Pre-Service Administrators' Experiences with Effective Research-Based Learning Strategies for English Language Learners

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Due to the increase of English Language Learners (ELLs) in the State of Texas, it is essential that educators are equipped with research-based strategies to ensure students' academic and linguistic growth. The objective of the study was to evaluate pre-service administrators' knowledge of the latest research-based learning strategies and educational approaches to teaching ELLs. Pre-service administrators were asked to complete a pre- and post- open-ended narrative response survey during a blackboard module lesson related to research-based learning strategies. Through textual analysis, researchers counted the number of items that were deemed critical content knowledge needed for quality ELL instruction. Identified ELL content were labeled ELL content units (CUs). CUs were then totaled per pre-service administrator for both pre- and post-survey narrative responses. A parametric t-test was utilized to compare pre-service administrators' ELL CUs between pre- and post-survey narrative responses. The researchers discovered significant growth of ELL CUs with a large effect size between the pre-service administrators' pre- and post-survey narrative responses. The growth in ELL CUs occurred as a result of the direct class instruction using ELL research-based best practices.

Keywords: accountability, English Language Learners (ELL), research based learning strategies, content knowledge, principal preparation, educational administration

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English Language Learners (ELLs) struggle in school if certain learning strategies and practices are not implemented in the classroom to help increase their English language development, as well as helping them acquire the content knowledge. In addition to the added pressure of acquiring a second language and learning the content material, these students are the most tested sub-population group in the current public education system. In Texas schools, students are required to be tested as they enter school to determine the level of English proficiency in order to determine program placement. ELL students are also expected to be assessed in the Texas English Language Proficiency Assessment System (TELPAS) in the acquisition of the English language proficiency level in various stages beginning in kindergarten through 12th grade to meet the mandates of the federal government. At the same time, they are tested on the content objective standards in order to meet the state requirements of the State of Texas Assessments of Academic Readiness (STAAR) assessment. It is imperative that current educators are well-equipped with effective strategies so ELLs can be successful in their academic development with the major requirements they must attain.

Research Foundation and Background

In November 2012, the Texas Education Agency (TEA) reported that there were 838,494 ELL students enrolled in Texas Public Schools, which was an increase of about 570,000 in the year 2000. Galicia and Vasquez (TEA, 2012) reported that there were over 120 languages spoken in the State of Texas and 90% were Spanish speakers. Other languages spoken in Texas public schools included Vietnamese, Arabic, Urdu, Korean, and Burmese (TEA, 2012). Since the ELL population is growing at a fast rate in Texas, it is important that educators are familiar with effective instructional approaches and strategies to help the students succeed academically.

Educational System Challenges in Providing ELLs with the Required Knowledge of Achievement

The United States Department of Education requires that states meet Adequate Yearly Progress (AYP) based upon increased percentages for all sub-population groups. TEA also requires an increase in standardized score percentages; therefore, if school districts do not meet the accountability measure, then dire consequences of losing title funding is implemented along with the accompanying negative publicity of placing districts under TEA improvement monitoring plans. As a result, schools districts are pressured to increase their test scores, and all students are pressured to perform well on tests.

According to Pandya (2011), those accountability pressures can lead to educators providing non-research based instruction and assessments to students with the following three main consequences: "(1) Test-oriented teaching; (2) The normalization of testing as learning in the classroom; and (3) Too many test scores but not enough information to help guide instruction and planning for ELL students" (p. 27). Panyda (2011) opined that educators and lawmakers should consider the "realities of testing, of learning English, and of teaching language arts all at the same time in order to understand the full range of pressure on teachers and students alike as a full set of complications that require attention" (p. 30).

