

Constructivism in Practice: The Case for English Language Learners

Nyaradzo Mvududu^{1*} & Jennifer Thiel-Burgess¹

¹ School of Education, Seattle Pacific University, 3307 Third Avenue W, Seattle WA 98119, USA

Corresponding author: Nyaradzo Mvududu, School of Education, Seattle Pacific University, 3307 Third Avenue W, Seattle WA 98119, USA. Tel: 1-206-281-2551 E-mail: nyaradzo@spu.edu

Received: August 10, 2012 Accepted: August 26, 2012 Published: September 20, 2012

doi:10.5296/ije.v4i3.2223 URL: <http://dx.doi.org/10.5296/ije.v4i3.2223>

Abstract

A classroom of diverse learners with diverse language backgrounds can be a great challenge for a classroom teacher. English Language Learners (ELL) present a particular challenge to teachers as they represent such a wide range of academic abilities, English language abilities, and academic background. Constructivism is widely touted as an approach to probe for children's level of understanding and the ways in which that understanding can be taken to higher level thinking. Constructivism is a way of learning and thinking. It is how students make sense of the material and how they can be taught most effectively. Constructivism as an educational theory holds that teachers should take into account what students know. Teachers then build on this knowledge and allow students to put their knowledge into practice. This paper will explore how the theory of constructivism may benefit ELL students in an inclusive classroom.

Keywords: *English Language Learners, Constructivism, Inclusion*

1. Introduction

Throughout history, immigration has significantly impacted the makeup of the U.S. population. Today, immigration continues to be a source of diversity in the U.S. Such diversity has many dimensions including language diversity. Language diversity has therefore become a standard reality in the school. It is reasonable to expect such diversity to grow. According to demographers, by 2026 an estimate of 25% of the children coming to school will live in homes where English is not the primary language. In light of this, it is important that teachers seriously consider language diversity if they are to meet the needs of all students and help them achieve academic success. Many states and school refer to these students as English Language Learners (ELLs).

There have been a number of programs designed to assist ELLs to develop English language skill. While the following is not an exhaustive list, it provides an overview of instructional programs implemented over the last decade or so.

- 1) Transitional bilingual education: Students are taught in their primary language. Over time (1-3 years) there is a gradual decrease in the use of the primary language and a transition to English-only instruction.
- 2) Maintenance bilingual education: Students are taught in both English and their primary language in the earlier grades (K-6) so that they become academically proficient in both languages.
- 3) Dual language programs: Students for whom English is the primary language and students for whom it is not are instructed together. The goal is for each group to become bilingual and bi-literate.
- 4) Sheltered English: Students are initially instructed at low levels of English and gradually move up the levels. The students' primary languages are not used.
- 5) English as a second language: No instruction is given in the primary language of the students. The goal is to mainstream students as fast as possible.

These programs are not mutually exclusive and many school districts use them in some blended form. Just as there are various ELL programs, there are various pedagogical approaches to teaching ELL students. Regardless of the program chosen, an approach that appears compatible with the goal of reaching all students is the constructivist approach.

2. Constructivism in practice

The constructivist view is touted as one of the leading theoretical positions in education. There is no universal definition of constructivism. For some it is a theory of learning, for others it is a theory of knowledge, and for others still it is a pedagogical theory. Additional views include theory of science, educational theory or an all-encompassing worldview. Phillips (2000) writes about a number of constructivist traditions. The theoretical framework for this article is educational constructivism. This theory has a number of variations. The two most popular are:

- 1) personal constructivism attributed to Jean Piaget and
- 2) social constructivism associated with Lev Vygotsky.

