Universal ESL Scaffolding for the K-12 Teacher: A Literature Review

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Abstract

This review of the literature analyzes scaffolding as it relates to best practices in the English as a second language (ESL) classroom, grades K-12. As defined by many professional educators, instructional scaffolding is temporary support provided to students on an individual basis based on their needs. Despite the ever-increasing population of ESL students in K-12 classrooms, the ESL instructional approach lacks consistency from country to country, state to state, and classroom to classroom. There is a wealth of research on ESL instructional techniques, but a lack of studies on the impact of various approaches to instructional scaffolding. The articles in question address instructional scaffolding in different ways for different grade levels spanning K-12. Did one prevail as a potential universal scaffold? How might we, as educators, stop reinventing the wheel and rely on a sound methodology? Studies on scaffolding as it relates specifically to ESL students’ comprehension is limited. These findings have important implications for the practices of current and future ESL teachers.

Keywords: English as a second language; ESL; Literacy; Scaffolding; Students K-12.

1. Introduction

Speaking two languages is a unique ability that does not come easily. Some people are born into a family where they learn two languages and become bilingual, others study for years to become bilingual, and some learn as a means of survival. Whatever the case, bilingualism proves to be a beneficial skill in today’s society. Bilingual benefits are evident in the pay rate differences between monolingual and bilingual individuals; “DISD offers $3,000 stipends for bilingual teachers and has taken other measures to lure them” (Hobbs, 2003, p. 1), to just simply navigating various daily life communication encounters. Enter the English as a second language student, who did not sign up for any addition to their native tongue and attends school due to compulsion.

The purpose of this review is to explore effective instructional scaffolding practices as they relate and apply to the increasing ESL student population in grades K-12, with literacy being the goal. This review intentionally aims at the efficacy of instructional practice and not a specific population as ESL students come from many backgrounds. Table 1 contains definitions related to the keywords used throughout this review. Galvan and Galvan (2017) state, “A table of definitions can be helpful if there are diverse definitions of a given variable” (p. 89). The definitions provide the meaning of the terms used in this review of peer-reviewed literature.

| Term | Definition |
|------|------------|
| English as a second language (ESL) | “In this environment, the main aim of ESL curricula, pedagogies and learning resources such as textbooks is to develop students’ overall English language competencies in listening, speaking, reading, and writing” (Gunawardena et al., 2017, p. 280). |
| interactional scaffolds | “The context of these teachers’ instruction—classroom composition, school materials, and opportunities for support and growth—mediated whether they would and could enact effective practices” (Johnson, 2019, p. 109). |
| literacy | “In terms of content knowledge, reading literacy is itself a complex cognitive-linguistic phenomenon that is embedded in social values and practice” (Pretorius and Klapwijk, 2016, p. 2). |
| planned scaffolds | “… scaffolds … viewed as providing comprehensible input, opportunities for language production and interaction, and support for reading development” (Johnson, 2019, p. 109). |
| scaffolding | “Is used to explain how teachers can mediate learning through reducing learner frustration, helping learners understand the task through demonstrating and chunking it, and maintaining learners’ interest in the task (Donato, 1994; Wood et al., 1976)” (Daniel et al., 2019, p. 5). “Provides entry points to challenging work and approximates larger tasks, parsing them into manageable pieces” (Oliveira and Athanases, 2017, p. 123). |
1.2. Positionality

This literature review presents effective and non-effective scaffolds used in ESL classrooms in grades K-12. The position taken by the reviewer is that literacy scaffolding for ESL students can be made standard, or universal, in grades K-12. ESL instruction has been an area of interest for the lead author since studying ESL in 2010 as an undergraduate education major. However, English instruction for youth became an area of increasing concern when the lead author worked as a lead dispatcher for the Fort Worth Police Department, Texas, from 2011 to 2016. My experiences as an emergency dispatcher, where communication is critical, revealed to me how important language acquisition truly is, not only in school settings but in life. Need help connecting to this sentiment? Imagine needing a translator on your worst day.

- Example: A lady calls in needing help or “ambulancia.” As a non-Spanish speaking dispatcher, often you are lucky just to get a correct address. The ambulance crew responding has no idea what the problem is, which is often critical in an emergency, not to mention sometimes dangerous; is the call for a heart attack or a stabbing?
- Example: A person calls in, and in the excitement and with language differences, the dispatcher believes the caller said “fire.” The fire department is dispatched, and they arrive to a large “fight” in progress. Extra time is lost, and fireman are in danger as the police are then called.
- Example: Though you may know a few similar key terms in Spanish, imagine an individual calling 911 that does not speak a language utilizing the Latin alphabet or an alphabet at all. As a 911 call taker or dispatcher, you “the emergency expert” are now having to connect the call to the language line for help amid, [insert any life-changing event], wasting precious time.