According to Wolf, Herman, and Dietal (2010), the ELL population has doubled in 23 states; however, the ELL achievement remains among the lowest compared to all students. For

example, "on the 2009 National Assessment of Educational Progress, 72% of 8th grade ELL students scored below basic in mathematics compared to 26% of non-ELL students" (Wolfe et al., 2010, p. 1). As a result, the University of California in Los Angeles' (UCLA) National Center for Research on Evaluation, Standards, and Student Testing (CREST) has developed a list of recommendations for ELL education from a three-year research study funded by the United States Department of Education (Wolf et al., 2010). According to Wolf et al. (2010), one of the CREST recommendations included in the study mentioned that "pre-service teacher education and post-service professional development should expand and integrate ELL assessment and accommodations knowledge and strategies" (pp. 1-5). States will need to make some major adjustments to their educational approach to ELL instruction in order to close the achievement gap among the ELL student population in American schools, as well as "preparing teachers in the areas of knowledge of pedagogy, linguistics, and cultural and linguistic diversity" to avoid the hindrance of language acquisition from ELL students" (Pandya, 2011, p. 91).

Pre-Service Educators Instructional Strategies Preparation

According to Calderon, Slavin, and Sanchez (2011), there continues to be a lack of knowledge and training of effective research-based learning strategies for ELLs among educators in order to successfully address the students' educational needs. The lack of preparation for ELLs could result in "misconceptions" regarding the learning needs of second language learners (Goodwin & Hein, 2016). Baecher, Knoll, and Patti (2016) contended higher education leadership preparation programs had challenges focusing on special populations, like ELL, "due to the structural limitations of courses and departments in higher education and the requirements of state credentialing bodies" (p. 201). In a report indicating criteria for successful ELL second language learning, Samson and Collins (2012) discovered that preparation programs should integrate the ideas of "attending to oral language development, supporting academic language and encouraging teachers' cultural sensitivity to the background of their students" (p. 2). The authors contended that these areas should be incorporated and integrated into pre-service preparation programs, certification, evaluation, and in the development of all teachers in general (Samson & Collins, 2012). In a review of the teacher certification examinations from five states (California, Florida, Massachusetts, New York, and Texas), only California and Texas mentioned "content relevant to ELLs in their teacher requirements" (Samson & Collins, 2012, p. 13). According to the authors, there was specific mention of the oral language and cultural diversity of ELLs and some mention of the academic language learning (Samson & Collins, 2012).

Pandya (2011) stated that there were many research-based approaches that programs could use to help prepare ELLs academically, socially, and linguistically; however, from a survey result, this researcher discovered "only one-sixth of the responding programs required preparation for mainstream teachers about the teaching of English language learners" (p. 91). It was also discovered that many of the states did not require linguistic knowledge for their teaching programs; therefore, the overview of teaching language learners resulted in "course material about ELLs and multiculturalism in the broad strokes of survey courses" (Pandya, 2011, p. 91). The lack of in-depth knowledge could explain why many educators are having difficulty motivating and teaching research-based strategies to ELL students. ELL pedagogy is directed to the instructional needs of all students and should not be limited to social justice and multiculturalism curriculum found in most pre-service educators' preparation programs (Baecher, Knoll, & Patti, 2016).

Waxman and Tellez (2002) stated that it was "a critical need to develop a solid knowledge base of effective teaching, leadership, and policy for ELLs that focuses on alterable practices that improve students' academic achievement" (p. 5). The authors also contended that teacher preparation programs should be developed "with appropriate knowledge and training of effective instructional strategies" and that "school administrators should similarly recognize the dangers of existing instructional practices and encourage teachers to change (Waxman & Tellez, 2002, p. 28). At the annual Conference for Professors of Instructional Supervision, one discussant communicated that "supervisors should model best practice teaching to help develop teachers for instructional improvement" (L. Goldsberry, Educational Leadership panel lecture, October 19, 2018).

Research-Based Models of Instruction Tools Utilized for Lesson Delivery

Sheltered Instruction is an approach utilized to teaching ELLs that "delivers language-rich, grade-level content area instruction in English in a manner that is comprehensible to the learners" (Markos & Himmel, 2016, p. 1). There are several models of sheltered instruction; however, according to Seidlitz, Base, Lara, and Rodriguez (2014), the research-based Sheltered Instruction Observation Protocol (SIOP) model is the approach most commonly used in Texas to teach ELLs.

