

Enhanced Student Learning Through Applied Constructivist Theory

Sharon R. Collins, B.Voc.Ed. (M.Ed. candidate)

1. Abstract:

This is an analysis of how constructivist theory is applied in the SD1910 course to facilitate enhanced adult student learning. As prior knowledge is fitted with new learning experiences, students construct new meaning. Through the use of learner-centered projects, site visits, presentations, reflective learning journals, case studies, and group interaction, students engage in real-life, applied learning experiences throughout this capstone course. Students develop greater creativity, confidence, and leadership skills through engagement in a wide variety of constructivist learning opportunities. Educators may require greater preparation time and administrative support as they apply constructivist theory to individual learning environments. The application of constructivist theory assists office administration students enrolled in SD1910 as they prepare for entry into a business office environment. This analysis may provide a useful framework for educators engaged in facilitating a constructivist learning environment.

Key Words:

Constructivist theory; learner-centered; student learning; adult learner; applied learning; office administration; capstone

2. Introduction

Constructivist theory and the practice of applying it in the post-secondary learning environment present both opportunities and challenges. The College of the North Atlantic course Workplace Success and the Administrative Assistant (SD1910) is used as a model of how constructivist theory can be incorporated into the learning environment. The SD1910 course, as it is commonly referred to, was first introduced in January, 2007, as part of the Office Administration Program at College of the North Atlantic. The course is designed as an opportunity for students nearing graduation to apply their knowledge acquired in previous courses. To illustrate the design and impact of this course, a brief review of constructivist theory is presented followed by an overview of SD1910. Highlights of how constructivist theory is integrated into the SD1910 learning environment are demonstrated as well as reflections on the impact on both the instructor and students.

3. Constructivist Theory

Constructivism is defined as learning that "is a process of constructing meaning; it is how people make sense of their experience" (Merriam, Caffarella, & Baumgartner, 2007, p. 291). The early development of constructivist theory can be attributed to the work of John Dewey, Lev Vygotsky, and Jean Piaget (Davis & Sumara, 2002; Henson, 2003; Huang, 2002; Merriam, Caffarella, & Baumgartner, 2007; Piaget, 1984, 2003; Proulx, 2006; Wilson & Lowry, 2000). Constructivism is a theory of learning and not of teaching; as a result, the constructivist learning environment is learner centered rather

than teacher centered (Proulx, 2006). The teacher's role is to ask "what should be taught" and "how can this be learned" (Proulx, 2006, Implications section, ¶ 7). Henson (2003) cites some of the advantages of learner-centered education put forward by Dewey. These include students' increased intellectual curiosity, creativity, drive, and leadership skills (Henson, 2003). Educators who are committed to learner-centered education seek to challenge students within their abilities while providing encouragement and recognition of student success.

Constructivist theory places the student at the center of the learning experience, and learner-centered education can be facilitated in a variety of ways (Henson, 2003; Spigner-Littles & Anderson, 1999). Students learn by doing; therefore, actively engaging students in experience-based learning is one key to the construction of new meaning (Merriam, Caffarella, & Baumgartner, 2007). In developing learning experiences that will have maximum benefit to students, the instructor should also be cognizant of the needs of individual learners. When planning for curriculum delivery, viewing the curriculum from the learner's perspective and from its relevance to the learner can facilitate learning experiences that will have maximum impact on students (Garmston, 1996; Henson, 2003; Spigner-Littles & Anderson, 1999). Effective teaching will nurture the desire to learn and attempt to engage learners not only on an intellectual level, but also on an emotional level. To facilitate all of these conditions for maximum construction of meaning, educators need to create a safe learning environment where individuals are free from fear and open to constructive learning, where learners feel welcomed, comfortable, and respected (Henson, 2003; Spigner-Littles & Anderson, 1999).

