Preparing K-12 Teachers for ELLs: Improving Teachers' L2 Knowledge and Strategies Through Innovative Professional Development Urban Education 2020, Vol. 55(10) 1489–1506 © The Author(s) 2016 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/0042085916656902 journals.sagepub.com/home/uex



Nan Li¹ and Angela W. Peters¹

Abstract

English Language Learners (ELLs) are the fastest growing segment of school population, especially in urban schools. The teaching workforce has relatively unchanged to match this fast growth. Data found no measurable difference in the percentages of teachers' ethnic backgrounds between 1999-2000 and 2007-2008. This mismatch creates the demand for preparing the K-12 teachers who can work effectively with ELLs. The study examines an innovative program that prepares K-12 teachers through research and service combined with traditional professional development. Findings reveal significant improvement in the teachers' second language (L2) knowledge and strategies working with ELLs.

Keywords

English language learners (ELLs), K-12 teachers, professional development

Introduction

The English language learners (ELLs) are the fastest growing segment of the school population, especially in urban schools (Echevarria & Short,

Corresponding Author:

 $Nan\ Li,\ The\ NPD\ Program\ \&\ ELL\ Center\ Project,\ Claflin\ University,\ 400\ Magnolia\ Street,\ Orangeburg,\ SC\ 29115,\ USA.$

Email: nli@claflin.edu

¹Claflin University, Orangeburg, SC, USA

2010; Milner, 2010). According to National Center for Educational Statistics (NCES) Data, 21% of school enrollment or 10.9 million school students ages 5 to 17 are ELLs (Li, 2015; NCES, 2012). However, the ethnic background of teachers has remained constant between the academic years 1999-2000 and 2007-2008 (NCES, 2012). These data indicate that the teaching workforce is not growing at the same pace as the ELL school population. Therefore, it is imperative that K-12 teachers receive training and preparation so they can effectively work with the growing ELL population to meet the unique needs of the ELLs in classrooms. This study examines a teacher-preparation program that was designed to prepare K-12 teachers to work effectively with the ELLs. Unlike a traditional professional development program that focuses on workshop training, this program took an innovative approach to combine the traditional professional development with research and service. The study took place in a region where four participating school districts experienced an increase of ELLs while subsequently being challenged with student performance, for example, academic success. Moreover, all four school districts involved in this study had at least one school rated "High Priority Points (e.g., Elloree Elementary had an Index "97.97" and Absolute Rating as "Below Average"; Centers of Excellence, 2010-FY 2009 Poverty Index/Report Card Ratings). The program produced very positive results. This study is intended to identify the positive factors of preparing K-12 teachers, and gain insight on teacher preparation so that more K-12 teachers can work effectively with the ELLs. Teachers are the key element to improve student learning. When teachers are actively engaged to enhance their theoretical knowledge and improve their teaching skills, they produce positive effects on ELLs' learning.

This study includes the results of a 10-month professional development program that combines research and service to yield positive outcomes. Teacher participants were selected by the four school districts with the assistance of the ESOL (English Speakers of Other Languages) Coordinator and Principal from each of the four school districts. These school districts were located in a southern state where the growth of the ELL school population was highest in the nation. For example, the increase of the ELL school enrollment was 898% from 1999 to 2009 according to the data from the National Clearinghouse for English Language Acquisition (NCELA, 2011). The K-12 teachers are relatively unprepared to match such a fast growth rate in the ELL population with many K-12 teachers not having ELL-related formal training (SC Department of Education [SCDE], 2010). The needs assessment survey (see Figure 1) was conducted and distributed to the

NEEDS ASSESSMENT: PROFESSIONAL DEVELOPMENT				
Years of Teaching	Grade Level to Teach School District			

Part I. Please read the following questions carefully and provide your answer to each of these questions by marking your choice in the right column marked as "Yes" or "No."

	QUESTIONS	YES	NO
1.	In your teacher preparation program, did you receive explicit instruction in language acquisition through a dedicated course?		
2.	In your teacher preparation program, did you receive strands of information regarding English Language Learners (ELL) woven throughout a variety of courses?		
3.	In your teacher preparation program, were you required to take a course in teaching students of culturally diverse backgrounds		
4.	If you did not have any formal coursework, would you have enrolled in any had it been available?		
5.	Would you participate in professional development regarding English Language Learners if offered?		
6.	Do you feel responsible to teach the English Language Learners in your classroom?		
7.	Do you feel confident and prepared to teach ELLs in your classroom?		
8.	Do you feel to possess second language acquisition knowledge and skills to teach English Language Learners?		

