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Effective Differentiation Strategies For Engaging English Language Learners In The General Education Classroom: An Implementation Study

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EFFECTIVE DIFFERENTIATION STRATEGIES FOR ENGAGING ENGLISH LANGUAGE LEARNERS IN THE GENERAL EDUCATION CLASSROOM: AN IMPLEMENTATION STUDY

by

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Renee Ullom
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ABSTRACT

Because of the growing population of English Language Learners (ELL) (U.S. Department of Education, 2020) and lack of time, training, and resources for teachers, there is an intense need for identification of effective differentiation strategies for teachers to implement in the general education classroom, which allows ELL students to engage in grade-level curriculum while acquiring English.

This mixed methods research study examines who ELL students are, barriers to success faced by ELL students, barriers to teachers when planning and delivering curriculum in the general education classroom. The investigation additionally explores the identification and implementation of effective differentiation strategies for ELL students and contributes to the research on effective use of differentiated strategies for ELL students.

Results from the research quantitative survey identified four specific differentiation strategies that were effective within the respondents' practice: (1) providing comprehensible input; (2) activating prior knowledge/building background knowledge; (3) explicit vocabulary instruction; and, (4) use of graphic organizers. The identified strategies were then incorporated into a Professional Learning Community (PLC) with respondents completing four qualitative surveys to report ELL engagement resulting from each strategy. Results showed that although implementation of the strategies increased ELL engagement, lower English Language Development (ELD) level students showed more benefit. Additionally, through triangulation of the qualitative data, it was determined that the implemented strategies provide more ELL engagement in grade level curriculum when used in tandem, rather than in isolation.

INTRODUCTION

As the demographics of the United States continues to change, the importance of addressing the needs of English Language Learners continues to grow (Samson & Collins, 2012). Teachers are asked to plan lessons that include multiple levels of differentiation in an attempt to reach all levels of students within their classroom. These diverse students range from special education, gifted and general education students, to ELL students who may not speak any English and possibly have never attended school (Salva & Matis, 2017). Some teachers may have received specialized training in ELL instruction in their pre-service curriculum. Other teachers may have attended required professional development or endorsement classes addressing ELL instruction and strategies. Many other teachers have had little to no training and are at a loss when trying to provide appropriate instruction for students who are not proficient speakers of English (Gandara & Hopkins, 2010).

The data are clear. Our ELL population is growing and there is no reason to believe that this trend will subside (*50-State Comparison*, 2020), yet teachers are struggling with how to actively engage ELLs in grade level curriculum. In stark contrast, differentiated strategies to support ELLs abound; yet the amount of time it takes to research, plan and implement the strategies is limited, at best (Wissink & Starks, 2019). As a teacher of English Language Learners, I have watched general education teachers struggle with providing differentiated instruction and watched ELL students sit disengaged in a classroom where they have no idea what is happening. I have also seen teachers who know how to break things down into smaller comprehensible chunks by providing such supports as graphic organizers, pictures and using

strategies such as slowing speech and using hand gestures. Providing teachers support by narrowing down strategies to more manageable options that have been deemed effective could open the door for our ELL students to engage in grade level curriculum while they are acquiring English.

This study was developed to determine the strategies general education teachers of ELL students have deemed effective and how ELL students are able to engage in grade level curriculum while using these strategies. Finally, support in the means of pre-service teacher training/in-service professional development is provided for further implementation of the identified strategies.

ARTIFACT 1

Problem Overview

Nationwide, the population of English Language Learners (ELL) continues to grow. Data from the Office of English Language Acquisition show that the percentage of ELL students enrolled in United States schools rose by 1.9 percentage points between school year 2000-2001 and school year 2016-2017 (U.S. Department of Education, 2020). This increase reflects a total of 3,793,764 ELLs enrolled in public schools in kindergarten through grade twelve in the 50 states and District of Columbia, which is 9.6% of our total student population (U.S. Department of Education, 2020). The Executive summary from the National Center for Education Statistics (2020) indicates that in 2017 the percentage of ELL students was 10 percent or more of the total student population in more than 10 states, mostly located in the West. Nevada, Texas, and California showed the greatest ELL population, ranging from 19 to 17 percent respectively. Twenty-one states had percentages of 6 percent or higher, but less than 10 percent, and only five states had less than a 3 percent ELL population (English Language Learners in Public Schools, 2020). From 1995 to 2000 the United States ELL population grew by 56%, in sharp contrast to the overall student population, which grew by only 2.6% (Samson & Collins, 2012). Although ELL students reflect nearly 10% of our nation's student population, our educational system remains ill-equipped to handle the ever-increasing needs of this diverse group of students (Coady et al., 2016). When examining this ELL data through the lens of the general education classroom, one must consider whether teachers are adequately prepared to teach these diverse learners. The inclusion of ELLs in content area classes engenders multiple complexities requiring

linguistically, socio-culturally, and developmentally appropriate instructional decision-making and accommodations (Polat, 2010).

The federal government requires school districts to provide professional development for school personnel who work with English Language Learners, but according to the Education Commission of the United States (50-State Comparison, 2020) only 28 states require specific qualifications, or pre-service/in-service training and professional development for general education teachers in statute or regulation. Gandara and Hopkins (2010) explain that this leaves many educators at a loss when required to deliver lessons suitable to reach the significantly diversified levels of these students ranging from students with no English language ability through students who may sound proficient, yet still struggle with academic language. When planning for ELL students, special considerations must be taken into account, such as language acquisition levels, available curriculum, and the model of classroom in which the instruction is being delivered (Gandara & Hopkins, 2010). Additionally, Gandara and Hopkins (2010) point out that essentially the amount of work for the teacher is doubled when ELL students are immersed in a general education classroom. For example, the instructor must provide specific content material based on the curriculum and language accommodations for students who are not English proficient while still differentiating instruction for general education students (Von Esch & Kavanagh, 2018). As an added obstacle, ELL teachers are more likely than other teachers to report that they do not have adequate school facilities or educational materials, which only adds to the difficulty of their job (Gandara & Hopkins, 2010).

Because of the growing population of English Language Learners (Samson & Collins, 2012) and lack of time, training, and resources, there is an intense need for identification of effective differentiation strategies for teachers to implement in general education classrooms that

allow ELL students to engage in grade-level curriculum while acquiring English. The purpose of this overview is to identify and conceptualize key concepts related to the research problem being investigated, define the purpose of the study, state the research questions, and define important terms used to lay the foundation for this dissertation in practice.

Who Are English Language Learners?

It is important to begin by defining who is classified as an ELL student, as the designation carries broad connotations. Otherwise known as Limited English Proficient (LEP), English as a Second Language Students (ESOL or ESL) (Gupta, 2019), or currently under the Every Student Succeeds Act (ESSA) as simply English Learners (EL) (Ferguson, 2016). For the purpose of this study, the term ELL will be used to refer to these learners.

ELL students are children from homes where English is not the predominant language and are identified when they enter school (Villegas & Pompa, 2020). Parents complete a home language survey that determines who should be assessed for English proficiency. These language assessments measure the speaking and listening skills for kindergarten and first grade, with the addition of reading and writing for second grade and up (Garcia et al., 2008). Children who score below proficiency, determined by individual states, are entitled to appropriate services until they show English proficiency as determined by yearly progress monitoring assessments (Samson & Collins, 2012). It may be widely perceived that students identified as ELL are foreign-born immigrants, but the data prove otherwise. The research of Garcia, et al. (2008) estimate that nearly two-thirds of ELL students are U.S. born children of immigrants, refugees, Native Americans, Alaskan Natives and U.S. Latinos.

Identifying Barriers for ELL Students

Unfortunately, ELL students often enter school with a deficit label as they are declared non-proficient because of the lack of English proficiency from the day they are identified as ELL (Parsi, 2016). But this is only scratching the surface when we begin to examine the barriers faced by ELL students and those who are designated to provide them with a formal education. As a specialized teacher of English Language Learners, I struggle with differentiating instruction to reach each of these students individually. Yet, Von Esch and Kavanaugh (2018) remind us that general education classrooms include teaching an even more diverse population, including students with disabilities, special needs, and gifted designations. Managing this mix of students is not uncommon, it is, in fact, expected in today's public education setting (West & West, 2016). Therefore, it is important that educators recognize and address the specialized needs of all students to best support their learning (Von Esch & Kavanagh, 2018). Although each student carries the burden of their individual struggles, there are some issues that often plague the ELL population.

From the moment an English Language Learner is identified in the U.S. school system, the path to a successful academic career seems daunting. ELL students must gain a second language while also maintaining pace with their English-speaking peers academically (Von Esch & Kavanagh, 2018). The research of Kibler and Valdés (2016) points out that as early as the 1910s researchers have tried to categorize or conceptualize English learners based on their aptitude or abilities. Yet the determination of these categories was questionable at best, often by proficiency assessments, which vaguely correlated with language acquisition, leaving ELL students receiving services that were not appropriate for their true intellectual ability. Blaise (2018) reminds us that further compounding the struggle toward academic success are the

government policies that apply to ELL students and the grade-level proficiency requirements that these policies impede. This includes high stakes testing, which does not address language barriers, yet creates unreasonable thresholds that often determine promotion and graduation. DeCapua and Marshall (2011) add that consideration must be given to foreign-born students who have little to no former schooling before arriving in the United States, often encountering "an educational system that demands knowledge and skills never contemplated or necessary before immigrating" (p.35). The following sections highlight some of the most significant barriers for ELL students and the importance of recognizing the effects that these barriers may impose on academic progress. In turn, focusing on these significant obstacles will lay the foundation for my research to identify specific differentiation strategies to support general education teachers of ELL students.

Language acquisition and academics

The dichotomy of acquiring a new language and the expectation of meeting grade level requirements while doing so must be specifically addressed. According to Blaise (2018), when ELL students enroll in the U.S. school system beyond the age of five, they may be subject to inaccurate grade level placement. States vary in their grade placement policies regarding new ELL students. Many states require placement by age, not academic level, when there is no official academic record available, regardless of the student's linguistic ability. Blaise (2018) contends that this placement often puts ELL students in a position where they begin academically behind, or struggle to maintain academic proficiency because of language demands, thereby creating dismal results. Yaffe (2017) maintains that the urgency of addressing both academic and language demands concurrently is emphasized by the data that indicates less

than 63% of ELLs graduate from high school in four years, a rate more than 20 percentage points below the national average.

Another consideration that must be considered is culture and family discourse. Although one might consider culture insignificant in the realm of schooling, cultural differences can affect both language acquisition and academic learning. DeCapua and Marshall's (2011) study closely examined the disconnect in Western-style schooling and the pragmatic cultures from which many ELLs originate. The shift from a collectivistic culture, where people see themselves as part of a group, to the Western individualistic culture is often confusing for many students to navigate. These discrepancies can cause a mismatch between home and school, termed *cultural dissonance* (DeCapua & Marshall, 2011), which can create emotional reactions such as isolation, inadequacy, and disengagement, and in turn, exacerbate the already monumental task of language acquisition coupled with academic achievement. Unfortunately, this same academic achievement does not end in the classroom, as ELLs also must endure the pressure of state and nationally mandated testing (Mitchell, 2015).

Standardized Testing

Significant barriers to academic success are also created through standardized testing for ELLs. The research of Delli Carpini et al. (2010) indicate that, on average, it takes five to seven years for an individual to reach academic language proficiency when learning a new language, yet ELLs are expected to "acquire academic language proficiency during their first year in the United States at a rate that mirrors the fast-moving, high tech, multimodal society they live in" (p. 93). Mitchell (2015) adds that subsequently, ELLs are required to prove their academic language proficiency in the same short amount of time. He explains that accountability testing may look different in each state, but ultimately it affects ELL students similarly. In an article

addressing testing, Mitchell (2018) stated that in 2015 Libia Gil, then head of the Department of Education Office of English-language acquisition, called for a lessening of required testing for ELLs. In addition to state mandated testing, end of course exams, progress monitoring and class exams, ELLs are also tested yearly for English proficiency. All of these tests are administered in English with few testing accommodations. Yet, the National Education Association (2015) reports that in 2020 a national framework to fairly test ELLs is still to be designed, thereby creating an achievement gap, or better termed an opportunity gap, that continues to widen.

Students with Limited or Interrupted Formal Education

The subclassification of ELL students with limited or interrupted formal education (SLIFE) is also important to address, as the specific needs of these students add an additional layer of encountered difficulties (Salva & Matis, 2017). DeCapua and Marshall (2011) report that regardless of their country of origin, the common factor of SLIFE students is that they have limited or no native language literacy, and limited or no formal schooling. Hickey (2015) adds that this circumstance most commonly occurs when the student has come from an area of armed conflict, has been displaced as a refugee or has lived in a rural area with limited facilities or high fees for education.