Adult learners benefit in a unique way through constructivism because they have many life experiences and prior knowledge on which to build new meaning (Garmston, 1996; Spigner-Littles & Anderson, 1999). When constructivist theory is applied in the learning environment, the educator's role is to facilitate and moderate learning rather than dispense information (Huang, 2002). The instructor and student both share the responsibility of learning. Learners develop knowledge internally rather than passively receiving information transmitted by an instructor (Merriam, Caffarella, & Baumgartner, 2007; Proulx, 2006; Spigner-Littles & Anderson, 1999). Constructivist learning can be facilitated through the use of case studies or projects which closely align with real-life experiences (Wilson & Lowry, 2000). These types of learning activities provide opportunities to construct new meaning by applying theory to practice.

Constructivist theory has several implications for educators. Proulx (2006) encourages educators to be cognizant of the fact that learners bring with them prior knowledge. Learners' prior knowledge deserves recognition and may be utilized in constructing new meaning. Learners have a role to play in the learning environment, as their learning needs direct the communication of new information which is in turn individually constructed (Proulx, 2006). Learning from mistakes can be a key element of constructivist learning activities, as they provide opportunities for further learning and are a natural part of the learning process. "Learners' mistakes are not seen as failures" (Proulx, 2006, Implications section, p. 4). In a constructivist learning environment, educators should be open to learning from their students as the students engage in creative construction of new concepts (Proulx, 2006). As students verbalize their newly constructed knowledge, they provide learning opportunities for others who are in the

same learning environment; and, they also engage in revising, analysis, and improving their own construction as they verbalize it to others (Proulx, 2006).

Huang (2002) discusses some instructional principles that may be applied to adult learners engaged in the constructivist learning environment. These principles need consideration for both live and online learning environments in order to achieve maximum student learning. First, learning should be interactive since "learners do not learn in isolation from others...[rather,] people naturally learn and work collaboratively in their lives" (Huang, 2002, p. 32). Interaction can be facilitated through such things as group activities, class discussion, and interaction between learners and instructors. Second, collaborative learning should be facilitated in order to provide opportunities for reflective responses and collaborative construction of new knowledge. In addition, learners' social and interpersonal skills can be enhanced through effective collaborative learning (Huang, 2002). Third, Huang (2002) echoes the writings of Henson (2003) and Spigner-Littles and Anderson (1999) by emphasizing the need for facilitating learning in a safe environment that encourages sharing of ideas and asking of questions. Fourth, the need to provide authentic learning that will equip learners for similar real-life experiences can be facilitated through such learning experiences as case studies, or internships. Fifth, constructivism and the theory of andragogy both emphasize the need for learner-centered learning. Sixth, and last, constructivist learning provides the opportunity for high-quality learning that provides learning experiences closely aligned with the real world of adult learners (Huang, 2002).

4. SD1910 Course Overview

The following overview of the SD1910 course and its various learning activities is provided in order to identify the context in which constructivist theory is applied. The two-hour per week SD1910 course is part of the fourth, and final, semester of the Office Administration Program at College of the North Atlantic. This capstone course is designed to provide an opportunity for students to apply the theory learned in three preceding office management courses and is in direct response to a request from industry to have an applied learning opportunity immediately prior to graduation. As such, no new concepts are included in this course; rather, students are challenged to put into practice the knowledge and skills they will soon be taking into the workplace. Due to the positioning of this course immediately prior to graduation, students see the relevance of the learning opportunities that are designed to prepare them for their future employment.

The broad topics in SD1910 are human relations, working relationships, professionalism, office management, college to work transition, and interview preparation. Some of the subtopics include the need for a positive personality, cultural diversity, supervisory and leadership roles, integrity, listening skills, customer service, clear communication, decision making, and critical thinking. An overview of the course is provided in Table 1.