Piaget and Inhelder (1969) believed that the fundamental basis of learning was discovery. Vygotsky (1978) believed that Piaget's emphasis was centered too closely on the internal processes of individuals. Vygotsky viewed cognitive development primarily as a function of cultural, historical and social interaction rather than of individual construction. He suggested that people create psychological tools to master their behavior, the most important being language. Whether knowledge is viewed as socially situated or whether it is considered to be an individual construction has implications for the ways in which learning is conceptualized. Such question like "how can the constructivist theory encompass both the collective activity and the individual experience to take into account the important classroom social interactions that are so much a part of the entire educational process?" underlie the complexities involved in translating the diversity of perspectives on constructivism into a common set of principles that can be operationalized. Two important notions encompass the simple idea of constructed knowledge (Hoover, 1996). The first is that learners construct new understandings using what they already know. They come to learning situations with knowledge gained from previous experiences. That prior knowledge influences what new or modified knowledge they will construct from the new learning experiences.

The second notion is that learning is active rather than passive (Hoover, 1996). Learners negotiate their understanding in light of what they encounter in the new learning situation. If what learners encounter is inconsistent with their current understanding, their understanding can change to accommodate new experience. Learners remain active throughout this process.

Constructivism, therefore, has important implications for teaching (Hoover, 1996). First, teaching cannot be viewed as the transmission of knowledge from the enlightened to the unenlightened; constructivist teachers do not take the role of the "sage on the stage." Rather, teachers act as "guides on the side," who provide students with opportunities to test the adequacy of their current understandings.

Second, if learning is based on prior knowledge, then teachers must take note of that knowledge and provide learning environments that exploit inconsistencies between learners' current understandings and the new experiences before them (Clements, 1997; Hoover, 1996). This presents a challenge for teachers as they cannot assume that all children understand something in the same way. Furthermore, children may need different experiences to advance to different levels of understanding.

Third, if students must apply their current understandings in new situations in order to build new knowledge, then teachers must engage students in learning, bringing students' current understandings to the forefront (Hoover, 1996). Teachers can ensure that learning experiences incorporate problems that are important to students, not those that are primarily important to teachers and the educational system. Teachers can also encourage group interaction, where the interplay among participants helps individual students become explicit about their own understanding by comparing it to that of their peers.

Fourth, if new knowledge is actively built, then time is needed to build it. Ample time provides opportunities for student reflection about new experiences, how those experiences line up against current understandings, and how a different understanding might provide students with an improved (not "correct") view of the world

3. Research on Constructivism

Many studies have shown how constructivist teaching can be effective across subjects and across the diversity dimensions of race, academic ability, and socioeconomic lines. For example, Le Grice, Mabin, and Graham (1999) found that using a constructivist approach to teach remedial mathematics to 8-10 year old students was effective in improving the students' math scores. Thirty participants were randomly assigned to three instructional groups using three different methods, one of which was a constructivist method for teaching mathematics. All three groups of students improved their scores. However, the students in the constructivist group had larger improvements. The remaining groups showed improvements but, at the one year follow up, the improvements were not maintained. On the other hand, retention scores were significantly higher for the constructivist group. This study demonstrates that constructivist approaches can be useful in improving standardized test scores for low achieving math students and the results may have longer lasting benefits than other techniques and theories.

A constructivist approach has not only been found to be effective in improving test scores, but also overall participation and retention of material. Altun and Büyükduman (2007) conducted a qualitative study in Turkey. The twenty-six students and one teacher included in the study were from an English preparatory program. In their instruction, the teachers used constructivist principles and students and teachers were observed over the three days of implementation. Students appeared to be more on task and active during the class hour and stated that they were better able to connect their learning to previous knowledge by participating more in group work. The students were also better able to make connections by utilizing the examples of their peers. This increased participation in the classroom resulted in a more permanent retention of the vocabulary. Additionally, students felt more able to concentrate on the curriculum and produce new knowledge. They attributed this to the removal of the previously prescribed goals of the class and the freedom to acquire their own knowledge.