It is important to return to the examination of culture when considering the barriers that SLIFE students encounter. In their research study, DeCapua and Marshall (2010) delve deeply into Low Context (LC) and High Context (HC) cultures. They examine the difference between the LC cultures, which emphasize the importance of time, planning and adherence to timetables and schedules, as opposed to the HC cultures that generally value social relationships and are interdependent members of groups. Most commonly, the Northern European cultures fall more toward the LC end of the continuum, while Mediterranean or Asian traditions fall closer to HC

(DeCapua & Marshall, 2010). LC cultures tend to view education through a structured scientific lens, while HC cultures view things less contextually and pragmatically. DeCapua and Marshall (2010) contend that although not always the case, it is not uncommon for SLIFE students to possess a HC background, thereby creating a lesser understood learning style in an LC culture.

Identifying Barriers for Teachers

Subsequently, teachers are expected to be able to determine the needs, deliver instruction, and incorporate cultural awareness into each of their lessons, thus creating an environment for which many teachers are unprepared (Master et al., 2016). Although professional development opportunities and a plethora of literature is available that address ELL strategies (Bowman-Perrott et al., 2016; Ferlazzo & Hull Sypnieski, 2018; Krashen & Bland, 2014; Martin & Green, 2012; Rodriguez-Mojica & Briceño, 2018; Salva & Matis, 2017; Tzu-Ching Chen & Yi-Chen Tsai, 2015), teachers are often strapped for time, limiting their ability to access this material (Gandara & Hopkins, 2010). In the same vein, ELL students do not come in a one-size-fits-all package. As with general education students, every child carries a different story, which must be addressed through differentiation, culturally responsive teaching, and social-emotional support (Von Esch & Kavanagh, 2018). The following section addresses the barriers for general education teachers when considering the needs of English language learners.

Differentiation

Teachers in general education classrooms face students with academic, language and cultural differences, yet must provide instruction that supports the needs of each of their learners (Von Esch & Kavanagh, 2018). Differentiating instruction is crucial in today's diverse classrooms and as Tomlinson (2000) states, "What we call ***differentiation*** is not a recipe for teaching. It is not an instructional strategy. It is not what a teacher does when he or she has time.

It is a way of thinking about teaching and learning" (p. 6). Yet Gandara and Hopkins (2010) are quick to point out that changing one's mindset to include differentiation does not preclude the element of time and planning, which are needed to research, prepare and implement best practice strategies, including specific ELL strategies. Fairbairn and Jones-Vo (2010) add that differentiating for ELLs must take into consideration where students' English Language Proficiency (ELP) falls within the language domains of listening, speaking, reading and writing. Knowing where to find and how to interpret ELP levels leads us into the barrier of data interpretation.

ELL Data

Another factor contributing to the delivery of instruction for ELL students is interpreting and planning based on specific ELL student data (Fairbairn & Jones-Vo, 2010). Under ESSA, each state must set guidelines for English proficiency among ELLs (Parsi, 2016). These assessments vary from state to state, but all assess ELL students in four domains: listening, speaking, reading, and writing. For example, in Florida, ACCESS for ELLs is administered yearly (Florida Department of Education, 2022). ACCESS is the proficiency assessment for states who belong to the World-Class Instructional Design and Assessment (WIDA) consortium (Fox & Fairbairn, 2011). Other examples of similar assessments include AZELLA in Arizona (Arizona Department of Education, 2020a) and ELPA21(CRESST, 2020). Interpreting these scores can help determine instructional levels in all language domains, yet with each student possessing a score for each domain, the results can be confusing and misleading to teachers who have not received adequate training on how to interpret the data, leaving teachers at a loss as to how to provide adequate support (Staehr Fenner & Snyder, 2017).

Professional Development

The issue of sustained and supported professional development is again rooted in both time constraints and current academic programming. Although it seems practical that teachers receive adequate preparation in their pre-service programs with regards to teaching diverse learners, it appears that this may not always be the case (Wissink & Starks, 2019). Compounding this assumption, veteran teachers often have not been introduced to current trends. Kim, Erekson, Bunten and Hinchey explain, "When teachers are exposed to new ideas provided by experts or specialists in the areas of ESL learning and assessment they need to see the practicality of the new information in their individual teaching contexts" (p. 230). This must include misconceptions that teachers often carry regarding ELL instruction, such as the development of literacy alongside language, culture and assessment (Kim et al., 2014).

Consistently, the issue of time constraints returns to the conversation when discussing professional development and implementation. Kim et al. (2014) point out that professional development often takes teachers away from the classroom thereby disrupting continuous teaching, and one day professional development seminars are often ineffective. The research of Smith and Robinson (2020) showed that when teachers take advantage of training opportunities outside of teacher instructional time, there is still the issue of implementation and sustainability without continued support from the specialist providing the training. In their study on implementation of the Common Core State Standards (CCSS) for ELL students, Murphy and Haller (2015) found that teachers were often frustrated by the limited or squandered professional development opportunities, which often caused additional anxiety. Because of these continuing issues teachers often opt out of optional professional development, thereby limiting the effort to support ELLs in the general education classroom.

Research Questions

The purpose of this study was to research current ELL differentiation practices to identify effective strategies that can be implemented in the general education classroom to support teachers with the meaningful engagement of ELL students in grade-level instruction while these students are concurrently acquiring English.

This study was guided by the following research questions:

- What differentiated practices are used in general education classrooms for English Learners?
- How do teachers implement these strategies?
- How do these differentiated strategies lead to more meaningful engagement of ELL students in standards-based instruction?

Definitions of Terms

The following terms are used throughout the study. The definition is provided based on how the term is used in the study.

Differentiation—Providing different pathways to learning so that every student can reach equally high expectations and standards, regardless of background (Fairbairn & Jones-Vo, 2010).

English Language Development (ELD)—The process of acquiring a new language and the framework that supports the process in terms of language acquisition levels (World-Class Instructional Design and Assessment, 2020c).

English Language Learner (ELL)—An individual who is enrolled or preparing to enroll in elementary or secondary school who was not born in the United States or whose native language is a language other than English and whose difficulties in speaking, reading, writing or understanding the English language my impede their opportunity to successfully achieve in an

academic setting (*50-State Comparison*, 2020).

General Education Classroom—Elementary and secondary classrooms that are provided content in English (Fairbairn & Jones-Vo, 2010).

Scaffolding—The assistance provided by a teacher to bridge the gap between what a student can accomplish independently and the current expectation (Echevarria et al., 2017).

Literature Review

Best practice literature focused on instruction for ELL students is easily accessible yet sifting through the information is time-restrictive and often confusing. For the most part, the literature focuses on similar strategies presented in different modalities (Fairbairn & Jones-Vo, 2010; Ferlazzo & Hull Sypnieski, 2018; Salva & Matis, 2017; Staehr Fenner & Snyder, 2017; Westerlund & Besser, 2021). What is important to remember is that there is not a one-size-fits-all strategy for ELL students (Fairbairn & Jones-Vo, 2010). These students possess different levels of mastery in each of the previously discussed language domains, which makes differentiating and scaffolding instruction more complex (Staehr Fenner & Snyder, 2017). Fairborn and Jones-Vo (2010) stress that "providing ELLs only with instruction identical to that designed for home language speakers of "standard" English is not sufficient"(p. vii). The purpose of this literature review is to investigate relevant theoretical foundations and methods of practice that support successful strategies for ELLs in the general education classroom. I will begin by examining researched strategies and follow those with current methods of practice.

Recommended Strategies

Using differentiation and assessment as a framework for instruction provides different pathways to learning; it gives every student the opportunity to reach equally high standards and expectations, regardless of background (Fairbairn & Jones-Vo, 2010). Tomlinson (2017 as cited

in Fairbairn & Jones-Vo, 2010) explains that differentiation may be implemented in areas such as content, processing, groupings, tasks, materials and assessment depending on the needs of the student. Recommended strategies that can be adopted into the general education classroom, which are supportive of ELL students and ultimately beneficial to all students in the classroom include, but are not limited to, comprehensible input, explicit vocabulary instruction, collaborative conversation, and building background knowledge, (Espino Calderon & Slakk, 2019; Fairbairn & Jones-Vo, 2010; Salva & Matis, 2017; Staehr Fenner & Snyder, 2017). The following sections explore the current literature supporting differentiated instruction strategies.

Building Background Knowledge

When students do not understand or are not familiar with a topic or theme that is being taught, comprehension becomes nearly impossible. The more readers know about text, the easier it is to interact, understand and retain what is being read (Gupta, 2019). This is why it is recommended that differentiated strategies are used to activate, build or tap into the background knowledge of ELLs (Dong, 2017; Gupta, 2019; Krashen, 2013; Krashen & Bland, 2014). Krashen's (2013) research on comprehensible input explains that using pictures, discussion and simplified text to build background knowledge supports comprehension by making the content more accessible.

Connecting content to ELL culture can be the gateway to providing background knowledge. Gupta (2019) states that domain specific content can be especially challenging unless it is related to a context that is familiar such as current experience. He uses the topic of photosynthesis as an example by first discussing how food is prepared in the students' native country to make a connection to plants producing their own food. Similarly, Dong (2017) relates a discussion on civil war in students' home countries to segue into a unit on the American Civil

War. Using surveys prior to introducing a topic also gives insight into what students may already know about a specific topic or may be able to contribute based on their personal backgrounds (Dong, 2017).

Consideration should be given to the fact that insufficient background knowledge of the target culture may hinder comprehension. Gupta (2019) references a text on "Groundhog Day" that may not have any significance for a student from another country or culture as they are unfamiliar with the customary belief in the United States. It is important to recognize that lack of content or culture specific background knowledge should not be viewed as a deficit, but the opportunity to further increase cultural comparisons (Dong, 2017; Gupta, 2019). Research has shown repeatedly that language learners' prior knowledge—which includes their previous learning history, native language, cultural and life experiences, and any understanding they have about the topic at hand—is a key ingredient of their meaningful learning (Ausubel, 1968; Cummins, 1979; Moll, Amanti, Neff, & Gonzalez, 1992 as cited in Dong, 2013).

Collaborative Conversation

Allowing ELL students the opportunity to share information with their peers builds confidence during the language acquisition process without the academic pressure of reading and writing (Salva & Matis, 2017). Vygotsky (as cited in Purdy, 2008) theorized that learning is a social activity and knowledge is enhanced through social interaction, thereby laying the foundation that talk with others allows one to reach higher mental functioning. Researchers agree that providing this opportunity requires active listening and speaking, as well as competency on the part of the native language speaker (Dooley, 2009; Goldsmith, 2013; Iddings et al., 2009; Mohr & Mohr, 2013; Purdy, 2008; Zhang & Stahl, 2011). In her research on intercultural conversation, Dooly (2009) suggests that ELL students should be encouraged to extend their

participation in "instructional talk" (Dooley, 2009) by being provided scaffolding as a support. She recommends beginning with a chart of terms or language that are appropriate for conversation and providing the students with an underlying concept that is understandable and engaging. The use of sentence stems or formulae to begin conversation benefit ELLs as it provides the opportunity to access language quickly with little disruption to fluency (Dooley, 2009). Goldsmith's (2013) research supports scaffolding strategies that include think-pair-share, giving ELLs the opportunity to formulate their language and turn to talk to a partner to communicate their thoughts without the fear of expressing an incorrect answer, and class meetings, which allow students the opportunity to witness and participate in structured social conversation. Furthermore, the class meeting setting allows the opportunity for students to share specific interests and to learn culturally significant aspects from one another (Goldsmith, 2013).

Giving students the opportunity to delve deeper into text through conversation supports the general education classroom in multiple subject areas. Zhang and Stahl (2011) use this strategy through a process called collaborative reasoning (CR). "In CR, students read a text that raises an unresolved issue with multiple and competing points of view…students then gather in groups of five to eight to deliberate the big question raised by the text" (p. 257). Qualitative results from this study showed that students felt more connected to the conversation, which promoted a more positive attitude toward learning English (Zhang & Stahl, 2011). Using a similar strategy with younger ELL students, Purdy's (2008) research examined the use of text to extend conversation through questioning. Allowing ELL students to grapple with comprehension through conversation with monolingual peers, as well as support from same native language peers, provided the opportunity to negotiate meaning thereby supporting language acquisition. Extending the conversation in a small group, teacher-facilitated setting, through open-ended

questioning and probing teacher responses helps students work through their own understanding in a safe environment (Purdy, 2008).