SD1910 Overview
In-class Presentations
Human Relations The Need for Positive Personality Traits Cultural Diversity in the Local and Global Workplace Working Relationships Supervisory and Leadership Roles Being a Team Player Office Management Good Listening Skills for Exceptional Customer Service Relating to Customers Getting Your Message Across Clearly Decision-making and Critical Thinking Professionalism Integrity, Ethics, and Honesty
Site Visits
Applied Office Skills (on campus) Customer Service in Action (at local businesses)
Group Presentations
Plan a Business Luncheon Display Appropriate Business Attire (fashion show) Demonstrate Professional Personal Grooming (hair and makeup)
Weekly Chapter Assignments and Case Studies
Learning Journal

Table 1 - SD1910 Overview

Each of the subtopics is reviewed in various chapters within the course text *Personal Development for Life & Work* (Wallace & Masters, 2006). All these topics are "taught" to the class through presentations by the students. At the first class of the semester, each student draws from an envelope the topic for which he or she will be responsible to present at a scheduled time during the semester. Students are graded on these in-class presentations based on how thoroughly the topic has been covered, as well as their level of creativity and effective communication.

Three major group projects are assigned as part of the professionalism topic. Since these graduates will be entering a business environment, the projects are designed to allow them to prepare for that type of workplace. Students are permitted to form their own groups and choose one of the three major projects. One of the major projects is to plan a business luncheon for the class and several invited guests. Students are given broad guidelines and a budget in which they must work and are then tasked with arranging a successful event at a given date. Students are graded on these major group projects based on their attention to detail and application of prior knowledge.

Wilson and Lowry (2000) discuss the benefit of case studies and projects in the constructivist learning environment. As outlined above, projects are a key component for constructivist learning in this course. Furthermore, in SD1910, each of the textbook's chapters includes case studies and short chapter assignments for reflection and response. In addition to these chapter assignments, a final learning journal (presented as a scrapbook) allows for a creative presentation of students' reflections on learning and the activities in which they are engaged throughout the semester (see Figure 1). At set intervals learning journal assignments are given to students. For example, as part of the human relations topic, students are tasked with giving and receiving constructive criticism and placing an entry in their learning journal about that experience. A final component of the course is two work site visits. During the first site visit, students are assigned to various offices throughout the college and are responsible for handling client phone calls and other routine office duties during a two-hour timeframe. This provides an opportunity for students to apply prior knowledge in a real office setting. The second site visit is off campus at various business offices in the community.



Figure 1 – Learning Journal Entry

Arrangements are made for students to spend two hours in the reception area of a local business and observe customer service in action. Depending on the office setting, students may be observers or participants in providing customer service. Students' reflections on these site visits are included as part of their ongoing learning journal that is presented for grading at the end of the course. While the various activities and learning opportunities require many hours of preparation on the part of the instructor, the opportunity for constructivist learning is greatly enhanced through these types of learning activities as students take the theory they have and construct new meaning by applying principles to practice.

5. Applied Constructivist Theory

Kerka (1997) writes that "the goal of constructivist teaching is to develop self-directed yet interdependent learners who can access and use a wide range of cognitive structures in order to transfer learning to contexts they have yet to encounter" (p. 5). Learners in SD1910 are required to fit their prior knowledge into the new learning experiences presented in this course. The result is newly constructed meaning. General student feedback indicates that enhanced learning occurs as students engage in hands-on learning that integrates prior knowledge with new learning opportunities. Student feedback at the end of the course included such statements as:

I enjoyed the thinking process; it builds your self-confidence; I enjoyed feeling like a professional; in our large group project...[I] really enjoyed it and had a great experience while learning; I enjoyed being a part of a team [in the group presentation]; I enjoyed having the responsibility [of] taking on this [group]

project; I liked...having hands-on experience; [I enjoyed] going out into the workplace; the information was beneficial and helps us with our public speaking and also with our writing and planning. (Course Evaluation Forms, personal communication, April 2007)