Building on prior knowledge is the cornerstone of constructivism. Yang (2002) conducted a qualitative study in which he found that new knowledge of one subject can be built while reinforcing previous knowledge from another subject. Similarly, Boekaerts and Minnaert (2006) conducted a study of 95 university sophomores in the Netherlands to examine how levels of interest in the content material related to three psychological need states: perceived autonomy, competence and social relatedness. All three psychological needs fluctuated over the course of the study, typically ebbing during the middle of a course but resurging nearer to the end. Boekaerts and Minnaert (2006) found that if a student felt satisfied in any two of the three psychological need areas that student tended to translate that satisfaction into an overall positive learning experience. For example, though a student may

not feel autonomy in a group situation, he or she might feel the group worked well together (social relatedness) and they learned a significant amount of material (competence) and consequently come away from a learning experience with a positive overall opinion. A group that doesn't work well together, but whose members feel relatively autonomous and productive (competence) will also tend to have a more positive overall experience. This study demonstrated that constructivist techniques need not satisfy all three psychological needs simultaneously. As long as a majority of psychological needs are satisfied, students feel they had a positive learning experience.

ELL students present a particular challenge, especially when taught in an inclusive setting. This sufficiency of satisfying a majority of psychological needs may be helpful when applied to English Language Learners. These learners may need to be approached with a variety of constructivist techniques for optimal learning and a positive learning experience. Many of the constructivist techniques may be useful when working with ELL students in a culturally and linguistically diverse classroom. Before discussing these techniques in that setting, we need a more general understanding of ELL students in inclusive classrooms.

4. English Language Learners and an Inclusive Classroom

A classroom of diverse learners with diverse language backgrounds can be a great challenge for a classroom teacher. Learning English involves cognitive processes, cultural processes and language processes. English Language Learners (ELL) pose a particular challenge to teachers as they represent such a wide range of academic abilities, English language abilities, and academic background. Additionally, cultural differences may influence the students' ability to be successful in the classroom. There has been a significant amount of research on the effectiveness of particular strategies or techniques in working with ELL students particularly in an inclusive setting.

An inclusive ELL classroom is one in which ELL students and general education students learn in the same classroom with one teacher. This setting has many benefits for ELL students as well as many challenges. ELL students in an inclusive environment will be forced to use their English skills more regularly, especially with their peers. Simich-Dudgeon (1998) found that talk amongst students, especially culturally and linguistically different students, can be a great help in language acquisition, comprehension, and reflection. Further, student collaborative talk can greatly help the teacher understand the comprehension level of students and can help him or her to build on what students already know and make the material more relevant to students. In an inclusive environment, ELL students are provided the opportunity to collaborate with students of all different English language proficiency levels. This may help ELL students to develop more complex vocabulary and concepts.

As previously stated, inclusive classrooms are not without challenges. For example, many ELL students are less likely to speak up and participate in a classroom of native English speaking students (Rose, McFarlane, & Nagy, Personal Communication, 2007). Further, many ELL students may not be receiving the services, the attention, or the help they need in an inclusive classroom (Ricken & Terc, 2006; Valencia, Menchaca, & Donato, 2002). Simply putting all students of all abilities in the same classroom is not an automatic solution.

Rather, an inclusive environment is an opportunity to teach multiculturalism, to have students work collaboratively, and to allow ELL students to work with native English speakers while still receiving services and resources to be successful in the inclusive classroom.

5. Techniques, Theories, and Research for an Inclusive ELL Classroom

Zehr (2006) found that a collaborative approach to teaching in an ELL classroom was highly effective in helping Laotian first graders increase their English abilities and become more comfortable working in the inclusive classroom. Two teachers worked together to build on what the children already knew. One teacher worked in a small group with students whose English language abilities were very low and oriented the students to a reading lesson that took place later in the day. The other teacher worked with the remaining members of the class on routine exercises and memorization. The two groups then came together and the lesson that the small group worked on was given to the entire class. This helped the students with low English language ability to orient to the challenging material, better understand the vocabulary, and provided them with an opportunity to contribute to the class lesson and discussion. Following the lesson, students were given the opportunity to work individually and then in small groups on the assignment and on lesson comprehension. This inclusive, collaborative approach assisted the Minnesota Elementary School to begin to close the achievement gap between English speaking students and English Language Learners (2006).

The results of this school district were strongly influenced by their specific population, their district resources, and the community of the specific school. While these results may not be generalizable to other school districts with higher rates of diversity, multiple language representation, and stratification of socioeconomic classes, research does imply that inclusive and collaborative environments can help ELL students to better acquire English language abilities.