Comprehensible Input

Based on Stephen Krashen's (2003) theory of second language acquisition, comprehensible input is "any written or spoken message that is understandable to a language learner because of the context" (Salva & Matis, 2017, p. 51). Salva and Matis (2017) further explain that this form of instruction takes the focus off total English language immersion and refocuses on language acquisition from a standpoint of slightly challenging and engaging input. Patrick (2019) summarized Krashen's theory by explaining that students acquiring a new language do not learn through memorization and rote rules, but through absorbing what is constantly around us, as we did when we first gained speech as a child. In her article supporting comprehensible input for ELL students in the writing center, Beattie (2005) briefly explains Krashen's methods by saying that teachers must first seek to find what an ELL student already understands by asking questions and listening to the complexity of the response, followed by continued input of language slightly above the comprehension level, but with added supports such as hand gestures, pictures, and diagrams. Salva and Matis (2017) agree by adding that continued use of comprehensible input strategies is necessary for a student to spontaneously produce a new language, which in this case is English.

Within the comprehensible input strategy, Salva and Matis (2017) explain that content should be so interesting to the reader that they forget that it is in another language, which Krashen and Bland (2014) refer to as compelling input. Teachers must ensure that lessons are engaging, which offers the student the opportunity to relax and focus on meaning (Krashen, 2013). This also encompasses Krashen's (2003) theory of the affective filter, or barrier between a

language learner and language acquisition. He states,

> If the acquirer is anxious, has low self-esteem, does not consider himself or herself to be a potential member of the group that speaks the language, he or she may understand the input, but it will not teach the language acquisition device. A block, the affective filter, will keep it out (p. 6).

Salva and Matis (2017) further clarify that ELL students, especially SLIFE students, are often uncomfortable or embarrassed by speaking in front of peers, which lessens the effect of comprehensible input intake. The authors stress that to "help ELL students feel less self-conscience it is imperative that general education classrooms create a welcoming environment where students feel safe to take risks, make mistakes, and chose options that promote language acquisition" (p.57).

There are many strategies that fall under the umbrella of comprehensible input. Fairborn et al. (2010) suggest that teachers incorporate visual supports, highlight vocabulary, and use multimedia to enhance comprehensibility. Salva and Matis (2017) add that aural, or heard, input is also an effective strategy and can be achieved by interaction with other students, multi-media, and of course verbal instruction. Aural comprehensible input can be a rich learning experience and highly effective when delivered appropriately. During instruction, teachers should remain mindful to simplify speech to a level slightly higher than the students' current comprehension level, clearly explain academic tasks by supporting directions with hand motions, pictures and visuals, and avoid the use of figurative language (Salva & Matis, 2017).

Explicit Vocabulary Instruction

Research from the field indicates that one of the particularly emphasized differentiation strategies for ELLs is the use of explicit vocabulary instruction (Cuba, 2020; Ferlazzo & Hull

Sypnieski, 2018; M. Gallagher et al., 2019; Salva & Matis, 2017; Solati-Dehkordi & Salehi, 2016). Direct vocabulary instruction involves the specific teaching of words in which students will encounter within the literacy context (Ferlazzo & Hull Sypnieski, 2018). This instruction encompasses word-meaning in addition to word-learning strategies such as using context clues, accessing cognates, dissection of prefix and suffix and using reference materials (M. Gallagher et al., 2019).

Strategies for explicit vocabulary instruction vary depending on the lesson content. The research of Cuba (2020) gave specific attention to frontloading academic vocabulary. "Frontloading gives teachers the opportunity to prepare students for the textual content and support the process of attempting to make it relatable to their lived experiences" (Cuba, 2020, p. 231). Cuba (2020) continues by highlighting the use of anchor texts that draw on an ELL student's linguistic and cultural diversity, thereby accessing their funds of knowledge as an asset. Supporting this approach in a study by Gallagher, et al. (2019), researchers found that when teachers embedded explicit vocabulary instruction through the use of interactive reading of content specific texts, as well as rich, multimodal teaching of target vocabulary, academic word knowledge increased for an extended period beyond the intervention.

Solati-Dehkordi and Hadi (2016) showed results in their research on the impact of explicit vocabulary instruction and writing outcomes. In the study, ELLs were given an anchor text and prompt to complete before and after explicit vocabulary instruction. Their results concluded that "explicit vocabulary instruction paved the way for converting recognition vocabulary into productive vocabulary" (p. 152). Yet Nesbitt and Tindell (2015) emphasize the fact that vocabulary instruction should be purposeful and words chosen should be the most

applicable to content instruction. The following sections highlight strategies for scaffolding within explicit vocabulary instruction.

Graphic Organizers.

Used as a resource to access content on their level, graphic organizers can support ELLs in a variety of ways (Ferlazzo & Hull Sypnieski, 2018; Staehr Fenner & Snyder, 2017). The work of Staehr Fenner and Snyder (2017) indicate that graphic organizers can help to break down new information and clarify the relationship between concepts. They go on to say that using different types of graphic organizers to support learning, such as a concept map for introducing a new topic, a story map for supporting story development, and a Venn diagram for vocabulary sorting activities can support concepts across content areas (Staehr Fenner & Snyder, 2017). Ferlazzo and Hull Sypnieski (2018) add that scaffolding within graphic organizers by adding sentence stems, sentence starters and pictures adds to the effectiveness of the graphic organizer for ELLs.

In their study on enhancing social studies vocabulary, Vaughn et al. (2010) identify the use of graphic organizers as one of four instructional practices associated with improved outcomes for ELLs. ELL students in a middle grade social studies class were provided the use of graphic organizers to support writing and build comprehension. When used as a supplemental intervention, ELL students made significant progress in vocabulary acquisition in comparison to a similar control group whom did not receive the intervention. Vaughn et al. (2010) also noted that non-ELL students in the target group also showed improvement, which could dispel the concern that strategies used for ELL students may have a detrimental effect on others in a general education classroom.

Similarly, in the math classroom, Nguyen and Cortes (2013) cite the use of advanced graphic organizers to break down learning into chunks and to separate it into step-by-step components. They contend that students can use graphic organizers to interpret new ideas using both their native language as well as English. Teachers can support the retention of new information by encouraging ELL students to add drawings, symbols, or pictures with brief captions next to mathematical concepts. This also provides information for future reference and referral for class use (Nguyen & Cortes, 2013).

Recommended graphic organizers in English Language Arts include K-W-L (What I **know**—what I **want** to know-—what I **learned**) charts for pre-reading, word clusters for vocabulary, and Venn Diagrams for post reading (Jenks, 2002). Ferlazzo (2014) recommends word charts with common academic language in which students translate the vocabulary into their home language, illustrate their definitions and make a list of common English Synonyms. Providing conceptual clarity for students is the primary object of graphic organizers. Echevarria et al. (2017) state, "These schematic diagrams are ubiquitous in today's classroom, but it does not reduce their value" (p.51).

Sentence Starters/Sentence Frames/Sentence Stems.

Providing ELLs sentence stems allows students to have meaningful interaction with words in context and allows them to actively participate in literature and content area discussions and activities (Echevarria et al., 2017; Nisbet & Tindall, 2015). Rodriguez-Mojica & Briceño (2018) define sentence stems as syntactical language supports that include sentence starters and sentence frames that model the expected language. Sentence frames can be used for beginning level ELLs as they contain additional support for more complex syntax, while sentence starters are typically designed to allow the middle level ELL student to participate in content area

instruction with the beginning structure of a sentence, for example beginning with "I predict…" (Rodriguez-Mojica & Briceño, 2018). Nisbet and Tindall (2015) point out that this differentiation strategy addresses all four language modes—listening, speaking, reading and writing—by first presenting different examples of the completed sentence starter followed by students completing the sentence on their own and finally sharing with others.

Rodriguez-Mojica & Briceño (2018) point out that sentence stems should be developed with the learning goal and communication expectations in mind. Inference sentence stems may include "I think because the text states__" while math stems may include content vocabulary such as "The marbles in the two jars are *equivalent* because__" (Nisbet & Tindall, 2015; Rodriguez-Mojica & Briceño, 2018). Goldsmith (2013) adds that similar sentence stems can be used for eliciting discussion as well as holding students accountable for listening to their partner or group and extending discussion. Ferlazzo (2014) suggests using sentence stems when engaging students in authentic text activities, as in the example of teaching cause and effect by first identifying academic vocabulary, then showing a video clip of a movie to help students identify cause and effect scenarios. In his study, Ferlazzo (2014) had students jot answers on white boards during the clip, share their thoughts and then were given sentence stems to create complete thoughts and begin the writing process. Rodriguez-Mojica & Briceño support this method by stating "Sentence stems serve as entry points into discussions and writing, and alleviate some of the cognitive load of oral and written expression allowing students to focus on the content rather than how to phrase their ideas" (p.398).

Word Wall/Word Bank.

Word Walls or word banks are another effective strategy for ELLs (Echevarria et al., 2017; Gupta, 2019a; Nguyen & Cortes, 2013; Staehr Fenner & Snyder, 2017). Gupta (2019)

describes word walls as an interactive wall display used to teach spelling, reading, and writing skills through visual content. He suggests beginning with a cognates board that taps into ELLs' background knowledge and helps to form community as a class created project. Later, more cognates can be added as students' receptive vocabularies are increased. Content from core subject areas should also be displayed as easy reference for vocabulary support (Gupta, 2019). In addition to subjects grounded in reading strategies, Nguyen and Cortes (2013) suggest that word walls for math that include formulas and diagrams provide an additional instructional support that can help clarify concepts and reinforce key ideas.

Another effective use of word walls is a visual display of scaffolding supports for speaking and writing responses. Staehr Fenner and Snyder (2017) explain that ELLs may use word bank stems to respond to content questions or engage in content activities such as completing graphic organizers, writing responses to specific content questions or working with peers in collaborative groupings. They go on to explain that these word banks can be especially effective when they are student developed based on content learning and should be used in conjunction with vocabulary learning. Visuals and home language supports added in connection to the visual display also enhance the accessibility of content for students (Staehr Fenner & Snyder, 2017).

Total Physical Response.

Total physical response (TPR) is an activity originally developed by James J. Asher in which students use their bodies to physically act out vocabulary (Ferlazzo & Hull Sypnieski, 2018). TPR has been found to be effective in teaching vocabulary and increasing engagement in ELL students (Boyd-Batstone, 2013; Fahrurrozi, 2017; Ferlazzo & Hull Sypnieski, 2018; Nguyen & Cortes, 2013). Although it is a strategy commonly used for newcomers, all students

can benefit from its implementation (Ferlazzo & Hull Sypnieski, 2018). Boyd-Batstone (2013) explains the procedure comparing it to a game of "Simon Says" without trying to trick the students. The teacher uses physical movement to model explicit vocabulary such as dropping a scarf to model "float downward" (Boyd-Batstone, 2013) or lunging forward while repeating the word lunge. Students then mimic the behavior while reproducing the language. The research of Fahrurrozi (2017) found that classroom implementation of TPR improves vocabulary learning outcomes by allowing the students to be physically active, following a role model and participating in activities that make vocabulary acquisition more compelling through movement.

Common Approaches to Addressing ELL Instruction

It is evident that the demographic shift, which has increased the number of English Language Learners in the United States school system, is not going to change (U.S. Department of Education, 2020). Ultimately, the responsibility lies with the practitioners who service ELL students and the institutions who train those practitioners to ensure they receive adequate services. Yet the time constraints and demands of the profession continue to impact teacher planning and implementation, often to the disadvantage of the students who require the most diligent amount of support (Von Esch & Kavanagh, 2018). Strategies abound (Fairbairn & Jones-Vo, 2010; Ferlazzo & Hull Sypnieski, 2018; Salva & Matis, 2017; Solati-Dehkordi & Salehi, 2016; Staehr Fenner & Snyder, 2017; West & West, 2016), yet without the ability to adequately spend the necessary time to research best practice methods, ELL students may not be afforded the opportunity to receive adequate differentiation and scaffolding based on their individual needs (Gandara & Hopkins, 2010). Specifically, strategy implementation must be broken down into the four language domains as well as English language acquisition levels, creating a virtual labyrinth of instructional planning and delivery (Fairbairn & Jones-Vo, 2010).

This then demands the need for further research into the effectiveness of differentiated strategies to provide meaningful engagement for ELL students in the general education classroom. When contemplating instructional strategies for ELLs, one important consideration is language acquisition levels and how they correlate to learning levels (Fox & Fairbairn, 2011). Each state is required to assess their ELL students yearly to determine language proficiency levels (Parsi, 2016). These levels can then be used to gauge learning expectations based on grade level curriculum (Wisconsin Center for Education Research, 2020). The following section outlines commonly used approaches and supporting organizations that address strategies and expectations within the language domains.

World-Class Instructional Design and Assessment (WIDA) Consortium

Currently, the most widely accessed curriculum support organization for ELLs is the World-Class Instructional Design and Assessment (WIDA) consortium (King & Bigelow, 2018). This organization supports "students, families, educators and administrators with high-quality, research-based tools and resources, dedicated to language development for multilingual learners" (World-Class Instructional Design and Assessment, 2020b). King and Bigelow (2018) report that the states that belong to the consortium have access to the provided tools, professional development, and to initial placement and progress monitoring assessments, which are required under ESSA (Parsi, 2016). Both the ELL placement screener and yearly progress monitoring assessment, known as ACCESS, assess ELL students across the four language domains of listening, speaking, reading and writing (King & Bigelow, 2018). The resulting data help teachers determine the level of instruction, differentiation, and scaffolding to provide in the general education classroom (Westerlund & Besser, 2021).