Part II. Please provide any additional comments related to how work effectively with ELLs:

Figure 1. Needs Assessment Survey Instrument.

Note. This Assessment Survey Instrument was used to assess the project needs. The responses from teachers demonstrated the great needs of the ELL Center Project with the following results. ELL = English language learner.

teachers in four target school districts to determine their needs. The survey data confirmed that most K-12 teachers did not have formal training related to teaching ELLs, which demonstrated the important needs of the program. The program took an innovative approach by combining research and service components into the traditional professional development training. At the end of the project period, findings revealed not only the increase in the teachers' knowledge in L2 acquisition theories and teaching strategies for working with ELLs but also the improved learning outcomes of the ELL students served. Traditional teacher preparation usually involves teachers in professional training workshops. This program took a new approach by adding research and service to the traditional professional training workshops. In other words, the teachers participated in professional development training while they were also serving ELLs and generating research data. The ELLs received service through the participating teachers who used L2 theories and strategies learned from the training workshops to work with ELLs. This provides immediate results on the ELLs' learning. This innovative way of preparing the K-12 teachers who teach ELLs can strongly help teachers in urban schools. Teachers were willing to participate in the training and actively engaged in research and service. They were serving the ELLs in classrooms and generating research data on improving student learning simultaneously. As the ELL school population continues to grow, every K-12 teacher should have basic L2 knowledge and strategies to teach ELLs effectively. From this perspective, the study herein has great significance and provides value to the ELL literature.

Literature Review

The traditional view of professional development is that it is something that should be "done to" the teachers (Byrd & Nelson, 2003; Hawkins & Irujo, 2005). In other words, it is the responsibility of the school district to provide professional development; the teacher's responsibility is to attend the professional development workshops, pay attention, and implement what has been provided. This view is reflected in the Gándara et al. results that indicate not enough teachers received training sessions that focused on the immediate needs of students and the quality of training is also of concern, including not effectively serving the needs of the ELLs (Gándara, Maxwell-Jolly, & Driscoll, 2005). This traditional model of professional development to prepare K-12 teachers represents a systemic problem of passivity due to its top-down practice of professional development. Teacher educators want professional development that is effective and engaging. It can be offered in conjunction with the school system or/and outside the system.

Requirements for Preparing Teachers of ELLs

Programs through which ELLs are being served can be divided into bilingual education, ESOL program, and mainstream education (Abbate-Vaughn, 2008; Clair, 2000; Meskill, 2005; Walqui, 2001).. Requirements for teacher preparation within each of these programs differ depending on a variety of factors. Generally, bilingual education requires teachers to be prepared in and competent for teaching students through their native language as well as English as the second language. The ESOL program requires the ESOL teaching professionals to be prepared to teach English reading, writing, speaking, and listening skills to the ELL students. The mainstream programs generally conduct all instruction in English and do not normally require teachers to be prepared to teach ELLs. However, with the context of the rapid increase in the ELL enrollment in public schools, the preparation of K-12 teachers becomes critically important (Ballantyne, Sanderman, & Levy, 2008). Thus, effective professional development training programs designed for the K-12 mainstream teachers become necessary. As the President of the National Education Association (NEA) states in the 2013 NEA Brief, preparing K-12 teachers to provide ELL students with high-quality services and programs is an important investment of American Education in the future (NEA, 2013).

It is generally agreed that the K-12 mainstream teachers with ELLs in their classrooms need these following knowledge and skills to work effectively with the ELLs and meet the needs of these students in classrooms (Li, 2015; Menken & Look, 2000). These knowledge and skills include understanding of basic theoretical constructs of second language (L2) acquisition; nature of language proficiency; role of first language (L1) and culture in learning; types of demands that academic work places on linguistically and culturally diverse learners; capacity to make academic content accessible; ability to integrate language and content instruction; respect for students' L1 and culture in instruction; and understanding how language and culture affect students' classroom participation. Most professional development programs are developed around some of these content areas for K-12 teachers. To be effective, this program focused on not only the content knowledge provided by the on-campus professional development workshops but also fieldwork research and service.

