Language Study Matters for Classroom Teachers in Diverse Schools

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Abstract

In this study, we explored dimensions of a teacher’s experience with formal language study, time spent abroad, and levels of bilingualism as factors that relate to their personal teaching efficacy beliefs using a purposeful sample of teachers from North and South Carolina working with English Language Learners in the mainstream classroom. Our statistical results from independent sample t-tests and Analysis of Variance (ANOVA) support the need for all educators working in diverse classrooms to commit to long-term formal foreign language study.

Key Terms: English Language Learner, Teacher Efficacy, Bilingualism, Multicultural Experiences

In the context of teaching, efficacy is a teacher’s expectation that he or she can affect student learning and it can greatly influence thoughts and feelings, kinds of activities that are chosen, amounts of effort that are exerted, and levels of persistence when faced with challenges or obstacles (Bandura, 1997; Ross, 1995; Tschannen-Moran, Woolfolk, & Hoy, 1998). Ultimately, researchers know that teachers who have more confidence in their abilities engage in more positive behaviors (Ashton & Webb, 1986; Ross & Smith, 1992; Brookhart & Loadman, 1993). Research studies about motivation also suggest that strong efficacy beliefs and high motivation in both teachers and students are related (Anderson, Greene, & Loewen, 1988; Midgley, Feldlaufer, & Eccles, 1989; Woolfok, Rossof, & Hoy, 1990). Researchers have also found relationships between teacher efficacy and the implementation of innovation (Ghaith & Yaghi, 1997; Guskey, 1988; Smylie, 1988). Understanding teachers’ efficacy beliefs has been one way to understand teacher practices. In other words, how a teacher feels about his/her abilities to affect student learning can influence what he or she does in the classroom. Although there are over thirty years of empirical research on teacher efficacy, this construct remains elusive to researchers and continues to be worthy of exploration. In fact, while we know much about teacher efficacy and its relationship to variables such as student achievement, teacher practice, and instructional innovation (Ghaith & Yaghi, 1997; Anderson, Greene, & Loewen, 1988; Guskey, 1988; Midgley, Feldlaufer, & Eccles, 1989; Woolfok, Rossof, & Hoy, 1990; Smylie, 1988), we understand less about what factors influence efficacy beliefs, particularly in the increasingly diverse classroom.

Given the increasing numbers of families from diverse cultural and linguistic backgrounds who have entered the country in the past ten years, teachers have been greatly challenged by immigrant students who are learning English as their second, third, or sometimes fourth language (NCES, 1999; Nieto, 2004). Currently, native Spanish speaking students make up the majority of English Language Learners (ELLs) in the U.S. In terms of race, ethnicity, and poverty levels, they are the most segregated ethnic group (Nieto, 2005). These students often enter schools and classrooms with teachers who feel under-prepared to meet their complex needs (NCES, 1999). As the number of immigrant students continues to increase, educational researchers continue to explore the factors that might influence their educational success. Research on teachers working in urban settings shows that their ability to successfully meet the needs of students who are ethnically, culturally, and linguistically diverse is dependent upon their attitudes and prior experiences with diverse cultures as well as their level and effectiveness of teacher education training (Byrnes & Kiger,
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We believe that the presence of culturally and linguistically diverse students challenges teachers who may have high efficacy beliefs when working with homogeneous groups of students. Examining the relationship between prior experiences, as related to the study of foreign languages and multicultural experiences, and teacher efficacy can inform teacher preparation programs as well as K-12 curriculum. The purpose of this study was to explore relationships between efficacy beliefs of teachers working in multicultural classrooms and their experiences with foreign language learning and interactions with diverse cultural groups.

Method

We present data from a survey of teachers working with English Language Learners (ELLs). Efficacy responses and background experiences abroad and with foreign language study at the elementary, middle, high, and university levels were analyzed and compared.

Participants

All teachers (N=252) working toward an add-on licensure in English as a Second Language (ESL) at a large university in the southeastern region of the United States were mailed surveys. Of the research packets that were mailed, 157 (62.3%) were returned but 19 were eliminated because they were incomplete. The teachers (N=138) included in this study were predominantly White (90.6%) and female (92%). Only 8% (n=11) were male and 3.6% (n=5) were African-American and Hispanic, respectively. Most of the participants (57.2%) reported having only Bachelor’s degrees, but many had Master’s degrees (40.6%) and a few had Doctorate degrees (2.2%). Almost three-quarters of the participants (71.7%) were teaching in elementary schools and 26.8% were middle or secondary school teachers.