The motto FWPD communications follow is “saving lives when seconds count.” What about when you do not have them? Samuels and Farstrup (2011) summarize one’s understanding “if you have no idea what those words mean, your language comprehension is zero—and your reading comprehension will also be zero (because the product of zero and any number is zero)” (p. 187). It is high time we began talking about how we can aid in the transfer of language effectively, as communication is an imperative part of life.

2. Literature Review Methodology

While an individual conducted this review, safeguards were in place to ensure the validity of findings, including recursive peer and mentor feedback. The study was non-experimental, “one in which participants traits are measured without attempting to change them” (Galvan and Galvan, 2017, p. 67). However, a peer-review process was utilized in the revising and editing phases for this literature review.

Table 2 summarizes the searches performed and the results obtained using the WorldCat database. As per Galvan and Galvan (2017), “It is important to note that WorldCat searches a virtual database consisting of the catalogues of about 72,000 libraries in 170 countries and territories that participate in the Online Computer Library Center (OCLC) global cooperative” (p. 20).

This review aims to identify universal scaffolding practices. It is important to note the terms initially used in the audit trail targeted the Spanish-speaking ESL population; for example, bilingual Spanish and Spanish speaking. Articles that targeted this population are important to the review as Hispanics have been deemed the largest minority in the United States, making up 18.3% of current census demographics (U.S. Census Bureau, 2020). Comprehension was searched using the term reading comprehension consistently paired with the Boolean operator “AND” along with another phrase such as bilingual Spanish or ESL students. Overall, the descriptors used were a combination of the following phrases: bilingual Spanish, reading comprehension, ESL students, ESL scaffolding, Spanish speaking, reading instructions, ESL teacher, bilingual teacher, literacy techniques, and proven ESL scaffolding techniques. 225 articles were located based on the keywords and Boolean operators. Articles deemed relevant had one or more of the search terms in the title and were not linked to a specific grade-level. Narrowing the results consisted of eliminating returns that were based on Spanish reading comprehension, targeted specific grade-levels, or were written in a language other than English. Once complete, the pool was narrowed to six studies, which, through reading and analyzing the purpose of each article, determined whether they targeted the purpose of the review.

| Database | Dates Reviewed | Search Terms | Sources Located | Relevant Sources |
|----------|----------------|--------------|-----------------|-----------------|
| WorldCat | 2014-Jan. 2020 | “bilingual Spanish” AND “reading comprehension” | 51 | 0 |
| WorldCat | 2014-Jan. 2020 | “reading comprehension” AND “ESL students” | 10 | 0 |
| WorldCat | 2014-Jan. 2020 | “ESL scaffolding” | 125 | 2 |
| WorldCat | 2014-Jan. 2020 | “Spanish speaking” OR “bilingual” AND “reading instruction” | 22 | 1 |
| WorldCat | 2014-Jan. 2020 | “ESL teacher” OR “bilingual teacher” AND “literacy instruction” | 12 | 2 |
| WorldCat | 2014-Jan. 2020 | “proven ESL scaffolding techniques” | 5 | 1 |
2.1. Analysis

The analysis of methodology (seen in Table 3) presents an overview of the research approaches explored through this review. Articles chosen for this review were mostly qualitative, interview-based research with results sections presented in a narrative describing themes and trends—often accompanied by quotations from the participants (Galvan and Galvan, 2017). However, there is one quantitative and one mixed-method article included. Participants and findings for each of the articles reviewed are identified in Table 3. It is important to note the sampling for participants were either purposive or convenience-based as it relates to the method of data retrieval. "Purposive samples are selected based on the careful judgment of the researchers regarding the types of individuals they consider to be especially good sources of data for a particular research topic" (Galvan and Galvan, 2017, p. 82); whereas, samples of convenience participants are selected based on whether “they are readily available” (p. 83).