Insufficient Knowledge and Skills for Teachers of ELLs

K-12 teachers of ELLs are aware of accountability for the ELLs' progress as required by standardized tests. Yet, teachers of ELLs need the appropriate

training to be able to meet their students' language and learning needs and to facilitate their academic growth; however, most teachers lack this training (Samson & Collins, 2012; Tellez & Waxman, 2005). Although research indicates that there are promising teaching methods for working with ELLs, the actual knowledge and skills that teachers need to support effective instruction for ELLs do not always reach them (Ballantyne et al., 2008). Currently, at the various stages of teacher preparation, there is insufficient information on how teachers should know about teaching ELLs. However, it is generally agreed that teachers must have basic knowledge and skills to serve ELLs, such as a working knowledge and understanding of L2 development, cultural diversity and awareness, and certain teaching strategies. If the nation wants to see the ELLs' improved learning outcomes, greater effort on how K-12 teachers are prepared through professional development programs becomes essential. By making sure that the needs of ELL students are addressed through preparing teachers with the needed knowledge and skills, it is possible that teachers of ELLs can better serve the ELLs and see better results of ELLs.

Methods

The purpose of the study was to identify the positive factors from a novel professional development program that prepared K-12 teachers in a nontraditional way by infusing research and service components in professional development. The program yielded positive results in terms of improved knowledge and teaching strategies of the teachers to work with ELLs in four school districts. These school districts were located in a southern state with a high increase in ELL school population and a high ELL growth rate, that is, the growth rate was 456% from 2007 to 2014 (Li, 2015). However, teachers received very little training and preparation in working with ELLs. Therefore, the program took an innovative approach to combine research and service into the traditional professional development training. The program had three objectives. First, the program was intended to prepare the K-12 teachers in low-performing schools of the four target school districts with instruction that accelerates ELLs' acquisition of the English language proficiency and content knowledge. Second, it was intended to improve the English language skills and content knowledge of the Hispanic-speaking ELLs in these school districts. Third, it was intended to collect data to enable more data-based decision-making through its innovative program design and training activities. In addition, the program was expected to achieve the following outcomes: (a) 90% of the K-12 teacher participants would increase knowledge and teaching skills to provide instruction for ELL students in low-performing schools as measured by pre- and post-training assessment and (b) 95% of the

ELL students who received service would improve their English proficiency and literacy as well as content knowledge as measured by the State tests in English and Mathematics and measured by the pre-test and post-test data.

Population and Settings

During the study period, 48 K-12 teacher participants were selected by the four school districts to participate in the program for research, service, and professional development. These four school districts were Orangeburg Consolidated School District 5 (OCSD5), Orangeburg Consolidated School District 3 (OCSD3), Calhoun County School District (CCSD), and Bamberg County School District (BCSD). These school districts had experienced a higher increase of ELL school enrollment in the recent years. These four school districts were also challenged with their students' low academic performance. For example, the State School & District Report Cards indicated that these districts had schools scoring below the satisfactory levels. Specifically, in 2010, the performance in OCSD5, which was one of the largest school districts, was rated as "Below Average" with an "At-Risk" improvement rating and low "Adequate Yearly Progress." The other three districts had a similarly low rating. The school districts also experienced resource challenges. The limited resources added to the challenge of teacher preparation for academic improvement of ELLs. For example, OCSD5 carried an interest debt of \$2,124,000 in 2007 and instructional expenditure per student was \$4,649 with no instructional aides (NCES, 2010). Fifteen schools and 213 ELLs in this district had two ESOL teachers with one on maternity leave during the study period.

The professional development workshops were conducted on the university campus. Yet, the research and service were conducted in the classrooms of the low-performing schools in the four school districts. OCSD5, as the largest of the four districts, had 7,059 students with 15 elementary, middle, and high schools located in the heart of the County (SCDE, 2010). In 2010, this school district met only 11 out of 21 objectives and these objectives included performance and participation of students in various groups. Using English/Language Arts and Mathematics as an example, the students performed unsatisfactorily in the state-level assessment. For instance, of the tested eighth graders, 52.7% of students did not meet the English/Language Arts State standards and 58.2% did not meet the Mathematics State standards. Of 6,882 students tested, 37.4% were at the *Below Basic* level and 1.9% reaching the *Advanced* level based on *Annual School Report* (SCDE, 2010). There were 213 ELL students in OCSD5 in 2010. Of these ELLs, 87% are Hispanic students (Grade K-12). Thirty-six percent were listed as Limited

English Proficiency (LEP) students. In the State English proficiency test, 63.6% of the LEP students scored at the *Below Basic* level, 18.2% at the *Proficient* level, and 0% at the *Advanced* level. In other words, ELL students performed further below the already lower-performance levels of the other K-12 students.

