Constructivism in Multicultural Education

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Abstract

Constructivism is a common teaching method used in many adult learning scenarios. This method requires the learner to engage in active experience followed by reflection and discussion about the experience to build knowledge. Subjects as abstract as culture are best learned through this model where the learner may build an awareness rather than a prescriptive list of learned facts. Constructivism was used to engage students in a college course at Texas A&M to develop their multicultural education. In the fall of 2015, five students enrolled in ALEC 644- The Agricultural Advisor in Developing Nations, and were educated on issues in international development. The course required these students to develop a catalog of case studies documenting incidents encountered with professionals and volunteers in development while abroad. Collaboration was a key element to the success of this project, as the students worked together to bring in 15 presenters to discuss their personal experiences in international development and a critical problem they encountered within their work. The students engaged with each presenter about a situation they encountered and discussed possible scenarios. As a group they reflected upon the incident and tried to arrive at the most effective and ethical solution to the incident at hand. The use of constructivist methods in this situation proved to be particularly effective at creating awareness of how culture impacts a situation both directly and indirectly. This provided an important skill set to these students seeking employment in the international development sector. The practice of learning through experience and reflection better prepares them to consult in sensitive situations, where many influential factors may not be obvious to an individual whose knowledge is not built on a foundation of diverse experiences. The effectiveness of the method can be observed in the final class product, the case study catalog, and the personal growth of the students in the course.

Constructivism in Multicultural Education

New, innovative learning theories are always being explored and implemented into various settings. The theories of constructivism and multicultural education frequent dialogues about improving the quality of learning for all students. This paper examines potential applications of combining these two theories and its use in a graduate course at a Texas university.

The utilization of constructivism in education is a growing trend. Theories around the use of the approach are continually evolving as well as diverging into different sects of constructivism. With these different perspectives on constructivism, theorists largely agree on the definition of constructivism as the approach where learners actively engage in constructing meaning from their experiences to acquire knowledge (Jones & Brader-Araje, 2002). This is a sharp contrast to what is considered the default teaching approach of directly transmitting a message from the teacher to the student (Oldfather, Bonds, & Bray, 1994). The constructivist approach can be broadly separated into two different interpretations: psychological and social constructivism. Jean Piaget, a Swiss developmental psychologist and philosopher, pioneered constructivist theory (Campbell, 1997). Piaget's theory is the psychological or cognitive approach and describes learning as a process that occurs individually. Psychological theory assumes students arrive at concepts already in their head and the teacher facilitates the modification of these existing concepts to construct new knowledge (Abdal-Haqq, 1998). This theory has been criticized because learning has been decontextualized by ignoring social and cultural factors that influence the learning process (Vadeboncoeur, 1997). Russian psychologist Lev Vygotsky developed theories surrounding social constructivism (Vianna & Stetsenko, 2006). Social constructivism emphasizes that learning occurs as an exchange of cultural meanings in a

social context. Thus, if the environment in which an individual was to learn was altered, the knowledge they may construct would change as well (Abdal-Haqq, 1998). Either method used may require more time for the students to acquire knowledge, but they both are regarded to internalize knowledge and deepen meaning to a greater extent with their implementation in the classroom (Abdal-Haqq, 1998).

Educators and researchers studying the field of multicultural education (MCE) define it in a multitude of ways and have no singular approach to the pedagogy. Despite the wide range of perceptions on this educational concept, multicultural education is generally accepted as a type of "education and instruction designed for the cultures of several different races in an educational system", as well as to incorporate different cultural history and context into educational materials (Wilson, 1997, para. 1). This approach to teaching and learning "acknowledges and incorporates positive racial idiosyncrasies into classroom atmospheres", which has been attributed to the increasing racial and cultural diversity within the United States (Wilson, 1997, para. 1). Much of the debate surrounding "race, ethnicity, social class, and gender in the U. S. has been based in the mythology of a superior culture into which all others must be assimilated"; multicultural education seeks to challenge this concept and combat it with a paradigm shift within the education system (Hanley, 2012, para. 1). Various goals set by educators of this pedagogy include reforming schools, classrooms, curricula, and conceptual themes to push the boundaries of conventional education systems. James A. Banks (2016) states that "there is a general agreement among most scholars and researchers in multicultural education that, for it to be implemented successfully, institutional changes must be made, including changes in the curriculum; the teaching materials; teaching and learning styles (Lee, 2007), the attitudes, perceptions, and behaviors of teachers and administrators; and the goals, norms, and culture of

the school" (2016, p. 4). Simply put, multicultural education is the teaching of a wide range of cultures to an equally wide range of cultures. Educators incorporating multicultural education aim for inclusivity in their curricula that also allows for students to better relate to the material being taught.

Teaching multicultural education is less about a specific subject matter, but rather an incorporation of various backgrounds, histories, cultures, and perspectives into a classroom. When looking at different settings and technologies throughout history, innovation has changed the face of how the world communicates, partakes in commerce, and travels. However, evolution and innovation has not infiltrated the classroom in a revolutionary way; the format of teaching is similar today as it was a hundred years ago, with a teacher in the front of a room lecturing at a group of students facing them.

As globalization continues to become the norm, and the demographics of students in the United States becomes increasingly more diverse, the education system requires a drastic change if educators hope to create critical thinkers and productive members of society. Glauco De Vita from Oxford Brookes University notes how "little attention has been devoted to the investigation of cultural influences on the development of individual learning style preferences, and how educators can use this information to diversify the way they teach so as to engage all students in multicultural settings and hence provide a truly inclusive approach to instruction" (2001, p. 165).