Specifically, ACCESS scores provide a performance level within each domain that correlates to specific tasks the student may be able to master based on data points. WIDA refers to the level-based tasks as Can-Do Descriptors (World-Class Instructional Design and Assessment, 2020a), which are intended to be used across the content areas as a support for grade-level and content standards. The intention of these scores is to drive appropriate instruction focused on providing ELL students equal access to grade-level instruction while supporting a framework for expectations based on language acquisition level (World-Class Instructional Design and Assessment, 2020a). Additionally, the descriptors are further broken into key uses comprised of recount, explain, and argue and discuss, which were developed through literature review and language analysis of college and career readiness standards (World-Class Instructional Design and Assessment, 2020a). Aligning data with the Can-Do Descriptors allows teachers the opportunity to differentiate and scaffold based on language proficiency. The research of Fairbairn and Jones-Vo (2010) suggests this creates academic parity by ensuring that all students in the classroom are receiving the same standard-based curriculum content.

Most recently, WIDA revised their English Language Development (ELD) Framework (hereby referred to as Framework) to focus on teacher collaboration and making language more visible in the content area. Westerlund and Besser (2021) explain that the Framework update "adds a laser-like focus on making language visible through a functional approach to language" (p.1). By breaking language down by content area, the Framework addresses the specific ways we use language within those areas. Examples include explaining causes and consequences of historic events in social studies and explaining underlying causes of natural phenomena in science (Westerlund & Besser, 2021). Further, Westerlund and Besser (2021) explain that these expectations are broken into the following key language uses: Narrate, Inform, Explain, and

Argue. These are accompanied by goals for content-driven language learning by students. Within these language function goals are recommended features, such as "noun groups," which carry out the function to "Introduce the claim" (Westerlund & Besser, 2021). The Framework includes lists of functions and features by way of annotated text examples within each language expectation, which helps teachers deepen their understanding of language demands within the content areas (Westerlund & Besser, 2021).

As part of the Framework development team, Molle and Wilfried (2021) discuss the development of the WIDA Framework's approach to language development in the content-area, or general education classroom. Through their analysis the researchers summarize the work of the Framework by explaining that:

> The Framework advances a view of language as a hybrid, multimodal social practice; places language learning in the context of students' meaningful participation in disciplinary practice and discourses; and views language development as the expansion of students' linguistic repertoires and their development of metalinguistic awareness (p. 586).

Drawing on the work of Thompson, et al. (2016, as cited in Molle & Wilfrid, 2021) meaningful participation is defined within the WIDA Framework as opportunities for students to "(a) connect to the content through embodied experience, (b) co-construct meaning with peers and teachers, and (c) have their ideas made visible to the classroom community and enrich the learning of others" (p.588). With this in mind, the Framework encourages students to interpret and represent knowledge in modes other than language, thereby allowing students to show content knowledge without full command of the English language (Molle & Wilfrid, 2021). This promotes the view of "multilingual students who can participate in disciplinary learning no

matter what their language competencies are" (Lee et al., 2013 as cited in Molle & Wilfrid, 2021, p. 589).

Citing the desire to collect evidence Molle and Wilfrid (2021) conducted a two-sesson focus group to introduce the Framework and receive feedback after use. The groups were formed from WIDA state participants across geographical regions (South, Midwest, and West) and included elementary and secondary teachers who were general education, content area and ELL teachers. Findings from the recorded sessions and online postings included data that showed that content area and language teachers found the Framework user friendly and applicable in in multiple dementions, including "representing language use in school through four interconnected language practices and describing language development in terms of ideology, form, structure, and performance" (Molle & Wilfrid, 2021, pp. 592–593), thereby validating the robust theoretical grounding of the design of the Framework.

Sheltered Instruction Observation Protocol (SIOP)

The Sheltered Instruction Observation Protocol (SIOP) method is an instructional model intended to deliver standards-based, content area lessons to ELL students while they are still acquiring English (Short et al., 2011). According to the Institute of Education Sciences (2009), "The goal of SIOP is to help teachers integrate academic language development into their lessons, allowing students to learn and practice English as it is used in the context of school" (p.1). Although there is not a set protocol for lesson delivery under this method, the focus of the content delivery is on building vocabulary and background knowledge (Echevarria et al., 2017). Developers of the SIOP model, Echevarria, Short and Powers (2017), break down the components of instruction to the following: preparation, building background, comprehensible input, strategies, interaction, practice/application, lesson delivery and review/assessment. More

than 15 years of empirical data show that the implementation of SIOP methods improve overall literacy in ELLs, even when delivery occurred mainly in content areas (Short et al., 2011).

Although the SIOP method of instruction has been in place for a significant period of time, recent data show the model to still be effective in language acquisition of ELLs when teachers received adequate training on how to implement the model (Desjardins, 2020; Piazza et al., 2020). Because teacher education programming often does not fully support the understanding of second language methodologies and curriculum that supports ELLs (Desjardins, 2020), part of the SIOP method stresses 1 to 2 years of training before a teacher is fully immersed in content application. Desjardins (2020) explains that trainings for the SIOP method are available in multiple formats, such as conferences, online professional development, and books, but these methods must also be supported by coaching, collaborative lesson planning and continued professional development. In their professional development study using SIOP, Piazza et al. (2020) collected data on in-service teachers who participated in a professional certificate program that included graduate-level university classes focused on the SIOP model. Over the course of 2 years, participants increased their use of SIOP strategies by 12% in comparison to a control group who did not show any increase.

Linking Possible Solutions

The theorists agree that supporting instruction for ELL students must be rooted in making content assessable through strategies that focus on language acquisition level, thereby making content meaningful (Echevarria et al., 2006; Lumbrears & Rupley, 2019; Salva & Matis, 2017). Through carefully seeking to understand language proficiency data, the teacher can deliver instruction that creates the educational opportunity for ELL students to be actively engaged with their grade-level peers, while creating an environment of safety where the student has the

opportunity to develop confidence within both the academic and language realm (Staehr Fenner & Snyder, 2017). There is currently an abundance of literature that supports this practice, offering strategies for differentiation, scaffolding and delivery methods, which support language acquisition (Fairbairn & Jones-Vo, 2010; Gupta, 2019; Li, 2013; Parker, 2011; Salva & Matis, 2017; Schütz, 2005; Solati-Dehkordi & Salehi, 2016). Yet, scholars also clearly emphasize the need for professional development to support the suggested learning initiatives (Barbara & Suzanne, 2019; Echevarria et al., 2006; Lumbrears & Rupley, 2019; Short et al., 2012). In her research study in New Jersey focusing on literacy development in the sheltered classroom, Short (2012) observed that teachers who were supported through professional development employed SIOP strategies at a higher rate than a control group whom did not receive the same support. Through this research, it is my belief that providing teachers with fewer, yet effective, ELL strategies that are easily understandable and engage ELL students in grade level curriculum through differentiation is one possible solution to the quandary of providing effective instruction to engage ELL students in the general education classroom while they are acquiring English. Consequently, this provides the necessary foundation for my research identifying specific, effective differentiation strategies that engage ELL students in grade-level curriculum while they learn English, and subsequently implementing those strategies to gauge engagement.

ARTIFACT 2

Research Approach

The research methodology for this study was designed to create a holistic vision of current uses of differentiation strategies used for ELL students in the general education classroom, as well as to take into account the voices of teachers using the strategies. Banta and Palomba (2015) advocate for the use of multiple measures and point out that "there is never one true measure of a complex construct (Fitch, 2011 as cited in Banta & Palomba, 2015, p.141). Thereby, this is a mixed methods research study initiated by data collected from a quantitative survey that measured the daily use of ELL strategies by general education and content area teachers. The quantitative data results were extrapolated and used to determine the four most used strategies to support ELLs in the general education classroom. Teachers were recruited to participate in a PLC as part of a strategy implementation study. Participating teachers implemented each strategy for a two-week time-period, creating an 8-week study. Following each strategy implementation, a qualitative survey was conducted, which measured the benefits and barriers created by use of the strategy as well as the level of engagement of ELL students in the grade level curriculum during strategy use. Engagement was measured by correlation to the WIDA Can-Do Descriptors (World-Class Instructional Design and Assessment, 2020a) and ELD proficiency levels. The following sections outline the results of the quantitative survey first, and are followed by the qualitative results.

Quantitative Methods

The following data focuses on the quantitative research survey, which was designed to define the parameters of the implementation study. Based on my review of the literature and current practice, I developed a survey including 10 common differentiation strategies used by teachers of ELL students (see Appendix A). The Qualtrics generated survey asked general education teachers to rate the use of individual differentiation strategies intended to support their ELL students on a Likert Scale of 0 to 5, with zero indicating not used, and 5 indicating daily use. Additionally, the survey responses identified the grade band taught (elementary, middle, high), the individual specialty area (all subjects, specialized subject, support) and the average number of ELL students in the class. Finally, participants were offered the opportunity to volunteer for the implementation study. All responses were anonymous aside from being directed to a separate professional learning community (PLC) participation survey if interested in participating in the implementation study (see Appendix B).

Demographics

The location for this study was a small county-wide school district in the Southeastern United States. Based on school year 2020-2021 demographic data, the county services approximately 8,700 students of which 823 are classified as Active ELL (LY) students. An additional 543 students exited the ELL program but were being monitored for progress in a two-year follow-up program (LF). Of the LY students, 63% qualified for the Free and Reduced Lunch (FRL) program and 15% of the LY students were identified as Exceptional Student Education (ESE). The public schools within the district consist of two high schools, one middle/high school, two elementary/middle schools and four elementary schools. Instructional personnel within all schools totaled 499.

Participants

The participants in this survey were chosen through convenience sampling of the teacher population within the district. Surveys were sent to principals with a request to forward to teachers who currently or had previously taught ELL students. Fifty completed responses were received, with elementary school teachers producing a 61% response rate.

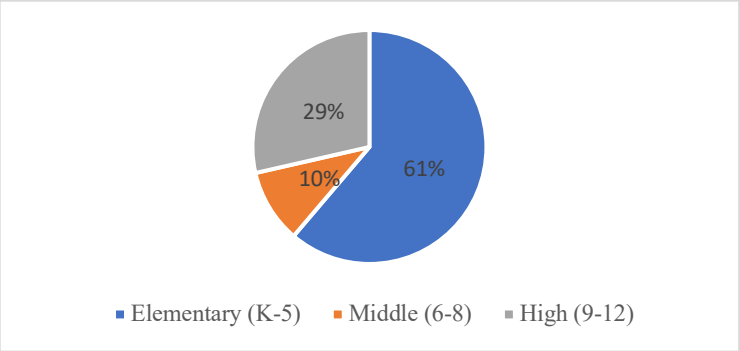


Figure 1. *Participation by Grade Level Taught.*

Within the grade level taught category, the average number of ELL students in a class vary widely with elementary having an average of 3 to 5 ELL students per class. Middle school had an average of 1 to 5 ELL students per class. High school had 1 to 2 ELL students per class.