Needs Assessment Survey

To assess the needs for ELL teacher preparation as well as providing data for the program, a needs assessment was conducted via survey. The survey consisted of questions that focused on (a) the preparedness of the teacher professionals for teaching effectiveness to K-12 ELLs and (b) their potential participation in the professional training activities (see Figure 1). The surveys were distributed to the teachers in the four school districts with the assistance of the ESOL personnel. The response rate was 76% from OCSD5, 73% from OCSD3, 74% from CCSD, and 78% from BCSD. Findings of the survey revealed the need for the professional development program. For example, Question 1 asked, "In your teacher preparation program, did you receive explicit instruction in L2 acquisition through a dedicated course?" A total of 94.7% of OCSD5 teachers responded "No," 91.7% of OCSD3 teachers responded "No," 92.6% of CCSD teachers responded "No," and 95.2% of BCSD teachers responded "No." Similarly, Question 5 asked "Would you participate in the professional development training regarding ELLs if it is offered?" In all, 92.1% of OCSD5 teachers responded "Yes," 97.3% of OCSD3 teachers responded "Yes," 94.3% of CCSD teachers responded "Yes," and 97.3% of BCSD teachers responded "Yes." The results from the needs assessment indicated a valid need for the ELL training in these four school districts.

Data Sources

The study was aligned with the academic school year and thus was a 10-month study. Forty-eight K-12 teachers participated in the study and they were selected by the ESOL coordinators and principals from each school district. The selected teachers had ELLs in their classrooms; yet, they lacked formal preparation related to teaching ELLs. While the teachers participated in the professional development workshops, they also conducted research by generating descriptive data. For example, the teachers were required to write monthly teacher reflections as documentary data to reflect their work serving the ELLs and document the progress as well as any roadblocks. The teacher reflections had a required format to include ELL writing samples

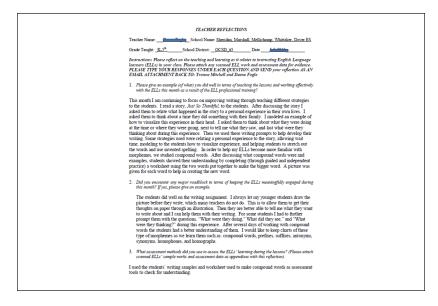


Figure 2. Teacher reflection sample with the scanned ELL work samples. *Note.* ELL = English language learner.

(see Figure 2). The teachers were required to submit their reflections at the beginning of each month throughout the study period. In these reflections, the teachers were asked to respond to specific questions, and the scanned ELL work samples in their reflections were intended to document the ELLs' progress as well as the teachers' instructional activities. The reflections also required the teachers to focus on strategies that worked well and any challenges they encountered as a result of the professional development training. This would help improve the program and increase positive outcomes. In addition, teachers had to explain how they implemented the knowledge and teaching strategies learned from the professional development training while working with ELLs.

Patton (2015) states that the fundamental purpose of educational research is to increase the understanding of educational processes, practices, and issues. To better understand the teachers' knowledge growth and improved strategies, three types of data were collected to measure the teachers' knowledge growth and program effectiveness. The first set of data, as mentioned, was teacher reflections to measure the professional growth of the teachers in L2 knowledge and teaching stills. This set of documentary data was collected from the mainstream teachers on a monthly basis with the scanned

ELL work samples to measure the participants' instructional activities and their work with the ELLs as well as any challenges, for example, difficult encounters in classrooms, when working with the ELLs. The second set of data included field observations at the beginning and end of the program to document the participants' instructional activities with the ELLs. The third set of data included pre- and post-assessment in the form of testing collected at the beginning and ending of the training to measure the teachers' knowledge growth. In addition, to measuring the ELL students' learning, a set of assessment data included pre- and post-assessment by using the LEARNS Literacy Assessment Profile (Gold & Potter, 1999). The LEARNS is an educational assessment tool that consists of a series of literacy assessment of ELLs in various language content areas, such as reading, writing, and listening. Data can be collected at three different intervals, that is, beginning, middle, and ending period. Lastly, to measure the effectiveness of the professional development training, the post-training surveys were collected after each workshop.