An expert in the field of multicultural education, James A. Banks, has been able to condense the idea of multicultural education into five dimensions: content integration, the knowledge construction process, prejudice reduction, an equity pedagogy, and an empowering school culture and social structure (Banks & Banks, 1995, p. 152). Banks has also identified four approaches to multicultural education: teaching about contributions of culturally different groups

and individuals, making it an additive approach to existing curricula, viewing it as a

transformation approach to reflect the perspective and experiences of diverse cultures and social

groups, and using it as a decision-making and social action approach (Gay, 1994, p. 21).

Multicultural education is not only a learning responsibility of the student, but that of the

educator as well.

     As an educator incorporating multicultural education into their classroom, curriculum,

and/or teaching style, it is crucial that they become educated on the various cultures of students

in their classroom. By becoming aware of the different backgrounds students may be bringing

into the class with them, the teacher can better contextualize and break down the information

being taught. Once an educator is well equipped with multicultural background studies, they can

then level the educational field by "giving all students more choices about how they will learn

choices that are compatible with their cultural styles [so that] none will be unduly advantaged or

disadvantaged at the procedural level of learning" (Gay, 1994, p. 20).

     Incorporation of multicultural education may seem exclusive to social science subjects;

however, Banks argues that there are numerous opportunities to integrate multicultural education

into both and math and science curricula. Finding a method in which to introduce multicultural

education into a classroom outside of the social sciences and liberal arts requires more efforts on

the part of the instructor, as the connection and integrations may not be as apparent with Science,

Technology, Engineering, and Math education (STEM).

     Constructivism and multicultural education can be married to optimize the learner's

experience. Traditionally science is being taught with little regard to the cultural context in

which each student perceives the information. The information is transmitted through the cultural

orientation of the education to be absorbed and reiterated in the same way by the student

(Atwater, 1998). Rodriguez and Berryman (2002) conducted a study that implemented a teaching approach that combines multicultural education with social constructivism to teach a unit on "Water in Your Community" to tenth grade students. They found that this approached increased students' understanding of the content as well as their enthusiasm for their science courses. The National Assessment of Educational Progress found that students from diverse backgrounds had a significant deficit in literacy achievement compared to their mainstream counterparts (Au, 1998). Au (1998) proposed to change this gap by implementing a framework in schools that would incorporate both social constructivism and multicultural education. She suggested that this would bridge the gap created by linguistic and cultural differences, discrimination, inferior education, and structural rationales. Within educational technology, constructivist concepts are being applied in interactive multimedia (IMM) to cater to multiple cultural contexts and create more effective instruction. Use of constructivism with IMM allows learners to engage in multiple realities and be more connected with worldviews (Henderson, 1996). The use of constructivism in multicultural education is a growing concept that is being applied in varied learning settings with success in deepening a learner's' understanding of a subject, developing a learner's' cultural awareness, and empowering minority learners in their education (Atwater, 1998; Au, 1998).

The Agricultural Advisor in Developing Nations at Texas A&M University is a graduate-level course designed to teach students how to approach, and how to react to critical incidents in an agricultural development setting. The instructor, Dr. Manuel Piña, stresses the importance of certain factors that can affect the success of advisors when working in a cross-cultural setting. Such factors include: trends, techniques, roles, conditions and preparation. There are three learning objectives of this course, and are revisited before and after each educational experience. The objectives are as follows:

1.   Know the fundamentals of diffusing innovations in intercultural settings in

developing nations.

2.   Gain insight and options for responding to critical incidents they may encounter

as agricultural advisors in intercultural settings in developed and developing nations.

3.   Develop a catalog of critical incidents recently encountered by Returning Peace

Corps Volunteers and faculty or others with recent international development experience.

The key to this course's success was the use of constructivism to educate students on the

experiences of guest speakers such as faculty with development experience and returned Peace

Corps Volunteers. Students listened to the guests talk through their critical incident experience,

and were then posed with the same choice the guest faced. Students debated and discussed what

they would do in the situation described to them, and ask questions about circumstances and

details from the guest's story to help them come to an informed and rational decision. Many

times, students were asked to make a hypothetical life or death choice, just as the guest speaker

was required to do in their real-world development work. The constructivism structured

discussion that followed each critical incident allowed students to take on the role of the

agricultural advisor in each situation and rationalize their decision. Meanwhile, pupils were

learning about how the aforementioned factors contributed to the incident, and how they

influenced their decision. The theoretical framework of this teaching style enabled students to

absorb the presented information, but also understand the repercussions of the choices they may

have to one day make as international development workers. Through constructivism, students

were able to more practically see Rogers' *Diffusion of Innovations* (2003) at work in a real-life

situation. They were also able to understand why certain decisions were made by guests and

what led them to that choice. And finally, constructivism helped each case study feel like a personal experience to the students individually. The construction of the catalog was far from a homework assignment. Students saw the value of such a document for anyone currently working in the development field, or hoping to do so in the future. Having taken on the experiences of each guest's story in the classroom helped the students see the need for such a catalog. The class envisioned it as a guide for others interested in development work, and presented it as such. Each case study is told in detail up to the point where a choice must be made. Options are presented to readers, and the real action taken for each study is listed in a separate section at the end of the catalog. The students who created the guide were intent on providing the information in the same fashion they were in the classroom, and utilized constructivism in their planning. It is their hope that by utilizing the guide in the intended manner, others will benefit from the case studies and the constructivism used to convey them.

Through the constructivist format of the class, students were able to draw on the cultural experiences of their peers, the guest speakers, and faculty. The students were then able to use this constructed knowledge to develop a multicultural capacity to assess sensitive situations and make informed decisions using empathy and foresight. The success of utilizing both the constructivist and multicultural educational approach to teach this course can be observed in the final class product *ALEC 644 Critical Incidents* (Berger, K. S., Keppler, K. D., Richards, M. N., Silva, D. M. Weir, C. E., 2015).

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