Data Sources

In addition personal and professional characteristics, the participants provided information about their background experiences, including the number of years spent studying a foreign language in elementary or middle school (FEM), the number of years spent studying a foreign language in high school (FH), the number of years spent studying a foreign language in college or graduate school (FCG), the number of languages spoken fluently other than English (FL), and the number of times traveled abroad (TRAVEL). Responses to a modified version of the Teacher Efficacy Scale (Gibson & Dembo, 1984) provided information about teacher self-efficacy (see Appendix). The change included inserting the word “LEP” before the word “student” in the original scale. Teachers responded using a Likert-type scale that included “strongly disagree,” “disagree,” “moderately disagree,” “moderately agree,” “agree,” and “strongly agree.” These responses were converted to numeral data using a 1-6 scale anchored with “1” indicating “strongly disagree” and “6” indicating “strongly agree.” Gibson and Dembo’s (1984) original scale consists of sixteen items with two dimensions (personal teaching efficacy and general teaching efficacy) of teacher efficacy that account for 28.8% of the total variance. The reliability coefficient (Cronbach alpha) is .79 for the sixteen items and .78 and .75 for personal and general teaching efficacy, respectively.

Although Gibson and Dembo’s (1984) 16-item teacher self-efficacy scale was the most widely used, factor loadings on the original sixteen items have not always been consistent across studies (Deemer & Minke, 2001). Therefore, we conducted a principal component factor analysis with varimax rotation for explorative purposes. Our data suggested four factors accounted for 60.54% of the variance. Personal Teaching Efficacy (PTE) accounted for 34.62% of the variance,
General Teaching Efficacy (GTE) accounted for 11.79% of the variance, and the other two factors accounted for 14.12% of the variance. The third factor focused on teachers’ attitudes toward the impact of students’ family background on their learning and the fourth factor reflected teachers’ beliefs about their competence to overcome challenging students’ family backgrounds. Factor one (PTE) consisted of items 1, 3, 5, 8, and 16; Factor two (GTE) consisted of items 7, 10, 12, and 14; Factor three consisted of items 9, 11, 13, and 15; and Factor four consisted of items 2, 4, and 6.

Confirmatory factor analyses (CFA) further defined the four-factor model: RMSEA = .06, GFI = .88, AGFI = .84, NFI = .91, NNFI = .95, CFI = .96, and standardized RMR = .07 (Wang & Quach, in review). The test yielded a chi-square value of 165.20 and with a degree of freedom of 98, which suggests that the hypothesized model is not entirely adequate. Nevertheless, finding a well-fitting model for which the $\chi^2$ value approximates the degrees of freedom is quite unrealistic in most empirical research (Byrne, 1998).

Root Mean Square Error of Approximation (RMSEA) is a goodness-of-fit statistic recognized as one of the most informative criteria (Byrne, 1998). MacCallum, Browne, and Sugawara (1996) posited that RMSEA values less than .05 indicate a good fit, values from .08 to .10 indicate a mediocre fit, and values greater than .10 indicate a poor fit. They strongly urged the use of confidence intervals in practice. The RMSEA value for our sample is .06 and the 90% confidence interval ranges from .04 to .08. The narrow confidence interval suggested good precision of the RMSEA value.

Goodness-of-fit index (GFI) and Adjusted Goodness-of-fit index (AGFI) compare a hypothesized model with no model at all and values close to 1.00 indicate a good fit (Hu & Bentler, 1995). For our sample, both GFI and AGFI indices were close to 1.00.

Normed Fit Index (NFI), Non-Normed Fit Index (NNFI), and Comparative Fit Index (CFI) are often used to evaluate the gain in improved fit from the independence model to the hypothesized model and values greater than .90 indicate a good fit. The NFI, NNFI, and CFI values of .91, .95, and .96, respectively, confirmed the four-factor model.