Data Analysis

The collected research and assessment data were disaggregated and synthesized by collection dates and types. For the first set of data, which included the teacher reflections that were collected on a monthly basis, we compared the beginning data to the ending data including the ELLs' sample works. This set of teacher-generated data not only revealed the teachers' knowledge improvement in the L2 theories but also teaching strategies. This set of qualitative data documented the detailed instructional activities of the teachers and it also generated the scanned ELL sample works to measure and document improvement in ELLs' learning progress. The scanned ELL writing samples allowed us to compare the student work at the beginning and end of the study period (pre and post). The format for the teacher reflections was a formal format with several questions which required a response (see Figure 2). This data revealed that teachers were able to incorporate more strategies after each workshop. For example, the teachers could incorporate specific strategies learned from the professional development training and implement them when working with the ELLs. As showed from one of the ELL sample works in Figure 2, the Cultural Wheel activity was a strategy learned from the workshop and used in classrooms.

The second set of data were the field observation. The observation was conducted with a form completed by the ESOL teachers who observed the K-12 teachers and submitted their observation at the end of each semester with the same teacher participant (see Figure 3). The observation was

Instruction Effectiven	ess	. 15			
Building Background			o de la	akali A	
1. Link concepts to students' background experience.	1	2	3	4	(5)
Make connection between past learning and new concepts.	1	2	3	4	(3)
3. Present new vocabulary in context	1	2	3	4	(5)
Comprehensible Input					
Use speech that is appropriate for ELLs' language proficiency.	1	2	3	4	(3)
2. Use a variety of techniques to make concepts clear.	1	2	3	4	(S)
Instructional Strategies				200	
Provide ample opportunities for ELLs to use learning strategies.	1	2	3	4	(3)
2. Use scaffolding techniques throughout the lesson.	1	2	3	(4)	5
3. Use of a variety of question types to promote critical thinking skills.	1	2	3	4	(5)
Interaction with ELL students: Many examples	given.	(H)	911.0		
Frequent opportunities for interactions about lesson concepts.	1	2	3	4	(3)
2. Utilize cooperative groups, buddies, pairs, large and small groups.	1	2	3	4	(3
Provide ELL students ample wait time for responses.	1	2	3	4	(5)
Knowledge/Skill Appl	ication	ilys.		100	
Applying Knowledge in Lesson Delivery	digital please	100 X 130 Ch.			3850
Content objectives supported by lesson delivery.	1	2	3	4	(5)
2. Language objectives supported by lesson delivery objectives cli	age 1	2	3	(5 Mary
3. Students engaged 90% to 100% of the period.	1	2	3	Ð	5
Applying L2 Skills in Lesson Delivery: Paire, shoee,	repair.	small	groups,	Model	ns limiting r
Use hands-on materials from training for students to practice.	1	2	3	4	(5)
Use activities for ELLs to apply content and language knowledge.	1	2	3	4	(3)
Integrate L2 language skills: listening, speaking, reading and writing.	1	2	3	4	(5)
COMMENTS: Mrs. king interacted well wi	ith h	ur	Stud	lento	. She
also monitored and adjusted well.	When	~ &	he a	w.	that
many of her students needed extr	نع ما	ract	ice	wit	the the
Content being taught they practi	cad a	۸. ۵	. 1.1	.0.	Class
		414	1	1800	Court
Submitted by: in small groups, and in	depen to at	am	~~.	1	o the

Figure 3. Teacher observation form sample.

focused on how they implemented teaching strategies and how they interacted with ELLs using these strategies. ESOL teachers were the professionals who had content knowledge and expertise working with the ELLs. Their observation of the teacher participants yielded valuable data. Specifically, the observation tool was designed to measure the following areas: (a) instructional effectiveness and (b) knowledge and strategies application. Instructional effectiveness was to examine the area of building background knowledge, providing comprehensive input, and interacting with the ELLs.

Table 1. Teachers Were Able to Use More Strategies After Their Training.