Research further indicates that English Language Learners will experience more academic success if they are academically proficient in their native language (August & Hakuta, 1997; Brisk & Harrington, 2007; Burton & Clennell, 2003; Cummings et al. 2005; Valencia, 2002). The more academic background a student has in their primary language, the more successful they will likely be in English-taught academic courses.

Cummins et al. (2005) suggest that inclusive classrooms with linguistically different children should consider this research. Children should not be forced to speak only in English, but their native language should be welcomed and celebrated. Students should be provided an opportunity to integrate their native language into their academic life. "Pre-existing knowledge for English language learners is encoded in their home languages. Consequently, educators should explicitly teach in a way that fosters transfer of concepts and skills from the student's home language to English" (p.38).

Cummins et al. (2005) place a great deal of responsibility on the classroom teacher to invest in students, to ask about their culture, their religion, and their identity. As teachers show interest and genuine concern, students begin to feel more welcome, accepted, and

secure. The goal is no longer assimilation to the larger culture, but rather a process of helping students learn to celebrate their own cultural identity. When students feel welcomed and accepted as they are, they are more likely to be successful.

Furthermore, Cummins et al. (2005) assert that these two main concepts are essential to academic success for English Language Learners: Students should be incorporating their native language and academic ability from their previous experiences into their English academic life, and students should be affirmed in their cultural identity. As students are affirmed, they are more likely to invest their cultural identity within the context of their academics and thus are more likely to succeed academically. In this way, students can utilize resources from their native language and culture while acquiring academic resources in English. Students will work with teachers, collaborate with peers, and utilize all resources the students possess instead of being limited to English resources.

While collaboration and relatedness have been shown to be effective techniques when working with ELL students, autonomy and self-direction have also been shown to be effective. From their study, Uresti, Goertz, and Bernal (2002) found self-directed learning to be an ideal method of instruction to help English language learners increase their overall proficiency. While this study doesn't focus on collaborative approaches, it suggests that inclusive classrooms using independent and autonomous learning styles can help students at all levels in an inclusive and linguistically diverse classroom.

In this study, Uresti, Goertz, and Bernal (2002) used an adaptation of the Autonomous Learner Model. The model is a five-dimensions program aimed at helping learners achieve the goal of independent or autonomous learning (Betts and Knapp, 1981). The Uresti, Goertz, and Bernal study focused on a mixed class of Spanish-speaking, English-language learners, and bilingual or English-proficient children. Techniques typically seen in gifted classrooms such as curriculum compacting, curriculum differentiation, and independent study were incorporated into the first-grade classroom for 24 weeks. The process involved an orientation period, an individual development period to promote self-understanding and the enrichment activity which students pursued as an independent learning project. Though largely anecdotal, the data indicated a significant increase in the students' scores on two standardized tests: the Iowa Test of Basic Skills and the Spanish Assessment of Basic Education. Independent investigations and self-direction had a positive effect on the students' academic success. It was also noted that this type of learning can be difficult for some Mexican American children who are taught culturally to avoid individual competition, independence, and self-direction. Nonetheless this method of instruction allowed students to safely and successfully pursue this type of learning.

Each of the studies cited presents an example in which inclusive ELL classrooms were successful. Involving students in the process of teaching and learning, utilizing collaboration amongst all students, allowing students to self-direct and work independently can all be successful methods for teaching ELL students in an inclusive classroom. Each of these approaches provides opportunities for students to be successful and gain confidence in their new English language abilities while still maintaining their cultural identity and celebrating

their background, their language, and their abilities. Characteristics of the approaches used in these studies are consistent with constructivist theory.

6. Constructivism in an ELL Inclusive Classroom

Constructivism is appealing as an educational theory because it provides a framework for the way students learn. This framework is similar and learning is similar for students regardless of race, cultural background, or language. However, there are many educators that believe that learning is intrinsically cultural. Bailey and Pransky (2005) share this perspective. They claim that learning is bound in culture and pedagogical theories such as constructivism don't account for the deep impact that culture has on learning and knowledge.