SIOP was "developed by Deborah Short and Jana Echevarria in 1999 in order to measure the quality of instructional delivery of sheltered practices in elementary and secondary classrooms" (Seidlitz et al., 2014, p. 86). SIOP is a "research-based and validated instructional model that has proven effective in addressing the needs of ELLs throughout the United States" (Center for Applied Linguistics, 2013, p. 1). The center claims that "research shows when teachers fully implement the SIOP model, ELLs academic performance improves" (Center for Applied Linguistics, 2013, p. 1). The SIOP model consists of eight interrelated components: lesson preparation, building background, comprehensible input, strategies, interaction, practice/application, lesson delivery, and review assessment (Center for Applied Linguistics, 2013). Each component is briefly described as follows (Center for Applied Linguistics, 2013):

Lesson Preparation. Content and language objectives must be clearly stated, displayed, and reviewed with students. Meaningful activities are integrated in lesson concepts with language practice opportunities.

Building Background. Concepts are explicitly linked to students' background experiences and teachers provide explicit links between past learning and new concepts being learned.

Comprehensible Input. Key vocabulary is emphasized and presented in a multisensory learning experience mode (see, say, write, act), and the speech used is appropriate for students' proficiency levels while providing clear explanations of academic tasks in simple language.

Strategies. Sheltered Instruction includes strategies such as cooperative learning, explicit targeted vocabulary development, slower speech with clear enunciation and fewer idiomatic expressions, text adaptations (such as graphic organizers, outlines, leveled study guides, highlighted texts, homework adaptations, taped texts, jigsaw text reading, marginal notes, and texts in students' first language) and supplementary materials (such as manipulatives, pictures, visuals, multimedia, and demonstrations).

Interaction. Discussion and interaction are practiced by using games, communication through technology, performing, acting, pair dialogue/pair-share opportunities, show and tell, and cooperative learning structures.

Practice/Application. Hands-on materials and manipulatives are used to practice the learning using the new content in context while providing activities that allow students to apply content and language together.

Lesson Delivery. Language skills and content objectives must be clearly supported by the lesson delivery consistently using scaffolding techniques to assist and support student understanding and retention through the use of paraphrasing, think-alouds, reinforce contextual definitions, providing correct pronunciation by repeating student responses, slowing down speech, increase pauses and speak in phrases.

Review Assessment. Wait time for student responses is provided and questions for students should promote higher order thinking skills (HOTS).

Research-Based Learning Strategies and Educational Approaches for Teaching ELL Students

Curriculum planning and the educational approaches to teaching ELLs must include identifying an orderly, logical approach to help emphasize the college readiness standards and supporting standards that are going to be tested, while at the same time, developing students' language and critical thinking skills.

Marzano, Pickering, and Pollock (2001) identified nine research-based strategies for increasing student achievement in their book entitled, *Classroom Instruction that Works*. The book presents and exemplifies instructional strategies that the authors extracted from a body of work conducted by researchers at Mid-continent Research for Education and Learning (McREL). The following nine strategies are based on effective best-practices for all learners as presented by Marzano et al. (2001):

Identifying similarities and differences. Students analyze and solve complex problems while comparing the similar and non-similar characteristics of specific items. ELL students can benefit from comparing, classifying, and creating metaphors and analogies in the form of Venn diagrams or charts to help develop the English language.

Summarizing and note-taking. Students identify the essential main ideas from reading material to help build comprehension by using a "set of rules for creating a summary" (Marzano et al., 2001, p. 32). Educators can have ELL students use this strategy to help them question unclear ideas and use predictions to help them identify future ideas and events in the text.

Reinforcing effort and providing recognition. Students are recognized for their effort in achievement and becoming aware of the importance in their effort to succeed. Educators can have ELL students maintain a weekly log to record their efforts and achievements in order to help shape their attitudes and beliefs in learning. Teachers personalize recognition and present awards for individual accomplishments to help build student motivation in learning.

Homework and practice. Research shows that students should be given the opportunity to practice their learning; however, the amount should vary by grade level and a purpose for the homework should be established. Speed and accuracy is also a key factor; therefore, educators could give students timed quizzes for homework and have students report on their speed and accuracy on related concepts being learned.

