 1967) to group answers and make connections to common questions. Data analysis of the comments from 24 participants revealed themes of low pay, lack of support from parents, administrators, and the government, feelings of excessive work, and concern about too many "false beginners" in introductory level Spanish courses.

Feelings of earning low salaries were expressed by the majority of the commenters. Males chose to comment on this issue more than females. Yet, collectively, participants expressed feelings of professional depreciation by administrators and colleagues in the "tested areas". A 37 year-old male veteran Spanish teacher stated, "I have two graduate degrees, I'm fluent in two languages, and because I'm a not math or language arts teacher, I don't seem to matter." Similar feelings were expressed from a 53 year-old male who mentioned that FL teaching is relegated to an inferior position "by people who should know better."

Along similar lines, several participants (all women) cited a serious lack of support from various entities. Three veteran female teachers stated that they felt they were the only ones who care about the students' success in the classroom. One stated that she was trying different methods to get students to value learning but she felt the "students and parents just don't care so why should I?" Another noted that she feels a lack of support for FL instruction from both the state and federal government. This 47 year-old French teacher expressed doubt about the future of FL programs in light of the current high stakes testing environment created by NCLB by

stating, “[W]ith the entire focus on how students do on the CRCT [state exams], language programs are going to disappear.”

The third theme, feelings of excessive work, was substantiated by several individuals commenting that they are teaching several different subjects and that the time it takes to plan, teach, and grade all of the [student] work is exhausting. One 25 year-old female remarked that after three years of teaching, she was wondering if she was in the correct environment (occupationally). She stated that her plan was to continue teaching but at a different school because she can teach Spanish all day instead of having to split her day between Spanish and English literature. Another participant in her late twenties, who stated that she was going to quit teaching, mentioned that she was “overwhelmed with the number of native speakers” in her Spanish classes. She felt that they (the native speakers) did not need to be in her lower level courses. Instead of having a couple of different levels of Spanish to plan for, she had to have two lesson plans running concurrently in the same hour to accommodate the native speakers who need to learn English and the others who want to learn Spanish [as a FL].

However, from a more positive perspective, several participants expressed vocational satisfaction and one female noted that any relatively low perception of efficacy in an area would improve with time. This 35 year-old career changer mentioned that “doing anything well takes time” and she felt that by working on her master’s degree, her teaching would continue to improve.

### **Discussion and Implications**

The purpose of this study was to measure the perceived level of efficacy teaching FLs among rural FL educators in Georgia and to identify and examine FL teachers planning to leave the profession in terms of self-efficacy and the demographic data. Data analysis indicated that

the FLTES appears to be psychometrically sound. Factor analysis of the FLTES indicated the presence of two distinct factors of FL teaching with strong structure and pattern coefficients.

Data analysis of the TSES reflected similar reliability and correlation coefficients as reported by Tschannen-Moran and Woolfolk Hoy (2001), giving support to their findings. Positive correlation coefficients between the FLTES and the TSES suggest that the FLTES has satisfactory construct validity, and equally important, that the FLTES appeared to measure a different aspect of teaching efficacy, FL teaching efficacy specifically.

Overall, the participants reported high levels of efficacy and interesting differences were revealed. Statistically significant gender differences were discovered where males expressed higher levels of confidence teaching at the highest levels of FL instruction and perceived confidence in using the language. While results from this study cannot identify the reasons males felt more efficacious in these two areas, the differences have implications for professional development. The FLTES could be used by FL departments and program coordinators to identify FL teachers with a strong sense of confidence teaching languages at levels three and above. Once identified, these teachers could be encouraged to conduct seminars for those who feel less efficacious. Seminar instructors could offer examples of successful strategies to teach languages at the advanced levels and offer suggestions to improve linguistic confidence.

Conceptually, teacher efficacy is cyclical in nature. That is, demonstrated proficiency during a performance creates a new mastery experience, which in turn provides new information that shapes further efficacy beliefs. Enhanced efficacy leads to greater effort and persistence, which in turn lead to better performance, which leads to greater efficacy. Conversely, lower efficacy leads to less effort and the tendency to quit easily, which leads to poor teaching outcomes, which produce decreased feelings of efficacy (Tschannen-Moran et al., 1998).

Findings from this research bolster Chacón's (2005) notion that a decrease in perceived efficacy may lead to teachers exerting less effort when motivating students to learn about an FL and to value FL learning because data analysis revealed positive correlations between the Content Knowledge factor and the student engagement factor.

Additionally, these findings offer credibility to the assertion that while it is critical for FL teachers to develop strong proficiency in the target language, these individuals also need strategies to help with classroom management and student engagement, the two lowest areas of perceived efficacy for the sample on the TSES. Perhaps teacher preparation programs need to focus on both the linguistic strength and facilitation of instructional practices of their teacher candidates. Additionally, teachers in rural districts may need specific guidance and strategies to motivate students to learn a second language while living in a more homogeneous cultural setting. However, it is important to note that the ANOVA did not indicate any statistically significant differences in perceived efficacy between those who were going to continue teaching and those who stated they were going to quit, which warrants more investigation in this area.