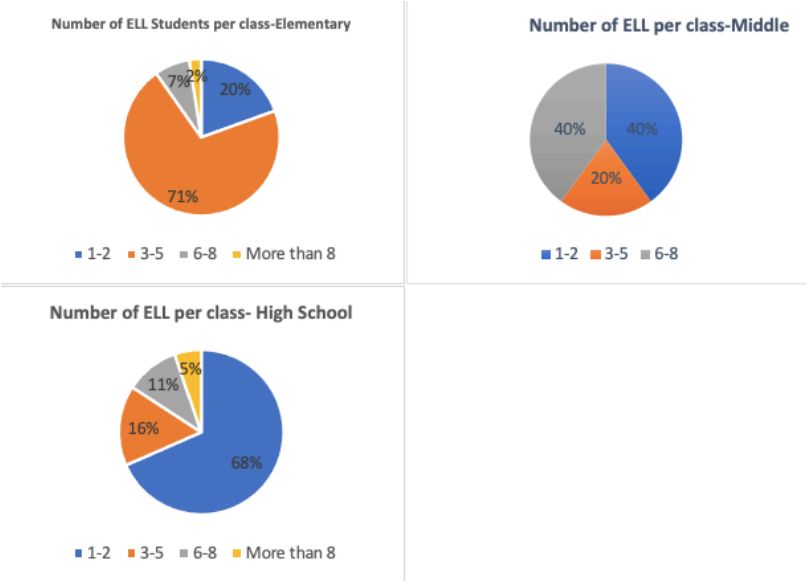


Figure 2. *ELL Students per Class by Grade Level Band.*

Quantitative Survey Results

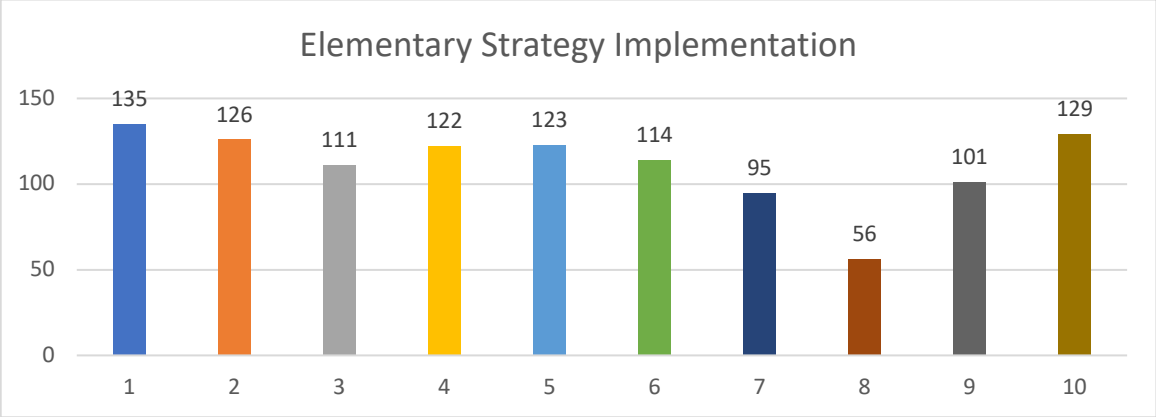
Ten differentiation strategies were identified and briefly defined for ranking on a Likert-type scale of 0 to 5 as identified in Table 1.

Table 1. *Differentiation Strategies.*

Differentiated Strategy	**What It Looks Like**
Comprehensible Input	Providing understanding through content, i.e., hand gestures, pictures, media, simplification of instructions
Explicit Vocabulary Instruction	Frontloading of content vocabulary
Sentence Frame/Sentence Stems	Sentence starters, cloze sentences, and word banks
Collaborative Conversation with Response Prompts	Whole group or small group discussion
Graphic Organizers	Charts, graphs, diagrams that support the instruction
Word Bank/Word Wall	Current content vocabulary displayed and referred to on a regular basis
Total Physical Response (TPR)-	Physically acting out vocabulary by imitating the teacher's actions
Peer Teaching	Prepared lessons for students to teach other students
Learning Stations	Small group activities with differentiated materials based on language acquisition levels
Activating Prior Knowledge/Building Background Knowledge	Eliciting from students what they already know before instruction and providing background on unfamiliar

The data for each differentiation strategy was analyzed based on reported grade level taught and cumulative responses. Reported weekly usage scores were totaled within each category, cross referenced for accuracy by mean and mode, and graphed for comparison. As Figure 3 shows, three differentiation strategies appeared consistent across all grade levels taught: comprehensible input, explicit vocabulary instruction and building background knowledge. Additionally, the use of collaborative conversation with response prompts and graphic organizers appeared as a strength in both middle and high school responses. Based on cumulative results, the following strategies were identified for an eight-week implementation study:

- Comprehensible input—providing understanding through content, i.e., hand gestures, pictures, media, simplification of instructions
- Explicit Vocabulary Instruction—frontloading of content vocabulary
- Activating Prior Knowledge/Building Background Knowledge—eliciting from students what they already know before instruction/providing background on unfamiliar topics
- Graphic Organizers—Charts, graphs, diagrams that support the instruction



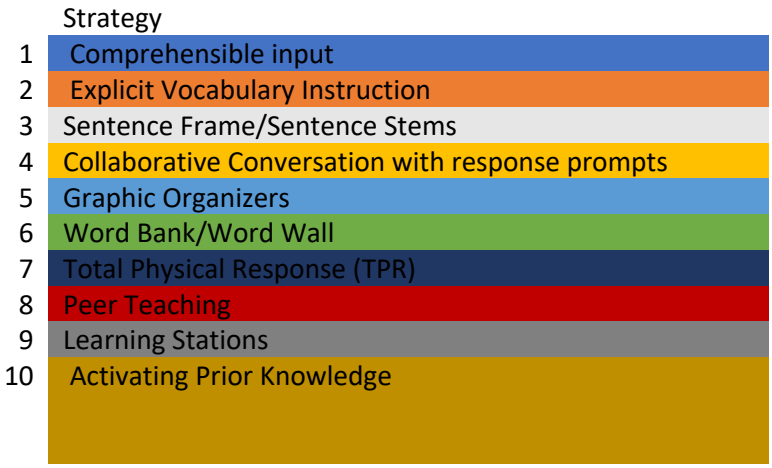


Figure 3. *Total Number of Times Strategies are Implemented in a Five-Day Week.*

Qualitative Methods

Upon completion of the quantitative survey, participants were asked if they would be interested in participating in a Professional Learning Community (PLC) to further explore identified differentiation strategies for ELL students in the following school year. Teachers who chose yes were redirected to a separate qualitative survey requiring their name, grade level taught and reason for interest in participation. The PLC was intended for four to six teachers, therefore if more responded the field could be narrowed based on interest response. Six teachers indicated interest but because of reassignment and attrition, three participants actively participated in the PLC throughout the eight-week implementation cycle. Participants included two elementary teachers and one middle school teacher.

The PLC was conducted virtually through online meetings. A researcher-developed Canvas Course was made available so participants would have easy access to video recordings of meetings as well as materials discussed that defined and supported strategy implementation. During virtual meetings several examples of the target strategy were presented and discussed to help support understanding of differentiation based on students' language acquisition level.

Participants were given a week before the strategy implementation to prepare lessons and differentiation strategies, then implemented the planned strategy over the next two weeks. At the end of each cycle the participants completed an anonymous strategy implementation survey (see Appendix C) in which they responded to the following questions:

- Which strategy did you implement?
- How did you implement the strategy?
- What were the barriers to implementing the strategy?
- How were your ELL students able to engage in grade level curriculum?

Qualitative Survey Results

Eleven survey responses were collected, which resulted in three responses for three of the implemented strategies and two responses for one strategy. Using thematic analysis, (Braun & Clarke, 2006) data were analyzed, triangulated and coded based on strategy, instructional area, implementation method, barriers, analysis of the barrier by instructor, and ELL student engagement by language acquisition level. Responses were sub-coded for emergent similarities across categories. Table 2 summarizes the results from each category followed by teacher responses.

Table 2. *Qualitative Data Summary.*

Strategy	**Instructional Area**	**Implementation Method**	**Barriers**	**Engagement**
Comprehensible Input	Science	Sorting and grouping pictures	Lack of motivation by all students (general education and ELL)	Basic understanding of concept
Comprehensible Input	English Language Arts	Hand gestures; highlighting	None noted	Some use of highlighting strategy

Comprehensible Input	Science	Pictures and symbols	Need to remind students to use supports	Immediate participation in activity
Explicit Vocabulary Instruction	Science	Tool simulations	Lack of adequate equipment for each student	Connected words with pictures
Explicit Vocabulary Instruction	English Language Arts	Shared Google Slide presentation	Time Consuming	Connected words with personal example
Activating Prior Knowledge	Science	Related hands-on inquiry	Connecting output language from previous units	Application of connections and transference to further investigations
Activating Prior Knowledge	Social Studies	Virtual Field Trip	Confused by sentence stems	Produced pictures of unfamiliar topic
Activating Prior Knowledge	English Language Arts	Using real-life images	None noted	Produced drawings of connections
Graphic Organizers	Social Studies	One-pager graphic organizer	Need of sentence stems for quality responses	Produced modified responses
Graphic Organizers	English Language Arts	Google Slides; personal anchor chart	None noted	Produced single word responses
Graphic Organizers	English Language Arts	Cause/effect blocks	None noted	Produced pictures or words within graphic organizer

Strategy results reported by participants generally focused on the engagement of WIDA Level 1 and Level 2 ELL students. These students are typically newcomers who have minimal English-speaking experience. Data show that across instructional area and differentiation strategy, the guiding factor for engagement was visual representation through either hands-on participation or interaction with pictures. For example, when building background knowledge for

a science unit on chemical reactions, one middle school science teacher participant shared the following after using bath bombs to note their properties and reactions in water:

> ELL students had a physical, hands-on interaction that made an even playing field for them in the general classroom setting. Those with English language knowledge were able to identify the properties their lab groups were studying, and even those with limited/no English language were able to identify the physically seen properties in their native language.

The same teacher participant also shared a positive outcome when using the comprehensible input strategy to make the content understandable at lower language acquisition level:

> Students were first assigned the task of sorting and grouping alien-looking creatures in a manner such as the periodic table. This puzzle sort was to allow similar features amongst the aliens to align with their columns and rows (such as increasing length of hair, an increase in the number of fingers, and associated body shapes). The overall goal of this multi-day lesson was for students to understand patterns, since the Periodic Table is a pattern of elements. By having such dynamic features drawn of aliens, the barrier of complexity that the Periodic Table brings was taken down.

An Elementary English Language Arts teacher participant shared the following after using pictures to build background knowledge through conversation with small group members:

> Posting real life images around the room, students were placed in groups and traveled around the room. Students collaborated and inquired about what the possibilities, cause or effect, could be. This activity helped the students be able to identify what the cause or effect is in a text.

Finally, an Elementary Social Studies teacher participant who took her students on a virtual field trip to give them a visual representation of life on a Spanish Mission in the 1500s reported the following results:

> We changed it for our ELLs, especially the newcomers to just have to draw pictures of what they saw. This lessened the language demand but still built background knowledge on what life was like in a Spanish Mission in Florida. Since a virtual field trip is so visual students are able to make connections in their minds about life in the mission without having the barrier of lack of language.

Figure 4. *Vocabulary Generated from Engagement Coding.*

Sub-coding showed that strategies were often not used in isolation and increased engagement when used together. For example, when students participated in a virtual field trip to build background knowledge, they also used a graphic organizer to support their learning as reported as follows. The teacher participant shared the following after the lesson:

> Students in small groups/partners went through a virtual field trip. Students utilized a graphic organizer to write what 'stuck with them' at each portion of the trip. My ELL students were given sentence stems within the graphic organizer to lessen the language demand but that proved to be difficult for them to know where the sentence stems began

or ended within the field trip. Instead, they drew pictures on the graphic organizer to note what they saw.

Participants also synthesized that all the strategies created comprehensible input for the ELL students. Cross connection of strategies occurred on multiple entries as shown in Figure 5.

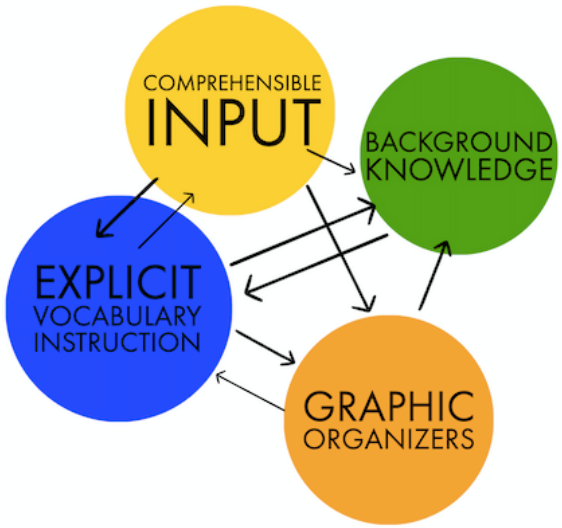


Figure 5. *Cross-Connection of Implemented Differentiation Strategies.*

Summary

The qualitative data shared by the PLC participants shows that the use of researched differentiation strategies made a difference in providing the opportunity for ELL students to engage in grade level lessons at their language acquisition level alongside English-speaking peers. However, the implementation of these strategies by the participants was supported by video introduction, recommendations for application, and interactive participation in the PLC. Other teachers may still need guidance when choosing an appropriate strategy or attempting an unfamiliar differentiation strategy with multiple levels of ELL students. The following section provides a series of videos to support implementation of the researched strategies.

ARTIFACT 3

Implementation of Solution

Addressing the problem of practice requires providing teachers with the ability to identify their ELL students' ELD levels as well as how to provide differentiation based on those levels. My research indicated that the most intense need for differentiation was for level 1 to 2 students, which aligns with the fact that these students are generally newcomers. Providing the means for these students to engage in grade level curriculum is challenging, yet extremely important. From the time they arrive, we need to begin to help them connect with their peers, thereby instilling the desire to engage in an environment that can literally be incomprehensible.