| Authors and Publication Year | Participants | Detailed Methodology | Findings |
|------------------------------|--------------|----------------------|----------|
| **Daniel et al., (2016)**   | 6 university-based researchers from Maryland and Vanderbilt universities. 8 elementary school teachers that consisted of fourth-grade and kindergarten teachers and fourth-grade and kindergarten bilingual students and teacher from an undisclosed location | Qualitative: Data gathered from a co-created program developed in tandem with teachers to form a study group, student interactions through ethnographic video-recorded interactions. Additionally, field notes, teacher interviews, video recordings, and surveys were all used in the data collection process (p. 401). | The findings, in this instance, were two-fold. “Despite the teachers’ expertise of their students and researchers’ knowledge of current scholarship on scaffolding literacy for EBs, our well-intentioned scaffolds inadvertently limited students’ opportunities for collaborative meaning-making” (p. 403). |
| **Daniel et al., (2019)**   | 2 second-grade teachers served as focal participants along with 2 third-grade teachers; all from a southeastern metropolitan area of the United States | Qualitative: Data included videos of summer workshops, videos of teacher implementation over 6 weeks, recordings of post implementation, and teacher interviews (p. 6). | “Three important themes across the two teachers that demonstrated how they planned and implemented scaffolds to support students in engaging in translanguage: (a) teachers drew from their rich knowledge base to figure out how to scaffold for their learners, (b) teachers implemented scaffolding that drew from learners’ rich experiences to reveal for learners how their translanguage skills can benefit them in school, (c) teachers scaffolded writing activities for learners that helped them write across their languages through transliteration and the use of other strategies, such as borrowing words from one language in another” (p. 6). |
| **Gunawardena et al. (2017)** | 20 veteran ESL certified teachers from Sri Lanka | Qualitative study that combined the transcribed interviews of 20 veteran teachers. | “Teachers consistently believed that teaching thinking is their responsibility, but they saw thinking as a deficit in current competency-based education system where students are taught knowledge and to do things” (p. 282). “Limited vocabulary seems to obstruct their [students] thinking which results in boredom and despair” (p. 283). |
| **Johnson (2019)** | 6 middle school teachers from 4 low-performing, Title 1 schools in California | Qualitative research included video recording of teachers, interviews with teachers, and transcription of instruction. | “The wide variety of scaffolds used shows that teachers had many tools to choose from to support reading and second language development, though they relied on interactional scaffolds more often than planned scaffolds; ‘most used’ interactional scaffolds were present in 38%–99% of segments, whereas ‘most used’ planned scaffolds were evident in only 20%–48%” (p. 119). |
| **Oliveira and Athanases (2017)** | 2 novice teachers and 1 seasoned teacher, and their respective classes in California | Qualitative data included teacher implementation of structured scaffolds, documentations of achievement that is there, and questioning beneath the surface level listening for answers that have made a conceptual connection. Quantitative data is | “Scaffolding is an instructional practice not readily resolved, finalized, or routinized. Instead, scaffolding persists as an ongoing concern, where thoughtful teachers continually learn about and assess diverse students’ diverse levels and forms of readiness for learning activities” (pp. 127-128). |
Scaffolding as an instructional tool can be quite beneficial to both the teacher and student if used properly. “Determining how to scaffold literacy tasks for emergent bilingual (EB) students (or English language learners Garcia, 2009) to facilitate their access to and engagement with complex texts has challenged English language arts teachers for decades” (Daniel et al., 2016, p. 394). Teachers, in this instance, need to know when and how to utilize scaffolding to maximize the learner’s ability to comprehend. Of the articles evaluated, teacher knowledge of literacy, literacy instruction, and peer interaction was evident as trends in the research of scaffolding ESL students, both positive and negative. It is important to note that reading competencies are transferable skills that do not change with the language; thus, good readers apply this skillset universally.

### 3.1. Teacher Individual Knowledge of Literacy

The knowledge related to teachers’ understanding of the English language came into question throughout each study. One such comment regarding individual competency in the area of literacy in the Pretorius and Klapwijk (2016) study follows, “It is intriguing to note how 100% of the Special School teachers report high reading enjoyment and yet modestly regarded themselves as average readers” (p. 10). This finding was eye-opening as the review sought to understand the achievement gaps amongst students from three South African provinces. Enjoyment typically correlates to someone engaging in an activity more; therefore, their ability to perform the activity or task would show improvement over time instead of remaining at a constant.

### 3.2. Teacher Instructional Expertise

The knowledge related to teachers’ understanding of the English language affected their knowledge of how to best transfer language. “Regardless of where and how teachers attain knowledge, it affects every aspect of teaching (Connelly et al., 1997)” (Johnson, 2019, p. 112). Daniel et al. (2016) explain, “In teacher-led, whole-class literacy activities, teachers have been cautioned against ‘providing so much … information that students are simply filling in the blanks’” (Valencia & Wixson, 2013, in Daniel et al., 2016, p. 394). The cautioning, in this instance, speaks to the teachers lacking understanding as it relates to the construction of language. Students are required to be active participants in the construction of their learning, allowing the cognitive load placement on the student rather than the teacher. Teachers also cautioned against under-scaffolding students by giving them questions resulting in yes or no responses. “Teachers also need to scaffold students thinking to enhance higher-order thinking (Chamot, 1995)” in Gunawardena et al., 2017, p. 281).