Nonlinguistic representations. Research shows that knowledge is stored in linguistic and visual forms. The "more educators use both systems of representation - linguistic and non-linguistic - the better students are able to think and recall knowledge" (Marzano et al., 2001, p. 73). Educators can give students the opportunity to use both forms in the classroom by

incorporating words and images using symbols to represent relationships and using physical models and physical movement to represent information.

Cooperative learning. Students are organized in cooperative groups to create a positive effect on the overall learning. ELL students can use their prior knowledge to help contribute learned skills within a group and help them achieve 'learning-positive interdependence, group processing, appropriate social skills, face-to-face interaction, and individual/group accountability" (Marzano et al., 2001, p. 85), which are the core components of cooperative learning.

Setting objectives and providing feedback. Students are provided with a direction for their learning, and they are provided with feedback regarding their learning. Educators can provide opportunities for ELL students to dictate what they know, what they would like to learn, what they have learned in the process. Formative and summative assessments can help guide student learning and provide teaching adjustments during the student learning process as needed for mastery (Zemelman, Daniels, & Hyde, 2012).

Generating and testing hypotheses. Research shows that using a general rule to make a prediction or using a deductive approach can help students generate questions and hypotheses about what may happen regarding various learning scenarios and projects. It can also help students build higher order thinking skills when they are asked to develop something using limited resources, or when they are asked to make predictions about a familiar system change using their personal background knowledge.

Cues, questions, and advanced organizers. Students can be exposed to information they are getting ready to learn by using cues, questions, and advanced organizers. These tools can help enhance the new learning by helping expose students to the new learning material.

Dong (2013) contended that educators can build on "using an ELLs student's native language and bridging ELLs prior knowledge with new learning tasks and actively engage students to create a rich learning environment" (p. 56).

Purpose of the Study and the Research Question

Administrators are instructional leaders at their respective campuses; therefore, it is important for administrators who are serving as instructional leaders to understand ELL needs and research-based teaching practices. Researchers sought to discover if using interactive online discussions concerning course content impacted new learning of the ELL content. One research question guided this study: To what extent does an online course focused on effective research-based learning strategies positively impact pre-service administrator's knowledge concerning instruction and management of English Language Learners?

Methods

Participants and ELL Content Knowledge

The participants in this study consisted of 23 educational leadership graduate students enrolled in an educational leadership online course at a central Texas university. The data were collected by the use of a pre- and post- narrative response survey (see Appendix A). A quantitative coding methodology system was developed and utilized for both pre- and post- narrative survey responses respectively in order to count the amount of content learned, or understood. The content unit (CU)

counting method provided the number of content units (CUs) per pre-service administrator's narrative response for pre- and post- surveys and is displayed as follows:

- Content Gain Score (+1) represented accurate knowledge as identified in the narrative response = 1 + CU.
- Content Loss Score (-1) represented inaccurate or false knowledge presented in narrative response = 1 – CU.
- Repeated Content Units (0 only counts once) produced the same correct information that was repeated in both pre- and post- narrative response surveys = 0 CU.
- Gain-loss content unit scores (+ and -) provided the difference between the sum of content gain scores and the sum of content loss scores.

This coding methodology allowed researchers to count the ELL content knowledge CUs prior to and after the class intervention experience. These frequency counts provided sum totals and represented the total ELL content knowledge presented from the pre- and post- narrative survey responses, respectively, by pre-service administrators.

Pre-Service Administrators ELL Online Content Learning Intervention Procedure

The instructor modeled the use of research-based strategies and its implementation in the classroom or school setting. For example, the instructor modeled formative assessment using pre-service administrators' responses on the pre-narrative survey concerning ELL content. Online class discussions regarding ELL content provided a means to communicate learning goals for the class with participants. The summative assessment for the online class was focused on the post-survey responses; thus, the instructor compared progress from pre- to post- narrative responses, a research-based best practice. This experience alone provided a model for pre-service administrators to follow when modeling research-based best practices with their future teachers.