Pre-assessment: Before training		Post-assessment: After training			
Top !	5 strategies listed by teachers:	Top 5 strategies l	isted by		
İ.	Visual aids (19)	teachers:	,		
2.	Small group/collaboration/	 Modeling 	(13)		
	cooperative learning (12)	2. Graphic o	rganizers (11)		
3.	Peer tutoring (8)	3. Pre-teach	ing (8)		
4.	Additional time (6)	4. Pair, share	e, and repair (6)		
5.	One on one instruction (5)	5. KWLS ch	art (6)		
6.	Partner work (5)	6. Repetition	n/clarification (8)		
7.	Connecting students with	7. Simplify la	nguage (5)		
	school resource teacher (3)	8. Thinking a	0 0 1		
8.	Use of native language in	9. Incorpora	ting content and		
	classroom (2)	•	objectives (3)		
9.	Use of technology (2)	10. Visual aid	. ,		

Knowledge and strategies application was to focus on participants' applying L2 knowledge in the classroom and their use of the newly acquired teaching strategies. The observation data in Table 1 show improvement when teachers incorporated their ELL teaching strategies. They were able to have more interaction with the ELLs in the instructional process and also were able to pay more attention to the student–student interaction. In other words, the ELLs were given more chances to interact with peers, which are much needed by most ELLs who do not have these opportunities at home or beyond their schools and classrooms.

In addition to the data collected through observations, to measure the growth of teachers' teaching strategies, both the pre- and post-assessment tests were used and administered to the teacher participants. The pre-test and post-test with 15 multiple choice questions related to the L2 theoretical knowledge, and teaching strategies was conducted at the beginning and end of the study period. One open-ended question was also included that asked the teachers to list the top five strategies they used to help their ELLs. The top five strategies listed by the teachers before the program training appeared to be unfocused with no specific methods. For example, many teachers listed using visual aids, cooperative learning, and peer tutoring as the top strategies. After the program, the teachers were able to describe more specific strategies, such as modeling, graphic organizers, pre-teaching, and Pair-Share-Repair strategies (see Table 1). Visual aids were listed as the number one strategy before the training. After the training, visual aids was the last strategy listed (see Table 1) because the teacher participants learned many

Assessment	Accumulative scores	Lowest	Highest
Pre-assessment	428	3	11
Post-assessment	723	8	15
Increased rate	68.93%		

Table 2. Pre-Test and Post-Test Assessment Data.

Note. Total number of participants: 48.

new strategies and were able to use them to engage their ELLs in a more effective way.

The pre- and post-assessment data were designed to measure not only the increase in the teachers' content knowledge and strategies for teaching their ELL students but also intended to assess program effectiveness through teachers' knowledge growth. The analyzed data by comparing the pre-test and post-test data demonstrated an increase in the average score. For example, the accumulative score for the pre-test was 428 and it increased significantly to 723 for the post-test by the end of the program period (see Table 2). Such a score differential shows an increase in the teachers' content knowledge and teaching strategies with their ELLs. It also demonstrated program effectiveness. To be effective, the content knowledge for professional development focused on the following content areas:

- Overview of ELLs' needs
- Standards for ELLs
- Second language acquisition theories and principles
- Role of culture in Second Language Acquisition
- BICS (Basic International Personal Communication Skills) versus CALP (Cognitive Academic Language Proficiency)
- Research-based effective strategies
- How to make academic language comprehensible

As mentioned, the pre- and post-assessment was administered to 48 participants with 15 multiple choice questions at the beginning of the program and at the end of the program covering the L2 theory contents and strategies with one open-ended question, for example, teachers were asked to share strategies they would use. Data indicated an increase in teachers' L2 knowledge by 68.93%. Before the program, the teacher's lowest score was 3 and the highest score was 11. After the training and implementing the ELL

strategies, the scores increased with the lowest being 8 and highest being 15 as shown in Table 2.

Results and Discussion

The findings indicate a professional development program that infuses research and service geared toward the ELL is more effective. Teacher participants generated research data by writing monthly teacher reflections, collecting data on ELLs' learning, and by observation data focusing on the effectiveness of the program in the classroom. At the end of the program, the project goals and objectives were achieved with noticeable results, as measured by the expected outcomes. All teacher participants have demonstrated an increase in the knowledge they acquired and strategies needed to work with ELLs. At the same time, ELL students have also demonstrated an increase in their learning as measured by multiple assessment data including their own writing sample works. The results are obtained from the analyzed data summarized in the following themed categories.