Bailey and Pransky (2005) point out there may be pedagogical differences among cultures. By accepting one pedagogy as "right" or "superior" and rejecting others as "inferior," educators disregard culture and make inappropriate assumptions about student learning and the importance of specific pedagogical techniques. In establishing an educational "best practice," the dominant culture is reflected. Theories such as constructivism reflect the view that values and culture are important in our society. Bailey and Pransky (2005) reject the notion that constructivist theories educate the "whole child" and assert that, like other pedagogies, constructivism is rooted in culture and essentially isolates and excludes culturally and linguistically different children.

In contrast to this perspective, Meredith (2003) found that research supported the idea of constructivism in the acquisition of reading and writing skills with English Language Learners. Meredith (2003) espoused the notion that has been presented previously: ELL students have experiences and backgrounds that can contextualize the information. As students feel information and knowledge is relevant to them, they are more likely to be successful. By capitalizing on students' backgrounds and prior knowledge, teachers are more likely to provide opportunities for their ELL students to be successful and feel invested in their education. Their education becomes relevant to them, their cultural identity, and their prior understanding and knowledge.

While there are differing opinions on the effectiveness of constructivism in ELL inclusive classrooms, there seem to be some areas of overlap. Constructivism suggests that students should be invested in the material being taught. Students should draw on their prior knowledge and background to relate to the material and make it personally relevant. As students do this, they are more invested and have a deeper level of understanding. Teachers are then responsible for ensuring that they (the teachers) have a basic understanding of students' prior knowledge and for redirecting or refining this prior knowledge and further developing it so that deeper and more complex concepts can be understood by the student within their own context.

Similarly, English Language Learners are more successful when they can relate the new material they are learning to previous experiences, to their cultural background, and to their knowledge within their native language. These steps lead to success for ELL students. As their differences are celebrated and integrated into the classroom and the lesson content, ELL

students become more invested. Students are likely to perceive the material as demonstrating respect for their differences. They will then view the material as relevant to them, and they can employ all of their resources to be successful.

Bailey and Pransky (2005) make a valuable and important point; much of learning is culturally bound. While this point is vital for educators to remember, it does not discount the potential effectiveness of constructivism in the inclusive ELL classroom. Educators must be cognizant of cultural differences, but they are also responsible for educating students from culturally and linguistically different backgrounds. By utilizing students' prior knowledge and allowing them to build on their own experiences and understanding and to refine their knowledge, teachers can respect the differences of their students and the context in which they learn.

Further, many concepts and techniques that are helpful in constructivist classrooms may be particularly helpful in an ELL inclusive classroom. For example, working collaboratively to deepen their understanding of the material is one way in which students from different backgrounds can see new perspectives, utilize their different resources and abilities, and practice their skills while learning to work with others. At the same time, independent study, autonomy and self-directed learning can be extremely helpful in assisting students in an inclusive setting to work at their own pace, find material that is relevant to them, invest in their own learning, and provide further opportunities for ELL students to be successful while building upon their previous knowledge and cultural context.

Constructivist techniques in an ELL inclusive classroom may not be effective for all students. However, using constructivist research and pedagogy may be a way to make material relevant for students who are culturally and linguistically different. Building on previous knowledge, making material relevant, and engaging active thinking is essential to both constructivism and instruction for English Language Learners and could potentially be a great tool to help ELL students be more successful in the inclusive classroom.

7. Conclusion

The reality we face in our schools is that the student population is becoming more and more diverse. It is important that we intentional think about how to effectively teach our students. Constructivism represents one of the big ideas in education. Its implications for how teachers teach and learn to teach are enormous. If our efforts in reforming education for all students are to succeed, we must focus on students. To date, a focus on student-centered learning may well be the most important contribution of constructivism. As Phillips (2000) noted, "it seems possible for a person who accepts constructivism as a philosophy to adopt a variety of educational practices or for a teacher who uses constructivist classroom practices to justify doing so in a variety of ways, some of which might not philosophically be constructivist at all" (p. 18). This may mean that the best of constructivist pedagogy can be had without constructivist epistemology.