The pre-service administrators were asked to review the ELL content, interact with the web links, and preview examples of various ELL strategy implementations relayed by a field expert, Mrs. Christy Burton (personal video communication, October 20, 2016), who is a Trainer of Trainers for SIOP and has also completed a Level I Audit Training through the Curriculum Management Improvement Model. The pre-service administrators summarized one ELL strategy and activity they had not used before from both the SIOP model and from the *Classroom Instruction that Works: Research-Based Strategies for Increasing Student Achievement* (Marzano et al., 2001) text. Participants shared implementation ideas for the ELL content and strategy selected. The focus of their writings described incorporation of the ELL content and ELL strategy in the classroom or school setting.

Data Analysis

Descriptive statistics were utilized which included ELL knowledge CU frequency counts and percentages gathered before and after pre-service administrators experience with the ELL, best practices content discussions and simulations. A paired *t-test* comparison was reported using pre- and post- CU means with related standard deviations. Normality was assessed for the pre- and post- CU score distributions by Shapiro-Wilk's testing. Researchers reviewed narratives and agreed on the content gain or loss score selections with 100% agreement before any data analyses.

Sample statements representing CU gains and losses were provided. Specific strategies identified from pre-service administrators' narrative responses were presented.

Results

CU Analysis of Pre-service Administrators' Narrative Responses

Pre-service administrators' prior knowledge narrative responses on the pre-survey of ELL knowledge provided a range from -2 to 26 ELL CUs while their post-survey narrative responses produced a range from 12 to 50 ELL CUs. The pre-service administrators gained 719 CUs from pre- (total = 198 or 27.5% CUs) and post- (total = 521 or 72.5% CUs) narrative response surveys, which represented a 45% (323 CUs) gain in ELL CUs from pre- to post- narrative responses (see Table 1).

Table 1
Content Units (CUs) of Pre- and Post-Surveys by Pre-Service Administrators (N=23)

Pre-Service Administrator	Pre-ELL Knowledge CUs	Post-ELL Knowledge CUs	CUs Difference (Post-Pre)	Total CUs (Pre+Post)
1	2	23	21	25
2	3	15	12	18
3	14	50	36	64
5	16	28	12	44
6	2	16	14	18
7	26	27	1	53
8	0	14	14	14
9	4	19	15	23
10	1	30	29	31
11	4	19	15	23
12	12	19	7	31
13	2	45	43	47
14	10	13	3	23
15	15	28	13	43
16	12	17	5	29
17	6	18	12	24

18	7	39	32	46
19	4	22	18	26
20	-2	13	15	11
21	17	12	-5	29
22	21	15	-6	36
23	14	22	8	36
24	8	17	9	25

Note. ELL = English Language Learners, CUs = Content Units. Pre-Service Administrator 4 was omitted due to non-participation.

Content Unit pre- and post- scores were normally distributed for pre-service administrators, as assessed by Shapiro-Wilk's testing ($p > .05$) (Shapiro & Wilk, 1965). Pre-service administrators' narrative responses produced lower ELL knowledge CUs on the pre-survey narrative ($M = 8.609$, $SD = 7.341$) as opposed to the post-survey narrative ($M = 22.65$, $SD = 10.24$) with a statistically significant mean increase of 14.04, (95% CI, 8.831 to 19.256, $t(22) = 5.587$, $p = .001$) which produced a large effect size $d = 1.165$ (Field, 2009; Rosenthal, 1994). The significant mean differences were noted with a notable large effect size (Winter, 2013) (see Table 2).

Table 2
Results of Pre- and Post-CUs ELL Knowledge Narrative Surveys from Pre-Service Administrators

	Before (pre)		After (post)		95% CI for Mean			
Narrative	*M*	*SD*	*M*	*SD*	Difference	*t*	*df*	*d*
CUs	8.61	7.2	22.65	10.7	8.831, 19.256	5.587**	22	1.165

** $p < .001$.
Note. N = 23, M = mean, SD = standard deviation, t = t-test statistic*, df* = degrees of freedom*, d* = Cohen's *d* effect size.