Providing specific differentiated strategies is beneficial to both the teacher and student, but as stated previously, combing through information to find these strategies can be overwhelming. Knowing this propelled me into creating a teacher toolkit of strategy examples based on effective differentiation strategies as identified in my quantitative survey, as well as responses from the qualitative surveys after strategy implementation. In keeping with the research of Darby and Lang (2019), videos were produced as a series of mini-lectures created in an informal setting, which has been deemed more compelling for student/teacher engagement in an online environment. The following video series is intended to be used by university professors as a tool for pre-service teachers as they begin their studies of working with English Language Learners, or as they are completing practicum within a classroom setting. Additionally, the series may be used as professional development for in-service teachers who are working with ELL students for the first time, or in need of assistance engaging ELL students in grade level

curriculum. The video series begins by addressing how ELL students are identified and continues with four separate videos that demonstrate targeted use of comprehensible input, explicit vocabulary instruction, building background knowledge and graphic organizers. The following section outlines the content in each of the slides presented in the videos.

Part 1—Identifying Your English Language Learners

Video link: https://youtu.be/UFG5GGMSL0E

Part 1 video presentation addresses the following:

Who are English Language Learners?

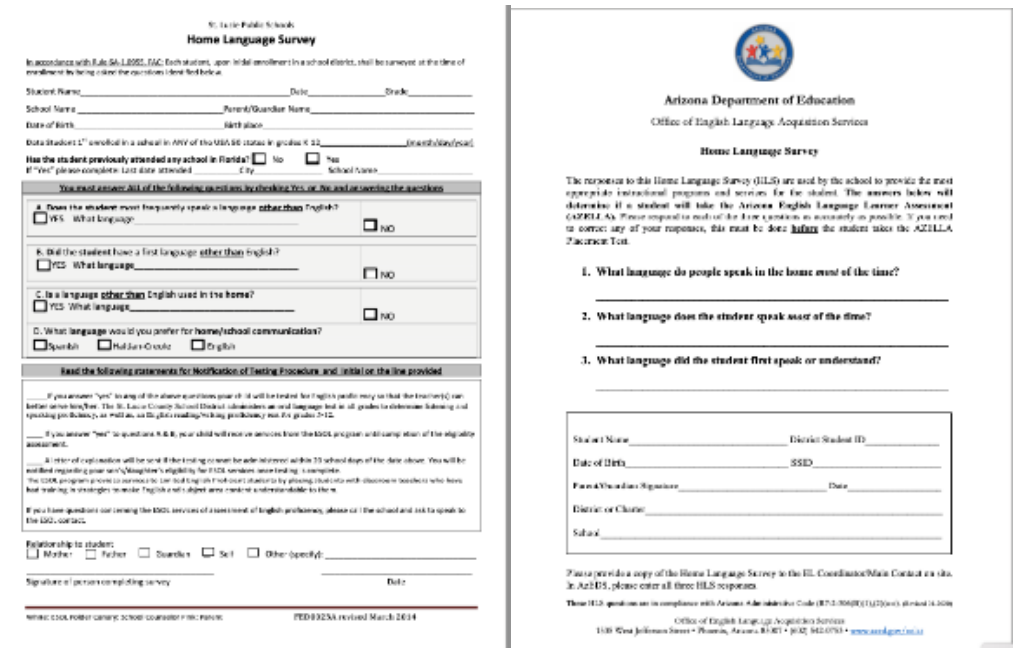
English Language Learners (ELL) are students from homes where English is not the predominant language. This may be because they are new immigrants, or it could be that they are growing up in a home where their parents or grandparents speak another language for cultural reasons or because their parents are immigrants. Children who are screened and score below proficiency are entitled to ELL services until reaching proficiency based on yearly progress monitoring

Home Language Survey

When a parent registers a child for school the first time, the Every Student Succeeds Act (ESSA) mandates that a home language survey (HLS) is completed. Each school district can develop their own HLS, but it is required to ask the following questions:

1. What was the first language learned by the child?
2. What dominant language is heard in the home?
3. What primary language is currently spoken by the child?

A student must be screened when they meet any of the above criteria. An English speaker may register for school, but if there is another language spoken in the home, they will need to be screened for English proficiency.

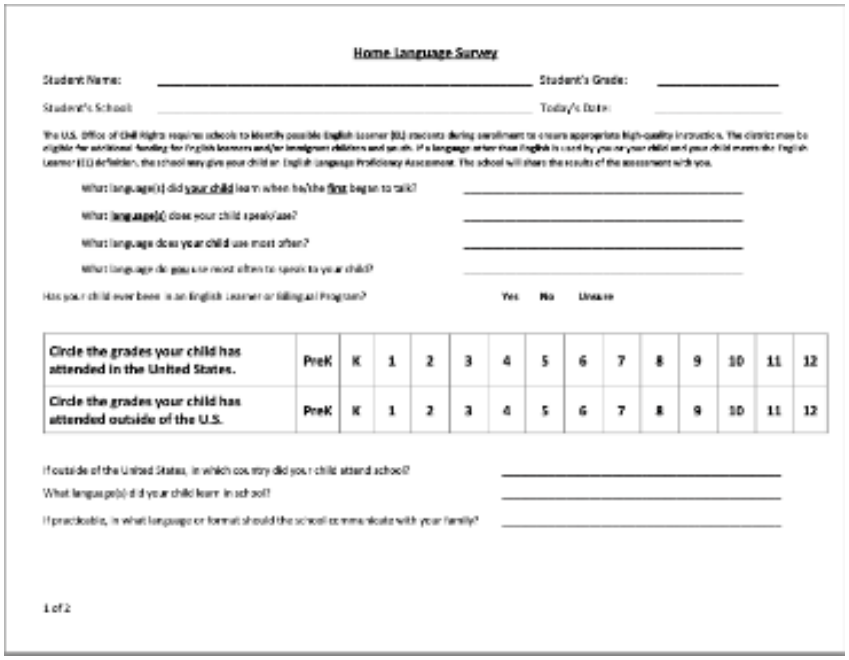


Home Language Survey

Arizona Department of Education

Office of English Language Acquisition Services

Home Language Survey



Home Language Survey

Student's Name: _____ Student's Grade: _____

Student's School _____ Today's Date: _____

Circle the grades your child has attended in the United States.	PreK	K	1	2	3	4	5	6	7	8	9	10	11	12
Circle the grades your child has attended outside of the U.S.	PreK	K	1	2	3	4	5	6	7	8	9	10	11	12

Figure 6. *Home Language Survey Examples from Florida, Arizona, and North Dakota.* Sources: Arizona Department of Education, (2020b), North Dakota Department of Public Instruction(2019), Saint Lucie Public Schools, (2014).

Determining Eligibility

Once the home language survey is completed, if there is a positive answer, the student must be screened for eligibility. States may determine what they would like to use as a placement screener. Examples include LAS Links Placement Test (Data Recognition Corporation, 2022), Test of English Language Learning (TELL) (Pearson, 2022), WIDA Screener (WIDA, 2022), New York State English as a Second Language Achievement Test (NYSESLAT) (New York State Education Department, 2019), Texas English Language Proficiency Assessment System (TELPAS) (Texas Education Agency, 2022), AZELLA Placement Test (Arizona Department of Education, 2020a).

ESSA requires that those who administer the assessment must be trained to ensure valid and reliable results. Generally, this is either the ELL teachers or ELL department head. Parents must be notified of results and be given the option to opt out if the child does qualify and they do not wish for them to receive services.

English Language Development (ELD)

After screening, students are assigned an English Language Development (ELD) level in four different domains. Kindergarten through first grade receive levels in only listening and speaking, and 2nd through 12th grade are assigned levels in listening, speaking, reading and writing, based on their screener results. A student may qualify for services in listening and speaking, or they may qualify in reading and writing.

World-Class Instructional Design and Assessment (WIDA)

Although states can choose what screener they use and how they administer their services, currently 41 of the 50 states are members of the World-Class Instructional Design and Assessment (WIDA) Consortium. WIDA has developed a set of Can-Do descriptors that explain

what you can expect your ELL student to do within their current level domains. The Can-Do descriptors provide examples that demonstrate what an ELL student can be expected to do.

What is an ELL Can-Do?

Although all states do not belong to the WIDA Consortium, the Can-Do descriptors are an excellent resource in showing what an ELL student may be expected to do.

Figure 7 shows a student who is in the 2 to 3 range, or Emerging in the Listening domain, 3 to 4 or Developing range for Speaking, 1 to 2 or Entering for Reading and 1 to 2 for writing. It is not uncommon for ELL students to score significantly higher in listening and speaking as reading and writing typically develop after the aural language skills.

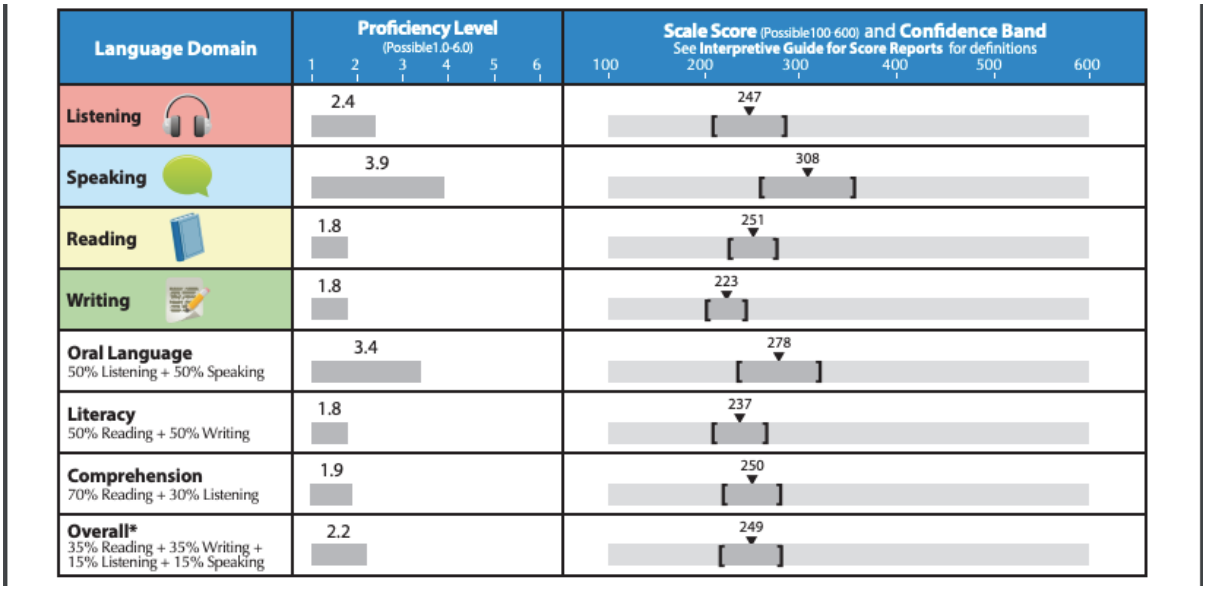


Figure 7. *WIDA Can-Do Descriptor Example.*
Source: WIDA Can-Do Descriptors (World-Class Instructional Design and Assessment, 2020a)

The Can-Do descriptors tell us that at the student's speaking level, he/she should be able to retell short stories or events, offer solutions to social conflict, working toward discussing stories and issues, and offering creative solutions to issues. As students reach an ELD Level 4, they are beginning to become proficient speakers.

Because the student's reading score is significantly lower, she may only be able to make sound and symbol relations or match icons or diagrams with word concepts, but not read yet. She is working toward identifying facts and explicit messages from illustrated text and identifying elements of story grammar.

The Can-Do descriptors give us a good idea of what we can expect from our ELL students and also what we should be providing to them so that they can successful and engage in grade level curriculum. Ultimately, that is our goal. We want our ELL students to be part of the school atmosphere and be able to interact and complete the same work as their grade-level counterparts but not necessarily with the same complexity. This can be accomplished by taking the language piece out of it and allowing them to show what they know without it.

How Do You Reach All English Language Learners?

This series has been developed based on differentiation that teachers have found effective. We will explore different ways to implement those strategies and why they are effective strategies.

Differentiation Strategy PD Timeline

The following series includes differentiation strategies for comprehensible input, explicit vocabulary instruction, building background knowledge and graphic organizers. These strategies are not commonly used in isolation and throughout the following series segments you will see the implementation of more than one strategy used at a time, but emphasis will be placed on the strategy being examined within the segment.

Part 2—Comprehensible Input

Video link: https://youtu.be/a4fQ5mr9hFE

What is Comprehensible Input?

As teachers we recognize comprehension as understanding and input as giving, therefore, comprehensible input is any written or spoken message that is understandable to a language learner because of the context in which it is given. Our goal is to give ELL students the ability to understand what we are saying and the ability to communicate back to teachers and peers.