Standardized Root Mean Square Residual (RMR) represents the average standardized residual value derived from the fitting of the correlation matrix for the hypothesized model to that of the sample data. A value less than .05 suggests a well-fitting model (Byrne, 1998). The value of .07 represents the average discrepancy between the observed and hypothesized correlation matrices. Thus, our model explained the correlations within an average error of .07 (see Hu & Bentler, 1995).

As a result, the five items (1, 3, 5, 8, 16) loaded on the first factor (Personal Teacher Efficacy) was used as a measure of teacher efficacy in the following analyses.

Cronbach’s $\alpha$ for the 16-item scale was .70 and the PTE and GTE factors yielded alphas of .85 and .71 respectively. These results are similar to previous studies (Anderson et al, 1988; Hoy & Woolfolk, 1993; Podell & Soodak, 1993). In this study, the five items loaded on PTE were used to represent teacher self-efficacy.

Data Analysis

We used independent sample t-tests to examine differences in efficacy for teachers who do not speak any language other than English fluently and teachers who speak at least one language other than English fluently. Analysis of Variance (ANOVA) was used to examine the differences of teacher self-efficacy among the groups of teachers who had different years of experience in learning a foreign language, and the Pearson correlation coefficient between teacher self-efficacy and the number of times the participants traveled abroad was calculated.
Results

Most (55.56%) of the participants did not study any foreign language in elementary or middle schools, but 28.15% spent 1-2 years, 8.89% spent 3-4 years, and 7.41% spent more than 5 years studying a foreign language in elementary or middle schools. While most (59.26%) of the participants spent 3-4 years and 34.81% spent 1-2 years studying a foreign language in high school, 5.93% did not study any foreign language in high school. The mean number of semesters that participants spent studying a foreign language in college or graduate school is 1.87 with a standard deviation of 1.41. Most (54.07%) of the participants speak English only, but 39.26% speak one language and 6.67% speak two languages other than English. The mean number of times participants traveled abroad is 3.27 with a standard deviation of 1.88.

Teachers who spoke at least one language other than English fluently had statistically higher self-efficacy ($M=25.67$, $SD=3.04$) than teachers who did not speak any language other than English fluently ($M=24.48$, $SD=3.32$), $t(134) = -2.162, p<.05$ with a medium effect size (Cohen’s $d =0.37$).
 We were interested in the participants’ foreign language learning experience in three different school settings (elementary and middle school, high school, and college and graduate school), the correlation coefficients for these three variables were low (.02, .25, and .32, respectively). We chose to conduct three separate independent ANOVAs for these variables.

When teachers were grouped according to the number of years spent studying a foreign language in elementary or middle schools, the ANOVA was not statistically significant, $F(3, 132) = 0.28, p>0.05$, $\eta^2 =.01$. Although teachers who spent five or more years had a higher self-efficacy score ($M=24.90$, $SD=3.73$) than teachers who spent 3-4 years ($M=24.67$, $SD=3.87$) and teachers who did not study a foreign language ($M=24.79$, $SD=3.42$), teacher who spent 1-2 years had the highest self-efficacy score ($M=25.37$, $SD=3.42$).

When teachers were grouped according to the number of years studying a foreign language in high school, the ANOVA was not statistically significant either, $F(2, 134) = 1.33, p>0.05$, $\eta^2 =.02$. Teachers who spent 3-4 years had a higher self-efficacy ($M=25.13$, $SD=3.52$) than teachers who spent 1-2 years ($M=24.96$, $SD=3.04$) and teachers who did not study a foreign language ($M=23.13$, $SD=2.80$).

When teachers were grouped according to the number of semesters spent studying a foreign language in college or graduate school, the ANOVA was not statistically significant either, $F(2, 134) = 0.91, p>0.05$, $\eta^2 =.01$. Teachers who spent 3-4 years had a higher self-efficacy ($M=26.50$, $SD=2.93$) than teachers who spent 1-2 years ($M=24.87$, $SD=3.44$) and teachers who did not study a foreign language ($M=24.79$, $SD=2.84$). The relationship between the participants’ self-efficacy and the number of times they traveled abroad was not significant either ($r=-.02, p>0.05$).