Statements and the Research-based Strategies Identified from Pre-Service Administrators' Narrative Responses

The following example represents a misunderstanding (CU loss) of ELL content and/or ELL research-based strategy. The Pre-service Administrator 20's pre-survey statement: *"Imagine that it (SIOP) is based on the researcher observing classrooms/student and analyzing the data."* Sheltered Instruction is an instructional model for teaching ELLs language acquisition. It is not a tool to observe and analyze classroom, instructional data.

The next statement is an example that represents understanding (CU gains) of ELL content and/or research-based strategy. The Pre-service Administrator 20's post-survey statement: *"The model is used to help students with the English language that includes lesson preparation,*

interaction, building background, practice and application, comprehensible input, lesson delivery, strategies and review and assessment."

This graduate class introduced many research-based best practices. From online discussions and online multimedia content presentations, future administrators were able to investigate and discuss ELL strategies, the application of these strategies, and ultimately the possible impact of the strategies on ELL students learning outcomes. Pre-service administrators' narrative responses provided researchers the means to determine pre-service administrators ELL content and ELL strategy utilization knowledge. The strategies identified and cited most by pre-service administrators after their online class experiences are listed below (see Table 3).

Table 3
Most Cited ELL Content and/or Research-Based Strategies from Post-Narrative Surveys by Pre-Service Administrators

Favored ELL research-based practices or content	Resource
Note-taking and summarizing	Students identify the essential main ideas from reading material to help build comprehension by using a "set of rules for creating a summary" (Marzano et al., 2011, p. 32; Echeverria et al., 2000)
3-2-1 Strategy	Evidence of Learning: Students summarize learning and think more deeply about the content by writing 3 things they learned, 2 examples that apply to the learning, and 1 question about the learning (Lead4ward, 2018)
Gradual Release Model	A modeling "I do it, you watch" technique where the teacher models and the students watch the demonstrated task working toward independent mastery (Zemelman et al., 2012).
Cooperative Learning: Think/Pair/Share	Strategies that "allow ELLs to talk with a peer, a small group, or the teacher as they participate in lessons and demonstrate their understanding of the concepts" (Markos & Himmel, 2016, p. 11); Echeverria et al., 2000).
SQP2RS	A strategy that assists students in reading expository text: Survey (Preview the text); Question (1 to 3 questions to answer using text); Predict (state 3 things that will be learned); Read (read the text);

	Respond (try to answer questions) and Summarize (summarize at the end of the text) (SIOP Model Resource Library, 2018; Rowlands, 2007; Echeverria et al., 2000).
GIST	Students interact with Generating Interactions between Schemata and Text strategy by reading and summarizing a section of a nonfiction text and underlining at least ten to fifteen words that appear to be important in the selected text. Students then generate a summary of the text by using the underlined words and repeat the strategy. The summary seeks to answer "who or what is it about?" and "What is most important about the who or what?" (Cecil, Gipe, & Merrill, 2017; Echeverria et al., 2000).
Objectives and Providing Feedback	Students are provided with a direction for their learning, and they are provided with feedback regarding their learning (Marzano et al., 2001; Echeverria et al., 2000).
Cooperative Learning: Think/Pair/Share/Write	Strategies provide students the ability to conceptualize topics and questions that guide their notes and idea representations to peers or group partners (Marrero-Colon, 2014; Echeverria et al., 2000).
Formative and Summative Assessments	Formative and summative assessments can help guide student learning and provide teaching adjustments during the student learning process as needed for mastery (Zemelman et al., 2012; Echeverria et al., 2000).
Reinforcing Effort and Providing Recognition	Students are recognized for their effort in achievement and become aware of the importance in their effort to succeed (Marzano et al., 2001; Echeverria et al., 2000).
Scaffolding	Academic scaffolding can be used "to activate kids' background knowledge to