References

- Altun, S., & Büyükduman, I. (2007). Teacher and student beliefs on constructivist instructional design: A case study. *Educational Sciences: Theory & Practice*, 7, 30-39.
- August, D., & Hakuta, K. (Eds.). (1997). *Improving schooling for language-minority children: A research agenda*. Washington, D.C.: National Academy Press.
- Bailey, F., & Pransky, K. (2005). Are 'other people's children' constructivist learners too? *Theory Into Practice*, 44, 19-26. http://dx.doi.org/10.1207/s15430421tip4401_4
- Betts, G.T. & Knapp, J. (1981) Autonomous learning and the gifted: A secondary model. *In Secondary programs for the gifted and talented*.(pp29-36) Ventura, CA: National/State Leadership Training Institute for the Gifted and Talented.
- Boekaerts, M., & Minnaert, A. (2006). Affective and motivational outcomes of working in collaborative groups. *Educational Psychology*, 26, 187-208. <http://dx.doi.org/10.1080/01443410500344217>
- Brisk, M.E., & Harrington, M.M. (2007). *Literacy and bilingualism: A handbook for all teachers, Second Edition*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Burton, J., & Clennell, C. (Eds.). (2003). *Interaction and language learning*. Alexandria, VA: Teachers of English to Speakers of Other Languages, Inc.
- Clements, D. H. (1997). (Mis?)Constructing constructivism. *Teaching Children Mathematics* 4(4) 198-200.
- Cummins, J., Bismilla, V., Chow, P., Giampapa, F., Cohen, S., Leoni, L., Sandhu, P., & Sastri, P. (2005). Affirming identity in multilingual classrooms. *Educational Leadership*, 63, 38-43.
- Hoover, W. A. (1996). The practice implications of constructivism. *SEDLetter* 9, (3).
- Le Grice, B., Mabin, T., & Graham, S. (1999). *I can do maths: Changing children's mathematics percentile ranking*. Retrieved from ERIC database (ED455093).
- Meredith, D. (2003). *Current philosophy and practice in ESL/EFL reading education: An analysis*. Retrieved from ERIC database. (ED482577).
- Phillips, D. C. (2000). *Constructivism in education: Opinions and second opinions on controversial issues*. Chicago: Ninety-Ninth Yearbook of the National Society for the study of Education, Part I.
- Piaget, J., & Inhelder, B. (1969). *The psychology of the child*. New York: Basic Books.
- Ricken, R., & Terc, M. (2006). *User-friendly schools for Latinos: A model for all immigrants*. Lanham, MD: Rowman & Littlefield Education.
- Simich-Dudgeon, C. (1998). *Classroom strategies for encouraging collaborative discussion*. Retrieved from ERIC database. (ED435188).

- Uresti, R., Goertz, J., & Bernal, E.M. (2002). Maximizing achievement for potentially gifted and talented and regular minority students in a primary classroom. *Roeper Review*, 25, 27-31. <http://dx.doi.org/10.1080/02783190209554194>
- Valencia, R.R. (Ed.). (2002). *Chicano school failure and success: Past, present, and future*. New York, NY: Routledge/Falmer.
- Valencia, R.R., Menchaca, M., & Donato, R. (2002). Segregation, desegregation, and integration of Chicano students: Old and new realities. In R.R. Valencia (Ed) *Chicano school failure and success: Past, present, and future* (pp. 70-107). New York, NY: Routledge/Falmer.
- Vygotsky, L. S. (1978). *Mind in society*. Cambridge: Harvard University Press.
- Yang, C.C. (2002). *Integration of laptops into a K-12 learning environment: A case study of a science teacher in a middle school*. Retrieved from ERIC database. (ED477110).
- Zehr, M.A. (2006). Team-teaching helps close language gap. *Education Week*, 26, 26-29.

Copyright Disclaimer

Copyright reserved by the author(s).

This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).