Discussion

Embedded within the U.S. curriculum is foreign language study, yet few U. S. students receive the kind of substantial long-term instruction needed at the pre-K-12 levels in order to attain high levels of proficiency. Of equal concern is the limited number of college graduates who finish their undergraduate education with professional-level bilingual skills (Brecht & Ingold, 2002). According to our data, most of the participants in the study took foreign language courses at the high school level. These courses often are part of minimal requirements (two or three years) for graduation. According to longitudinal data collected on the development of second languages, this limited amount of time is often insufficient for the development of advanced levels of language proficiency (Collier, 1987, 1992; Cummins, 1981; 2000).
Demographic data showed that most of the participants did not begin their study of foreign languages until high school or college. Only 6% of the total number of teachers in this sample reported not taking any foreign language course in high school. Most had three or four years of foreign language study at that level. Over half of the sample (approximately 54% of teachers) continued their study in college by taking classes for two or more years and had multiple experiences traveling abroad. While this demographic data showed that this particular sample had a wide range of language and experiences with diverse cultural groups, this is quite uncommon for most preservice teachers. In fact, in an evaluation of 690 undergraduate transcripts of teacher education candidates from three institutions, Heyl & McCarthy (2003) found that very few studied abroad or participated in foreign language study. Specifically, the researchers discovered that a very small minority of preservice teachers studied and/or student taught abroad (3.9%), 76% of participants did not participate in foreign language study, and at each of the three institutions studied, a small percentage (26%, 11%, and 8%, respectively) of “total credits taken as an undergraduate” reflected an “international” curriculum (p. 9).

Teachers’ foreign language learning experience and the number of times teachers traveled abroad did not have a significant impact on their efficacy beliefs in working with ELLs. A teacher’s bilingual status significantly influenced his or her self-efficacy in teaching ELLs. In other words, the findings from this study support that the number of foreign language courses teachers took in K-12, college, and graduate school did not predict teachers’ self-efficacy in working with ELLs, despite what we may intuitively think. Teachers who self-identified as being bilingual did have higher teaching efficacy than those who only spoke English.

Teachers who participated in the process and perhaps struggled in the learning of a second language have much insider knowledge about second language acquisition. They can perhaps empathize with their ELLs on a different level. Through foreign language study, teachers gain a personal understanding of the challenges of learning English and this knowledge enhances their teacher self-efficacy. Therefore, it is not surprising that teachers who speak at least a language other than English fluently have higher self-efficacy to teach ELLs.

What was surprising in this study was that the number of times teacher traveled abroad did not have any significant relationship with their self-efficacy beliefs. This finding may be the result of the unique makeup of the sample. The demographic data showed that the participants in this study were unlike most teachers. When asked about international travel, almost 50% of the sample reported having traveled outside of the U.S. more than three times and over half identified themselves as being proficient in a language other than English. It may be that for this sample, the differences were not easily detected in self-efficacy beliefs between the teachers who traveled and those who did not.

Another explanation may be that experiences with travel in general can range in length, time, and quality. People travel abroad for a variety of different reasons, but those who travel for leisure often have limited interactions with the local people. Therefore, traveling abroad alone does not necessarily enrich the teachers’ knowledge about the learning styles of students from other countries and does not necessarily guarantee that teachers will develop a deep understanding of the process of learning a second language. For the participants in this study, the level of depth or breadth of their travel experiences were not explored which could have made an impact on the results. For this study, teachers were asked to identify the number of times they traveled abroad. They were not asked to specifically describe where they went, how long they were there, or the types of experiences they had while traveling. With the limited information that was gathered on this variable from this sample of teachers, it is difficult conclude that travel experiences abroad do not influence teacher efficacy at all. We assert although the results showed no significant relationship, we believe that travel experiences abroad can impact a teacher’s sense of teaching efficacy in working with diverse
students, but that the experiences must be substantive. In other words, while the occasional trip to a foreign country may not make an impact on teacher efficacy in working with diverse students, we argue that time spent studying, teaching, or learning abroad for an extended amount of time could influence teachers’ perceptions of their effectiveness in working ELLs.