Teachers' Reaction to Training

The participant reaction to training was significantly positive, as measured by the post-training survey instrument with a series of questions, asking about the training content and effectiveness. One question asked, "Was the information received during the training useful for your teaching?" The participants all responded with *strongly agree* or *agree* that the training was useful and increased their content knowledge and teaching skills to work with the ELLs. In addition to the statistical data provided, the participant's positive reaction to training was also reflected in the participants' comments. Positive comments included, "I have gained many new ideas and useful strategies to use with my ELLs"; "The training was very helpful for me"; "Love the ELL Center training and great information"; "The sample lesson plan incorporating the strategies learned from the training was very beneficial."

Teachers' Knowledge Improvement

The pre-test and post-test assessment data were used to measure teachers' knowledge growth in L2 theories and their newly acquired teaching strategies. The assessment data indicated that the teachers demonstrated knowledge improvement. The knowledge and teaching strategies gained by the teachers through the program training included the basic L2 acquisition theories and teaching strategies specifically for working with ELLs. As

demonstrated by multiple assessment data, teacher participants showed an increase in L2 knowledge and teaching strategies. For example, the scoring difference between the pre- and post-tests was significant. Data indicates that teachers' knowledge increased (i.e., 428 points from the pre-test vs. 723 points from the post-test on the L2 theoretical knowledge for 48 participants) in addition to descriptive data, survey comments, and observation data.

Teachers' Application of Knowledge and Skills

The Project used multiple data to measure the teacher participants' application of knowledge and skills in teaching. For example, the teacher reflections submitted on a monthly basis with documented ELL work samples required to respond to specific questions, including how they had applied the knowledge and skills learned from the training workshops to teaching practice in classrooms. One question asks, "Please provide an example that (of what) you did well in terms of teaching the lessons and working effectively with the ELLs as a result of the ELL Center professional training?" Based on the participants' responses, the teachers were able to apply the knowledge and teaching strategies learned from the training into teaching. For instance, teachers used the "Flip Booklet," "Body Clock," as well as many other strategies learned from the training workshops to teach ELLs in classrooms. Teachers were also able to incorporate the L2 acquisition theories, for example, BICS and CALP, to work with ELLs as the result of program training. Basic concepts of the L2 acquisition theoretical knowledge using BICS and CALP included context-embedding and context-reduced language to teach participants commonly used examples of such so that their students become proficient in the language of the classroom.

Improvement of K-12 ELL Learning

The program has a positive impact on K-12 ELL learning as measured by pre-test and post-assessment data. The number of ELL students in four target school districts was 358. Services were provided by the teacher participants with some pre-service teachers also providing service. The school districts were located in a low-income region as determined by the State School/District Report Cards. Using the assessment data (i.e., the writing samples of the ELL students and the LEARNS assessment), the ELL students have made documented improvement in learning. For example, based on the LEARNS assessment, the ELLs served by the program showed an average increase of 29.6% in their language skills during the study period. Specifically, listening

skills increased by 37.2%, reading skills increased by 28.3%, and writing skills increased by 23.5%.

Conclusion

The ELL school population will continue to increase in urban schools. The need for preparing K-12 teachers to meet the linguistic, academic needs of this population will increase (Milner, 2010). Unique knowledge and skills are required for the successful training of the K-12 teachers to work with the ELL students. The success of this teacher-preparation program is evidenced through accomplishing the program goals and objectives as well as positive outcomes. There are very few teacher training programs that combine research and services with the traditional professional training to meet immediate needs for the growing ELLs. The teacher-preparation program engaged teachers in professional training, research, and service to improve instruction that accelerates the ELLs' acquisition of language and content knowledge. It also improved the teachers' teaching strategies so they could effectively work with the ELLs in the schools that had a higher increase in the ELL school population and that had high priority points (i.e., low student academic performance). The program produced positive results and increased the academic performance of the ELLs served in the four school districts. In conclusion, preparing the K-12 teachers who provide the ELLs with high-quality services and programs is an important investment of American Education (Li, 2015; NEA, 2013). We hope that this study has contributed to ELL teacher preparation through professional development combined with research and service. The innovative professional development workshops provided an opportunity for teachers to take an active role in the teaching and learning process to meet the immediate needs of the ELLs.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Funded by U.S. Department of Education and SC Commission on Higher Education .

References

Abbate-Vaughn, J. (2008). Highly qualified teachers for our schools: Developing knowledge, skills, and dispositions to teach culturally and linguistically diverse

students. In M. E. Brisk (Ed.), *Language, culture, and community in teacher education* (pp. 175-202). New York, NY: Lawrence Erlbaum.