What Does Comprehensible Input Look Like? Aural (Heard)

Aural, or heard comprehensible input does not necessarily mean that it is coming strictly from your voice. Adding to our voices helps ELL students understand. Some examples of ways to enhance our voices include:

- Body Language- pointing and using hand gestures
- TPR (Total Physical Response—Using the body to accentuate a word or phrase and then having the students repeat the word and action
- Slowing Speech—giving time for students to absorb language
- Clearly explain the academic task-step by step instructions with time to complete the task between instruction
- Using appropriate speech for the language proficiency level- using limited words and repeating with actions
- Avoid figurative language—use literal language whenever possible, or explain meanings of figurative language

What Does Comprehensible Input Look Like? Written

Written comprehensible input may include:

- Pictures which accompany words or phrases
- Realia- toys or miniatures that can be handled and manipulated

- Scaffolded activities with sentence stems and starters
- High-interest/low level reading material- materials at their learning level, but also at their age level
- Illustrations—draw or have the student draw the word
- Labeling—provide words that accompany everything they see
- Models—provide copies of expected output

Compelling Input Facilitates Comprehensible Output

The research of Steven Krashen (2014) says that comprehensible input must be compelling, or interesting, in order for students to produce comprehensible output. Giving them activities where they can work with their peers creates an atmosphere of engagement and encourages comprehensible output.

Combining Strategies

When providing comprehensible input, using multiple strategies adds to the accessibility of the content.

Pictures are Worth a Thousand Words

Providing pictures for instruction and assessment gives ELLs the opportunity to show mastery without language constraints.

Comprehensible Input-All-Day-Every-Day/Promoting Success for ELLs

Comprehensible input can be incorporated into almost every lesson you teach. Using body language supports verbal language for understanding. Slowing speech allows ELL students to hear individual words and begin the process of comprehension. Providing pictures for instruction and assessment provides the opportunity for success regardless of language acquisition level.

Part 3—Explicit Vocabulary Instruction

Video link https://youtu.be/NPwOOWVDj2U

What is Explicit Vocabulary Instruction?

It is very important that we explicitly teach vocabulary to our ELLs. Specifically, this is the teaching of words that students will encounter within context. This can include teaching word meaning and giving students word learning strategies such as using context clues, accessing cognates, dissection of prefixes and suffixes and using reference materials.

Frayer Model

Figure 8 shows an example of a Frayer model, which is a four-square box with the target word in the center. In one box students write the definition in their own words so that the target word makes sense to them. In another box students compose sentences so they can practice using the word in context. The third box can be the word in students' native language, or for higher level ELLs, a synonym and antonym. Finally, in the last box students draw or input a picture that describes the word.

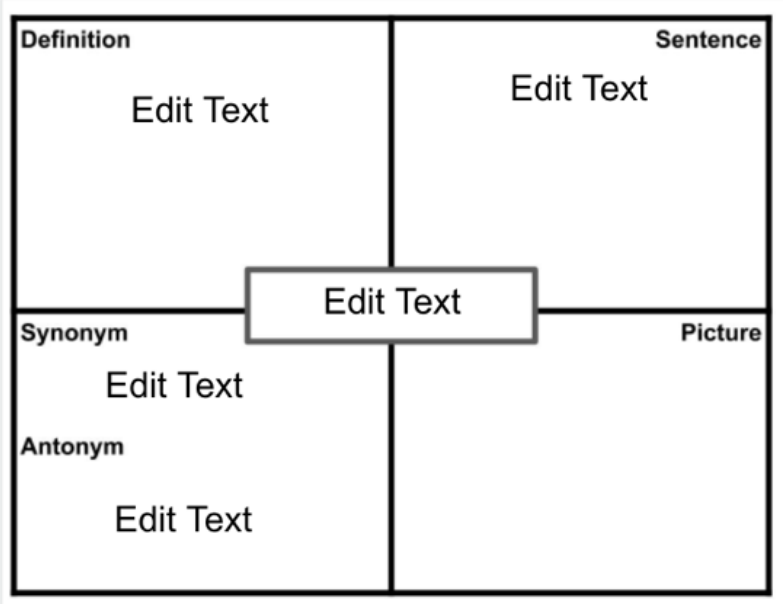


Figure 8. *Frayer Model.*

Practice with Pictures

Students draw pictures of vocabulary words on sticky notes or small pieces of papers. The teacher says the vocabulary word and the student must identify the matching picture. This is a great activity for newcomers who are working with higher level vocabulary words.

Personalized Word Walls

Figure 9 shows individual folders where students can add words as they learn them. Effective use of word walls includes classroom word walls that students add to as they learn words.

Figure 9. *Individual Word Walls.*
Source: Mini offices for students in grades K-3, (C. Gallagher, n.d.) and Personal Word Wall Printables, (n.d.)

Sentence Builders Using Content and Foundational Vocabulary

Supplementing content vocabulary with common words can help build meaning and content. As an example, teachers can provide a list of common words with content vocabulary and students create their own sentences using both common and vocabulary words.

Purposeful Instruction

The most import aspect of explicit vocabulary instruction is that it is purposeful instruction. The words chosen should be the most applicable to content instruction. Looking through the vocabulary and choosing the most important words for the lesson may include

reducing the number of words to make it manageable for the student. The goal is to pave the way from word recognition to word use and into engagement with their classroom peers.

Part 4—Building Background Knowledge

Video link: https://youtu.be/GZ_JJvroFd4

Importance of Background Knowledge

The more readers know about text, the easier it is to interact, understand and retain what is being read. ELL students coming from different countries and cultures may not have exposure to the same ideas and concepts that are being taught in their classrooms. We must ensure that we are giving our students the background knowledge that they need to move forward with understanding.

How to Build Background Knowledge

- Pictures—Video clips played at a slower speed
- Virtual field trips
- Classroom discussion—engage curiosity
- Connect to ELL Culture—What happened in your country that may be similar?
- Build on ELL assets—What do you already know?
- Preview a topic

Find out what is already known by providing pictures and words. Provide guiding questions such as:

- What do you see?
- What can you connect?
- Can you create a hashtag?

Interpret Pictures

Provide authentic pictures before teaching, especially with material that is specific to United States history, customs, or events. Allow the students to examine content while asking questions, drawing conclusions, making connections, and collaborating with peers.

Engage Curiosity

Use hands-on activities to connect to topic area lessons. This is especially effective in math and science, which are vocabulary heavy, but often can include realia or manipulatives that can introduce the concept and create excitement toward the topic.

Virtual Field Trip

Allowing students to visit a museum, monument, or an author or artist exhibit creates a visual map of the content that will be taught. If it is not available or reasonable to visit in person, search for a virtual field trip that connects to the topic.

Before You Teach—Think

Ask yourself the following questions before you teach:

- What part of the content might be confusing or unknown to someone from another culture?
- What do my students need to know as a preface to the content?
- How can I provide clarifying information about the content?
- Can my students provide me with a connection to their native culture?
- How can I build background knowledge?

Part 5—Graphic Organizers

Video link: https://youtu.be/O7Ai4DLiAkA

What are Graphic Organizers?

A way to help organize ideas when introducing new topics, supporting story development, or sorting and organizing vocabulary.

Charts

Charts are effective for strategies such as cause and effect, problem solution, main idea and details, or sorting activities. These can also be used with pictures, sentence stems or sentence starters.

Using a KWL Chart

KWL uses a chart to show what students already know (K), what students want to know (W) and what they have learned (L). This is used during three separate parts of the lesson with the know section activating prior knowledge, the want to know section allowing for engagement, and curiosity after reading and the learned section as a reflection after the lesson.

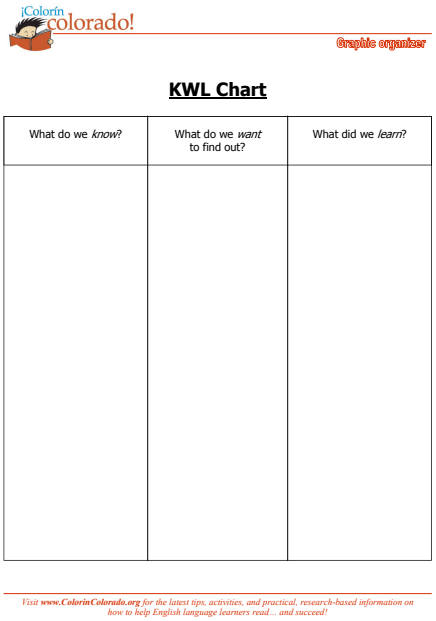


Figure 10. *KWL Chart.*
Source: *Using Graphic Organizers with ELLs*. Colorín Colorado (Sigueza, 2005).

Using a Two-Column Chart

Two column charts can be used for instruction or assessment and may include supports such as pictures.

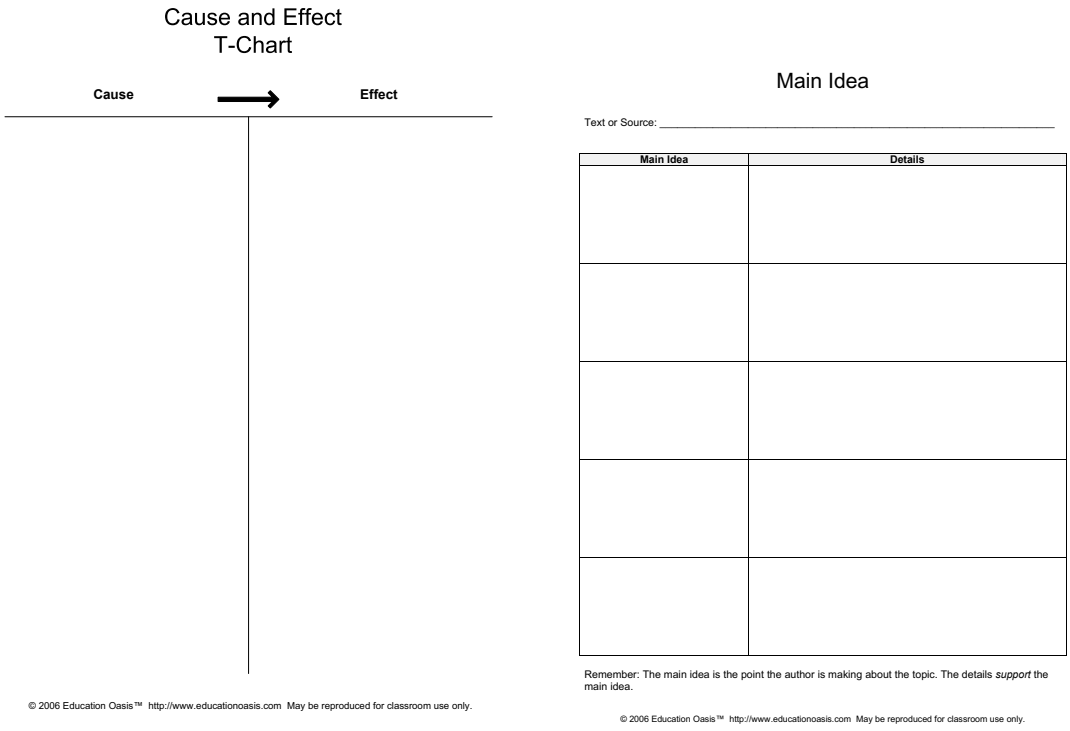


Figure 11. *Two Column Charts.*
Source: *Graphic Organizers | Education Oasis*. (n.d.).

Maps

Maps can be used to describe characters, settings, plot, and story organization. Higher level ELLs may be able to use flow charts and concept maps.