	make explicit connections between new content and prior knowledge by repeating, reviewing, supporting and summarizing" (Zemelman et al., 2012, p. 158; Echeverria et al., 2000).
Sheltered Instruction	Sheltered Instruction is an approach utilized to teaching ELLs that "delivers language-rich, grade-level content area instruction in English in a manner that is comprehensible to the learners" (Markos & Himmel, 2016, p. 1).
Content Objectives	State content standards that state "the cognitive skills or knowledge that students are expected to acquire during a lesson and specify how students will demonstrate what they have learned" (Markos & Himmel, 2016, p. 3; Echeverria et al., 2000).
Language Objectives	Language Objectives 'articulates for learners the academic language functions and skills they need to master in a lesson in order to meet the grade-level content standards" (Echeverria, Short, & Vogt, 2012; Markos & Himmel, 2016, p. 4; Echeverria et al., 2000).

Note. The resources listed were used to discuss research-based strategies for engaging ELL students with content and learning.

After the pre-service administrators were provided with the strategy content material, many communicated these strategies could be utilized with non-ELLs that struggled with academic and language/vocabulary development because they are considered research-based best instructional practices. Some pre-service administrators also communicated ways in which they could use the best practice strategies in their professional development presentations as a way to model the strategies to the teachers.

Implications

Administrators are the curriculum leaders of their schools. Increasingly, ELL curriculum and its implementation are important factors in meeting the needs of students with limited English skills and experience. Administrators' awareness of ELL curriculum also aligns with research-based instructional practices that educators are encouraged to apply in increasingly diverse teaching settings. Pre-service administrators' knowledge and use of ELL curricular content are imperative educational components for professionals seeking administration careers with public schools.

Administrators need to understand the language, terminology, and critical research-based strategies to have meaningful discussions with their future teachers who work with ELLs.

The results of this study demonstrated that the educators were provided with methods and research-based strategies needed to assist ELL students with successful second language learning experiences. In addition, these methods and strategies serve as instruments to build success with high-stakes testing and motivation in learning as we know it. At the same time, these methods and strategies can be used with all learners who have a tendency to struggle in school due to a lack of educational opportunity as a result of their low socio-economic status and/or lack of educational background.

Conclusions

Pre-service administrators significantly improved the number of ELL knowledge CUs gained, an average gain of 14.04 CUs. As a result, pre-service administrators' participation in this online course proved advantageous for gaining new ELL content knowledge and research-based strategies for ELL student learning. Most pre-service administrators come to class with some ELL content prior-knowledge, but the direct experience with ELL content is needed to gain new, critical ELL content knowledge and skills. In conclusion, it was consistently observed that direct online-instruction utilizing ELL content increased the pre-service administrators' knowledge and understanding of the ELL content. Direct experience is central to the meaningful learning of new content and skills (Zemelman et al., 2012). University instructors modeling of research-based best practices provided the pre-service administrators in this study the experience they will subsequently provide their future teachers. Administrators' content knowledge regarding the learning and instructional needs of ELLs is an imperative prerequisite for providing teachers with examples and resources to encourage research-based ELL teaching practices. Policies governing administrator preparation programs in education may need to include a renewed emphasis on ELL curriculum. After all, K-12 administrators are the instructional leaders on their respective campuses, and they set the examples by modeling high quality teaching for their respective teachers (Crave, Elliott, Russell, & Swan, 2018).

Limitations and Future Research

This study only represented a small number of pre-service administrators enrolled in one online graduate class from a university in north central Texas. Future studies could include additional classes and/or professional development that focus on serving the instructional needs of ELLs. Longitudinal studies following administrators who have participated in higher education course work or professional development regarding ELLs instructional needs could be initiated to determine the impact of higher educational course work.

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Appendix A

Pre- and Post- Survey Questionnaire

Study I.D. #_____ Where did you receive your undergraduate degree? _____

1. What is Sheltered Instructional Observation Protocol (SIOP) and on what research findings is it based?

2. What are some Sheltered Instruction learning strategies?

3. What are the SIOP components or features?

4. What are the essential SIOP lesson plan components?

5. Identify some research-based learning strategies that can be implemented that help develop English Language Learners language development and academic achievement.