- Ballantyne, K. G., Sanderman, A. R., & Levy, J. (2008). Educating English Language Learners: Building teacher capacity. Washington, DC: National Clearinghouse for English Language Acquisition.
- Byrd, P., &, Nelson, G. (Eds.). (2003). Professional Development in Language Education Series: Sustaining professionalism. Alexandria, VA: Teachers of English to Speakers of Other Languages.
- Centers of Excellence, 2010-FY 2009 Poverty Index/Report Card Ratings.
- Clair, N. (2000). Teacher study groups: Persistent questions in a promising approach. *TESOL Quarterly*, 32, 465-492.
- Echevarria, J., & Short, D. (2010). Programs and practices for effective sheltered content instruction. In California Department of Education (Ed.), *Improving education for English learners: Research-based approaches*. Sacramento, CA: CDE Press.
- Gándara, P., Maxwell-Jolly, J., & Driscoll, A. (2005). Listening to teachers of English language learners: A survey of California teachers' challenges, experiences, and professional development needs. Sacramento: The Regents of the University of California.
- Gold, J., & Potter, L. D. (1999). Corporation for National Service (U.S.): LEARNS (Partnership), Northwest Regional Educational Laboratory, & Bank Street College of Education. LEARNS literacy assessment profile (1201 New York Ave., NW, Washington 20525). Washington, DC: Corporation for National Service.
- Hawkins, M., & Irujo, S. (2005). Collaborative conversations among language teacher educators. Alexandria, VA: Teachers of English to Speakers of Other Languages.
- Li, N. (2015). A book for every teacher: Teaching English language learners. Charlotte, NC: Information Age.
- Menken, K., & Look, K. (2000). Meeting the needs of linguistically and culturally diverse students (Schools in the middle). Washington, DC: National Association of Secondary School Principals.
- Meskill, C. (2005). Infusing English language learner issues in professional educator curricula: The Training All Teachers project. *Teachers College Record*, 107, 739-756.
- Milner, H. R. (2010). Start where you are but don't stay there: Understanding diversity, opportunity gaps, and teaching in today's classrooms. Cambridge, MA: Harvard Education Press.
- National Center for Education Statistics. (2010). *Teacher preparation and professional development: 2010* (NCES 2010-88). Washington, DC: U.S. Department of Education.
- National Center for Education Statistics. (2012). Language minorities and their educational and labor market indicators—Recent trends (NCES 2012-092). Washington, DC: U.S. Department of Education.
- National Clearinghouse for English Language Acquisition. (2011). *The growing numbers of English learner students*. Washington, DC: Retrieved from http://www.ncela.us/files/uploads/9/growingLEP_0809.pdf

- National Education Association. (2013). *An NEA policy brief: Professional development for general education teachers of English Language Learners*. Retrieved from http://www.nea.org/assets/docs/PB32_ELL11.pdf.
- Patton, M. Q. (2015). Qualitative research & evaluation methods: Integrating theory and practice (4th ed.). Thousand Oaks, CA: Sage.
- Samson, J. F., & Collins, B. A. (2012). Preparing all teachers to meet the needs of English Language Learners: Applying research to policy and practice for teacher effectiveness. Washington, DC: Center for American Progress.
- SC Department of Education. (2010). Schools and Staffing Survey: Teacher preparation for the English learners. Retrieved from http://ed.sc.gov/instruction/adult-education/english-as-a-second-language/
- Tellez, K., & Waxman, H. (2005). *Quality teachers for English Language Learners* (Laboratory for Student Success, The Mid-Atlantic Regional Educational Laboratory). Philadelphia, PA: Temple University Press.
- Walqui, A. (2001). Accomplished teaching with English learners: A conceptualization of teacher expertise. *The Multilingual Educator*, 2(2), 51-56.

Author Biographies

Nan Li is associate professor of Education at Claffin University. She is a researcher and writer with over 20 publications. She is also director of projects in amount of \$3.2 million funded by U.S. Department of Education and South Carolina Commission on Higher Education. She plays a key role in preparing K-12 teachers who can work with ELLs in mainstream classrooms.

Angela W. Peters is vice provost of Academic Programs, professor & former chair-person of the Chemistry Department at Claflin University. She is the 2010 recipient of the Stanley C. Israel Diversity award; the 2005 SC Governors Professor award; the 2004 Historically Black College and University National Millennium Teaching award (White House Initiative), and the James E. Hunter Excellence in Teaching award (Claflin University).