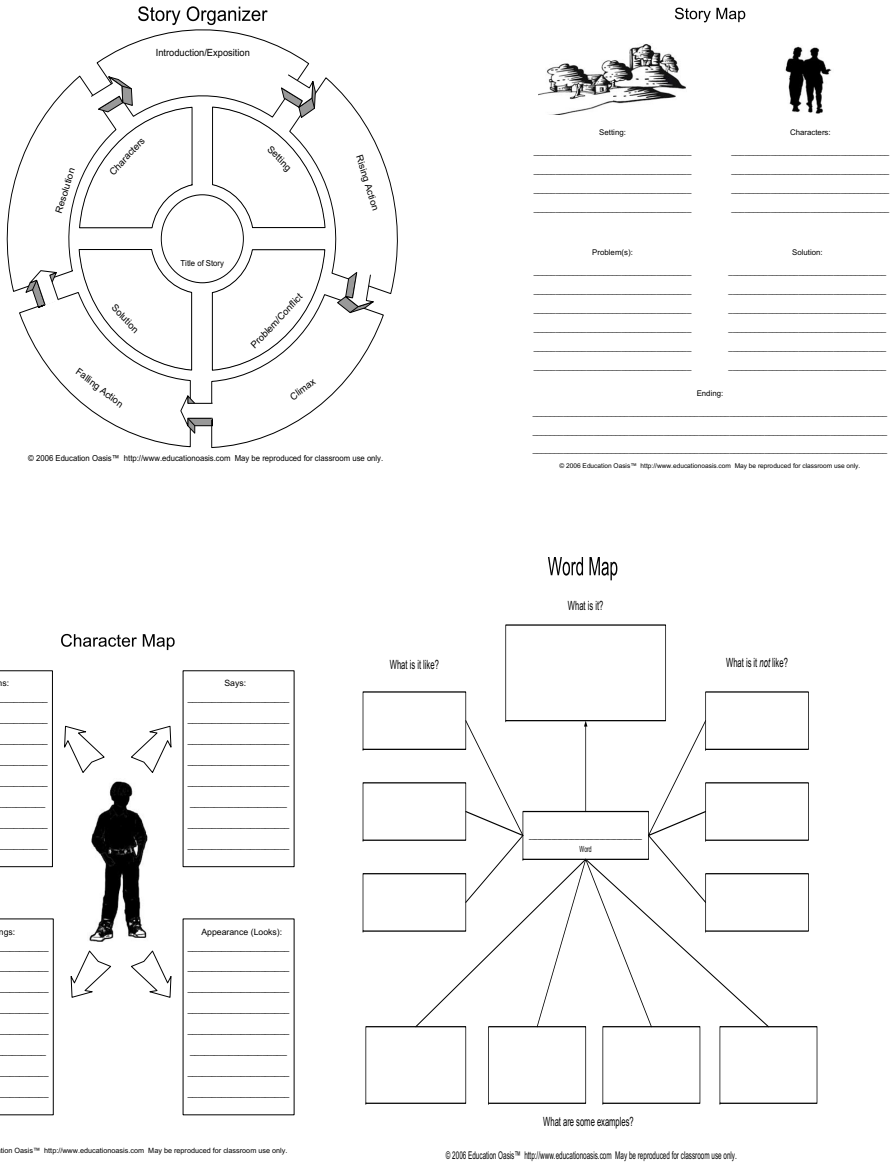
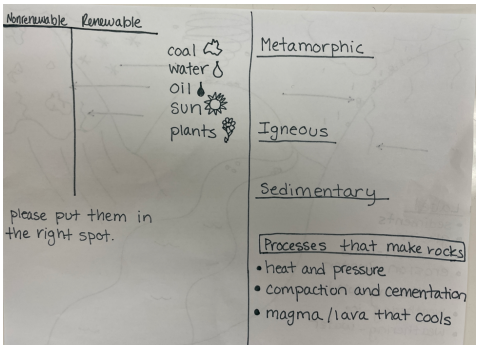


Figure 12. *Maps.*
Source: *Graphic Organizers | Education Oasis*. (n.d.).

Add Support with Word Banks and Sentence Stems

Word banks and sentence stems help ELL students complete the graphic organizers within their ELD level.



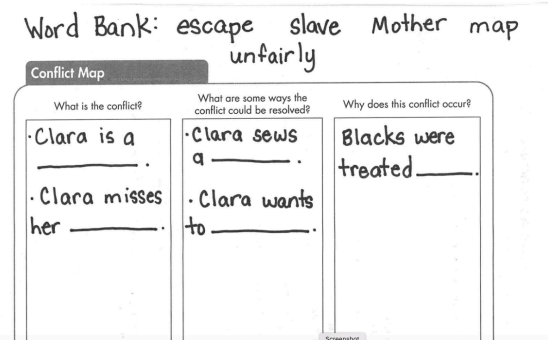


Figure 13. *Word Banks/Sentence Stems.*

One Pager

A one-page document that summarizes a topic studied in an organized and attractive manner. This can be supplemented with sentence starters, sentence stems or word banks.

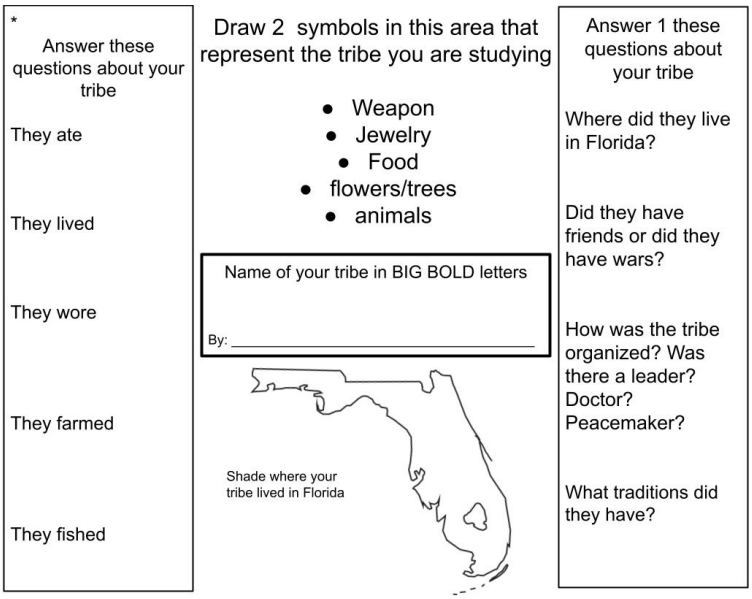


Figure 14. *One pager.*

Providing Content Clarity with Graphic Organizers

Breaking information into small comprehensible chunks using graphic organizers allows ELL students the opportunity to interact with content at their current academic and language development level. Graphic organizers can be further differentiated by adding pictures, sentence stems and word banks.

Summary

As our nation's demographics continue to change, it is important that teachers remain current in their practice to support these changes. Yet, as teachers are asked to plan and add additional instruction beyond academic curriculum to their current workload, the ability to research effective methods to reach our diverse learners can become daunting. Providing assistance such as this video series can support teachers as they attempt to navigate the evolving student population, making it possible to differentiate effectively and provide our ELL students the tools they need to engage in grade level curriculum while acquiring English.

CONCLUSION

As a conclusion to my research and implementation study, I believed it was appropriate to consider how my research has impacted my own practice as a teacher of ELL students in adding insight to the probable implication for general education and content area teachers. Through a self-study review and note taking of my recorded PLC sessions, I have been able to gain deeper insight into the depth of the topic of differentiation strategies and further refine my personal practice through reflection and modeling of concepts. Dana and Yendol-Hoppey (2020) use the CPED definition to explain that as *scholarly practitioners* we use "practical research and applied theory as tools of change" (Perry, 2013, p. 3 as cited p. 20). Although my research is intended for application by all teachers, one must examine the benefits the research has played in his or her own practice as an entry point to said change.

Discussion

To begin examining how my problem of practice, research, and teacher toolkit tie together, I must reflect on why we need to focus on differentiated strategies for diverse learners. It is clear that as a country our demographics are in flux.

Nationwide, the population of English Language Learners (ELL) continues to grow. Data from the Office of English Language Acquisition accentuates that by showing that the percentage of ELL students enrolled in United States schools rose by 1.9 percentage points between school year 2000-2001 and school year 2016-2017 (U.S. Department of Education, 2020). At the school where I am currently employed, our ELL population makes up more than 35% of our total student population, making it imperative that teachers are prepared to use

effective strategies to help these students actively engage with their peers in grade-level curriculum in the general education classroom while they are acquiring English.

Research has focused on what characteristics are prevalent in teachers whose data shows effective instruction of ELLs (Lumbrears & Rupley, 2019; Master et al., 2016; Polat, 2010). The study of Master et al. (2016) suggest that previous years of experience as well as scores on specific teacher certification exams may affect the ability to better instruct ELLs in the area of math. In concurrence with their data, Polat (2010) found that in-service teachers were much more self-confident in their ability to differentiate instruction for ELLs than pre-service teachers, thereby calling for focused attention on direct instruction and field experience with diverse learners in college education curriculums. Although these technical results seem logical, Lumbrears and Rupley's (2019) study of former ELL students who are now adult educators showed that empathy, compassion and cultural knowledge expressed by classroom teachers throughout their schooling greatly impacted their desire to excel at English language acquisition, thereby creating greater success in academics.

Gupta (2019) stresses the importance of general education teachers understanding how to incorporate principles of second language learning into an effective literacy program. Yet the time it takes to research implementation strategies and prove their effectiveness is often not available in demanding teacher schedules (Polat, 2010). Because of my facilitator role in the PLC, I was able to guide implementation of strategies while practicing the same strategies in my own classroom, thereby narrowing the vast research to a more manageable set of differentiation tools to be accessed and applied for ELL differentiation. Through my dissertation in practice research, I believe I have become more of an expert in the area of differentiation strategies for ELLs and am able to better assist teachers with implementation of strategies, in turn helping ELL

students engage in grade level curriculum while acquiring English. The development of the video series passes on my learning by providing concise differentiation strategy options and some effective ways of implementation.

Limitations

There are limitations to this research study. These limitations include the size of the sampling group in the quantitative survey and the size of the implementation group in the qualitative study. Both groups were small, indicating that the data results may not be applicable in all circumstances. Additionally, the research was conducted within a single school district. Although this district's demographics show a large population of ELL students, prior experience teaching ELLs was not taken into consideration in the survey, which may affect the results. Because of the district ELL demographics, teachers may have prior ELL teaching experience on which to draw. Additionally, the study was implemented over a short time period, limiting the data collection to a small number of responses based on current instruction during the implementation period. Taking these limitations into consideration, the data collection methods created a snapshot of both current ELL differentiation strategies being used in the general education classroom, and effectiveness of engagement of ELLs while using the strategy. Finally, researcher bias should be considered due to researcher PLC facilitation. Participant implementation of strategies may have been affected by discussion of specific methods and uses of individual strategies.

Recommendations for Future Inquiry

The implementation of the specific ELL differentiation strategies shows the potential for ELL engagement in grade level curriculum as evidenced by collected data, pictures and videos presented in the teacher toolkit. But it is not practical to assume that teachers can reach these

results using only the four identified strategies. Although teacher planning and professional development time is limited, it is possible that through a series of short videos, similar to the developed teacher toolkit in this study, teachers may be able to increase their understanding and capacity for differentiation strategies.

It is the recommendation of this researcher that further research be conducted on the effectiveness of additional differentiation strategies and accompanying in-service training/professional development videos be produced to assist teachers in expanding their repertoire of effective differentiation strategies for engagement of English Language Learners in the general education classroom.

APPENDICES

Appendix A

ELL Differentiation Strategies Survey

Q1 Instructional Level (Choose all that apply)

- ☐ Elementary
- ☐ Middle
- ☐ High
- ☐ Other _____

Q2 Area of Instruction

- ☐ General Education (all subjects)
- ☐ Core Subject Area (math, science, social studies, etc.)
- ☐ Support (ESE, ELL, etc.)

Q3 Average number of English Language Learner (EL) students in each class (Currently identified as active EL (LY))

- ○ 1-2
- ○ 3-5
- ○ 6-8
- ○ More than 8

Q4 Please indicate how many times per week each strategy is implemented. 0 equals never; 5 equals daily.

	Weekly Strategy Use					
	0 (1)	1 (2)	2 (3)	3 (4)	4 (5)	5 (6)

Comprehensible input- providing understanding through content, i.e. hand gestures, pictures, media, simplification of instructions (1)	○	○	○	○	○	○
Explicit Vocabulary Instruction- frontloading of content vocabulary (2)	○	○	○	○	○	○
Sentence Frame/Sentence Stems- Sentence starters, cloze sentences and word banks (3)	○	○	○	○	○	○
Collaborative Conversation with response prompts- Whole group or small group discussion (4)	○	○	○	○	○	○
Graphic Organizers- Charts, graphs, diagrams that support the instruction (5)	○	○	○	○	○	○
Word Bank/Word Wall- Current content vocabulary displayed and referred to on a regular basis. (6)	○	○	○	○	○	○
Total Physical Response (TPR)- Physically acting out vocabulary by imitating the teacher's actions (7)	○	○	○	○	○	○

Peer Teaching- Prepared lessons for students to teach other students (8)	○	○	○	○	○	○
Learning Stations- small group activities with differentiated materials based on language acquisition levels (9)	○	○	○	○	○	○
Activating Prior Knowledge/Building Background Knowledge- eliciting from students what they already know and providing information before instruction (10)	○	○	○	○	○	○

Appendix B

PLC Participation Interest Survey

Q1 Name

_____

Q2 Email Address

_____

Q3 Grade Level/Subject

_____

Q6 Provide a short statement of why you are interested in participating in this PLC.

_____

Q4 Participation will be limited to 4-6 teachers. Data collected from strategy implementation will be used as part of a further research study focused on effectively engaging EL students in grade level curriculum through differentiated strategy implementation. By submitting your personal information, you acknowledge that you understand and agree that any data collected may be part of this research study if you are selected to participate.

- ○ I agree
- ○ I do not agree

Appendix C

Strategy Implementation Survey

Q2 Which strategy did you implement?

_____

Q3 How did you implement the strategy?

_____

Q4 What were the barriers to implementing the strategy?

_____

Q5 How were your ELL students able to engage in the grade-level curriculum through use of the strategy?

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