Nevertheless, an even stronger relationship was found for the same three factors (instructional strategy, classroom management, and student engagement) and the Foreign Language Teacher as Facilitator dimension which suggests that teaching FLs is more than just strength in content knowledge. The effects of NCLB (2001) have been damaging to rural FL instruction (Jimerson, 2005a; North Central Regional Educational Laboratory, 2003) and new educational reform efforts need to focus on specific issues faced by rural districts instead of the current one size fits all model. The results indicate that the participants felt rather efficacious in their content areas but less efficacious in the area of facilitating instruction. While national educational policy needs to be seriously addressed by the new administration, teacher education

programs working with candidates who will work in rural areas need to place increased emphasis on facilitating instruction. Such emphasis is particularly needed in the area of student engagement because teachers felt the least amount of efficacy on those certain four items of the TSES that measure student engagement specifically. The literature is clear that teachers who feel less efficacious motivating and helping students to value learning are more apt to leave the teaching profession, which is a serious issue at this time of critical shortage of FL teachers.

The data also help support earlier findings about those who leave the profession in the first few years of teaching (Ladson-Billings, 2001; National Commission on Teaching and America's Future, 2002) because the majority of the individuals in the present study who indicated that they were quitting the profession were in their first five years of teaching. Additionally, findings reported here bolster earlier research that links rural teacher attrition to low salaries, teachers' feelings of lack of support from parents, administrators, and governing bodies, teaching multiple subjects throughout the day, and certain aspects of NCLB. Additionally, findings from the present study offer new information about rural FL teachers specifically.

Each of the ten who reported that they were going to quit teaching was a novice female educator. Even though there were only ten educators in the sample who stated they were going to leave teaching, it is important to remember that these individuals represent 6% of the sample, which is significant for two reasons. First, such findings are important because they help focus attention from a rural Georgia perspective when looking at the 11% rate of attrition reported by the Georgia Professional Standards Commission (2006). Second, and possibly even more important, if each of the ten teachers who stated she would be leaving at the end of the school

year had an average of 20 students per Spanish class and taught six classes per day, 1,200 students would be affected by such attrition.

Such findings clearly warrant further study in this area to help clarify any differences between those educators who decide to remain or to leave the profession. Additional research is required specifically focusing on the number of false beginners in the classroom; how those individuals affect language teachers' efficacy perceptions, and the difficulty of encouraging students to value learning. Such research could include participants from other areas, such as North Carolina, that have higher rates of attrition than Georgia in order to discover other factors associated with high attrition rates.

While findings from this study indicate that the FLTES appears to be a psychometrically sound instrument to measure FL teachers' sense of efficacy, this study does have its limitations. Data were self-reported and were collected near the end of the school year. A limitation of self-reported data is that researchers have no way of verifying the accuracy of the respondents' answers to the survey. Thus, observing rural FL teachers in their classrooms may help improve the accuracy between an individual's perception of his/her teaching expertise and his/her observed teaching performance. Such contact with educators could lead to a deeper understanding of the comments too. Despite the limitations of this study, questions still remain. It would be informative to know why women appear more likely to leave the teaching of languages in rural districts and what aspects of teaching languages are the most difficult for novices to manage. Additionally, it would be important to know what chain of events takes place as rural FL teachers begin to contemplate leaving the profession after taking so much time and effort becoming certified. The shortage of FL teachers is a serious issue and more research is needed to understand the plight of rural educators at this time of critical need.

The teacher shortage continues in spite of the lack of consensus about the contributive factors associated with the problem. It is apparent that the shortage will not be solved by simply stating that a dilemma exists. Instead of waiting and hoping that prospective efficacious educators will enter in the teaching profession and choose to work in rural schools, it is time for research emphasis to be placed on building and maintaining teachers' sense of efficacy teaching languages. Additional effort needs to be expended on finding serious remedies to prevent in-service rural FL educators from leaving the profession and improving lines of communication with educational stakeholders to embrace FL learning for all students.

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<sup>i</sup> To be considered highly qualified, teachers must have: (1) a bachelor's degree, (2) full state certification or licensure, and (3) prove that they know each subject they teach (US Department of Education, 2004).

<sup>ii</sup> A statistical procedure that reduces a large number of questions in a topic area to a smaller number of basic factors.

<sup>iii</sup> Correlation coefficients or (*r*) range from -1.0 (an inverse relationship) to +1.0 (a perfect relationship).

<sup>iv</sup> To have a clear renewable teaching certificate in the State of Georgia, FL teachers must demonstrate at least Advanced Low language proficiency based on ACTFL's Oral Proficiency Guidelines.

<sup>v</sup> A statistical method that makes simultaneous comparisons between two or more means to verify if a significant relationship exists between variables being tested.