Our results have implications for pre-service and in-service teachers as well as higher education institutions of teacher education. They support the conclusion that superficial attempts in language study or travel experiences do not influence efficacy beliefs in teachers working with students who are culturally and linguistically diverse. The data show that, for the participants in this study, neither the number of years studying a language other than English nor the number of times that teachers traveled abroad necessarily influences teachers’ personal self-efficacy in working with ELLs in the mainstream classroom. The factor that contributed most to a teacher’s sense of personal efficacy was whether or not teachers had developed levels of high proficiency in that language. In other words, the teachers who had a significantly higher sense of personal teaching efficacy in working with ELLs were those teachers who self-identified as bilingual with high proficiency in a language other than English. From these findings, we argue that teachers who work with diverse students must develop a lifelong commitment to learning a language other than English. In fact, teachers should be encouraged to learn a second language well enough to self identify themselves as truly bilingual. It is only then that foreign language study was a significant factor in the teaching efficacy of teachers working in multicultural classrooms with ELLs.

Implications for Improvement of Practice

Our data support the need for teachers to engage in a lifelong commitment to the study of a foreign language and specifically showed that teachers who self-identified as bilingual had higher efficacy beliefs in diverse classrooms than those who did not. While the results may show that the number of years of formal foreign language study or the number of times an individual travels abroad experiences was not significant in the examination of personal teaching efficacy for teachers in diverse classrooms in this study, we believe that these factors should be further explored. The participants in this study were those teachers who recognized the need to become better trained in the education of ELLs and were actively seeking an additional teaching license in ESL. This factor can make them uniquely different from the average mainstream classroom teacher. To better understand personal teaching efficacy of teachers working with diverse studies, we recommend the following to researchers, educators, and institutions of higher education.

We recommend that this study is replicated with a random sample of classroom teachers who are more reflective of the national demographic. We also recommend that future researchers explore the complexity of language study and travel abroad experiences. In other words, future studies should examine more than the number of years that a teacher has studied foreign languages and the number of times they have traveled outside the United States. Teacher perceptions of the quality and rigor of their foreign language instruction, the quality of their instructors, the range in the levels of proficiency of the instructors, foreign language class size, type of instructional methods used are all factors that could be included when examining foreign language study. The effect of travel abroad experiences can also differ depending upon the length of stay, the countries visited, the reasons for travel, and the like. Both quantitative and qualitative studies that examine language study and travel abroad more deeply can help researchers and practitioners understand how multicultural experiences shape personal efficacy beliefs of teachers working with diverse students. Ultimately, teachers who work with ELLs in the mainstream classroom must understand the complex languages and cultures of these students in order to effectively teaching. To promote this understanding, university programs can do their part by encouraging inservice and preservice teachers to engage in...
language study with the goal of becoming bilingual. In addition, universities should consider integrating travel abroad or other immersion experiences as a required part of the teacher education curriculum. Ensuring that both inservice and preservice teachers engage in substantive language study and experiences abroad can help develop a teaching force that is both more globally aware and culturally responsive in their teaching.

**References**


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Appendix A

TEACHER EFFICACY SCALE

(see Brophy-Sellens (1994) for modified version and Gibson and Dembo (1984) for original scale)

1. If a limited English proficient (LEP) student in my class becomes disruptive and noisy, I feel assured that I know some techniques to redirect him/her quickly.

2. The hours in my class have little influence on LEP students compared to the influence of their home environment.

3. When I really try, I can get through to most difficult LEP students.

4. A teacher is very limited in what he/she can achieve because an LEP students’ home environment is a large influence on his/her achievement.

5. If an LEP student did not remember the information I gave in a previous lesson, I would know how to increase his/her retention in the next lesson.

6. The influences of an LEP student’s home experiences can be overcome by good teaching.

7. When an LEP student gets a better grade than he/she usually gets, it is usually because I found a better way of teaching that student.

8. If one of my LEP students couldn’t do a class assignment, I would be able to accurately assess whether the assignment was at the correct level of difficulty.

9. If LEP students aren’t disciplined at home, they aren’t likely to accept any discipline.

10. If an LEP student masters a new concept quickly, this might be because I know the necessary steps in teaching this concept.

11. Even a teacher with good teaching abilities may not reach many LEP students.

12. When an LEP student does better than usual, many times it is because I exerted a little more effort.

13. If parents of LEP students would do more with their children, I could do more.

14. When the grades of my LEP students improve, it is usually because I found more effective teaching approaches.

15. The amount that an LEP student can learn is primarily related to family background.

16. When an LEP student is having difficulties with an assignment, I am usually able to adjust it to his/her level.