### 3.3. Peer Interaction

Student to student interaction was another theme that emerged as a part of the review process. As explained by Vygotsky (1994), Sociocultural Theory has “construed the development of human functioning not as innate abilities to automatically grow up when exposed to the environment but as dynamic potentials amenable to change which develop as a result of interaction with the social world in a microgenetic atmosphere” (Vygotsky, 1994, in Shabani and Hui, 2016, p. 2). Simply put, learning takes shape through individuals relying on influential and meaningful interactions with others. Peer interaction is evident through planned partnering activities in Johnson’s (2019) study of language acquisition for emergent bilingual students. Daniel et al. (2016) highlight the value of peer-to-peer discussions and a menu of scaffolding moves as instructional supports for ESL learners (pp. 409–410). It is important to realize the impact of socialization on student learning and provide ample opportunities for meaningful interaction to occur.

### 4. Discussion

As we move further into the discussion of universal ESL scaffolds, it is important to note methodological strengths and any weaknesses or gaps found in each of the studies. Table 4 presents the strengths, weaknesses, and gaps found amongst the reviewed articles. Strengths are identified through the methodology used to gather research, the structure of the text, and detailed examples throughout the text (Galvan and Galvan, 2017, p. 58). Weaknesses
are defined as insufficient and inconsistent methods of data retrieval (p. 59). Finally, gaps noted in the articles below are areas where conducting more research will provide a clearer picture.

Table 4. Strengths, Weaknesses, and Gaps

| Authors and Publication Year | Strengths                                                                 | Gaps/Weakness                                                                                     |
|------------------------------|---------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Daniel et al. (2016)         | The review consisted of empirical research that was adjusted and refined through the practice of scaffolding as a teaching method. | Gaps in their review included an absence of full explanations of teacher ability and backgrounds as it related to teaching ESL students. In an account of the context in which the research was conducted, the teacher participants were only mentioned as a group of “eight elementary school teachers” (p. 399). |
| Daniel et al. (2019)         | Highlighting the reasoning behind LOTES (Languages other than English) attempts in masking their native tongue. “In English-only settings, however, multilingual students too often feel that their multilingual skills are relegated to the margins of schools and that the use of LOTES is subversive” (Gutiérrez et al., 1995)” (p. 2). | A weakness exhibited in the article is a lack of an explicit definition of translanguaging, the central medium of scaffolding argued as a best practice in the classroom. |
| Pretorius and Klapwijk (2016) | The researchers used a purposive sampling of individuals to conduct their research. Purposive sampling is especially important when evaluating the quality of the results ascertained from the participants (Galvan and Galvan, 2017). | The article does not take the student perspective into account, thereby weakening the overall strength of the review. |
| Gunawardena et al. (2017)    | The article does an exceptional job of explaining and synthesizing the challenges faced by teachers of ESL students and ESL students alike in the classroom. | A weak area to be noted is the need for a more in-depth look at the processes surrounding requirements for teacher instruction for results to be analyzed. |
| Johnson (2019)               | Information is summarized in tables using a clear and concise format for each structure. | Though data is provided via tables on scaffolds used most often, insight into how effective the techniques selected would become would give a more persuasive argument for the use of said scaffolds. |
| Oliveira and Athanases (2017)| Detailed information on what scaffolding looks like in a non-linguistically diverse classroom, before giving any reasoning on why these practices may need to adapt for linguistically diverse learners is provided in this article. | “Others (e.g., Delpit, 1988) have described how some educators, particularly white monolingual teachers, often see youths of color and emergent bilinguals in ways that assume deficiencies and underestimate potential” (p. 125). A weakness in this study is the lack of an example of deficient thinking to support the quote used within the text. |

5. Implications and Conclusions

Based on the information in the review, the strongest scaffold that can be applied universally to grades K-12 is teacher knowledge. “Irrespective of the debates around theories of changes in the educational context, it is strongly recommended that teachers be made aware of and given training in frameworks that specifically target explicit comprehension and instruction and modeling” (Pretorius and Klapwijk, 2016, p. 16). Pretorius and Klapwijk (2016) further support their claim by naming example frameworks focusing on reading comprehension and instruction such as Reciprocal Teaching, Concept-oriented Reading Instruction, Transactional Strategy Instruction, and Four-pronged Comprehension.

Johnson (2019) reminds us, as educators, that there is a wide variety of scaffolds to choose from, though teachers tend to rely on certain ones, begging the question of how many are necessary? Answering the question may be a way to educate teachers K-12 in a way that achieves success in ESL classrooms. As students become familiar with processes that work and can grow with said processes, there is no need to reinvent the wheel. Success through universal scaffolding would further validate that all students can achieve to their highest ability academically and beyond, given proper instruction.

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