Enhanced student learning is also observed by the instructor as students show evidence of new leadership skills and engagement in learning that is closely aligned with the real-world workplace into which the students will enter. Proulx (2006) distinguishes between matching new knowledge to prior learning versus the constructivist approach of fitting new knowledge into existing knowledge. The construction of new meaning based on prior knowledge and current information may not simply be a "matching" exercise but is more often a "fitting" together of the various pieces to construct a new understanding of concepts. This is seen clearly in SD1910's office site visits when students are given the opportunity to construct new meaning from the theory of handling client phone calls with the real experience of actually handling client phone calls (see Figure 2). Learners are required to fit the theory with the experience provided in this learning activity in order to create a new and deeper understanding of what this office skill entails. This learning experience highlights the contextual nature of constructivism as learners take prior knowledge from one context (the classroom) and re-shape it into new knowledge in a different context (the office). Learners are constantly re-constructing knowledge in order to make sense of new information in their individual contexts and environments (Wilson & Lowry, 2000).



Figure 2 - Site Visit

Many of the learning activities in SD1910 require cooperative learning through group projects and presentations. This is in keeping with Vygotsky's approach to learning (Henson, 2003). The development of leadership skills is a by-product of the course's various group activities as a group leader naturally emerges. One of the advantages of learner-centered education, as put forward by Dewey, is the development of leadership skills (Dewey, 1983; Henson, 2003). In addition, as students participate in in-class presentations and verbalize their newly-constructed knowledge to fellow learners, they engage in further construction and refinement of their own learning. Proulx (2006) discusses the importance of verbalization as a valuable component in constructivist learning. Although many classes are conducted at various venues, an in-class session begins with a student presentation. Students are encouraged to be creative in the presentation of information by using handouts, role play, or other learning activities that will engage their audience (see Figure 3). When the students complete their presentation, the instructor takes the opportunity to highlight any



Figure 3 - In-class Student Handout

outstanding points, engage students in discussion, assign exercises and case studies from the textbook, present an overview of upcoming events and major group projects, and provide direction to students as they continue constructing new meaning from the learning opportunities in which they are engaged. SD1910 provides multiple learning opportunities within a constructivist environment.



Figure 4 - Business Luncheon

Adults seek authentic learning activities from which they can construct new meaning as they apply previously learned principles to real-life experiences (Kerka, 1997; Spigner-Littles & Anderson, 1999). In SD1910, learners build on previous instruction in three office management courses and use this knowledge to construct new meaning. For example, the theory of planning a business luncheon is part of one office management course. This theory is applied in SD1910 when a group of students is tasked with planning a real business luncheon (see Figure 4). These students work within a budget as they

book a conference room, design an appropriate luncheon menu, provide small gifts for attendees, and make the necessary arrangements for a guest speaker. The student feedback from this activity has been that much new learning occurs as prior theory is integrated with practice to construct new meaning. In short, the students have newly-constructed knowledge of the various aspects of planning and hosting a successful business luncheon.

Facilitating and moderating the learning environment is the instructor's role in SD1910. This teaching style is in keeping with applying constructivist theory in an adult learning environment (Spigner-Littles & Anderson, 1999). Through the regular group activities and in-class presentations, students work collaboratively as they research and prepare to share their findings with fellow students. The instructor provides the various topics for discussion, based on prescribed course learning objectives; then, the small groups of students build on their prior knowledge, acquired in previous office management courses, to construct deeper, applied meaning that is in turn shared with the larger group of learners through in-class presentations. Even though not an objective of this course, students' enhanced public speaking skills is a by-product of these collaborative presentations. Both the instructor and students observed enhanced presentation skills and levels of confidence throughout the semester's student presentations. While students do experience some trepidation about taking on the role of classroom presenter, the SD1910 classroom has proven to be a safe environment for this type of learning. Providing a learning environment free from fear is foundational to successful constructivist learning (Henson, 2003). If a student does make a mistake in the course of their learning, this is not considered a failure, but rather an opportunity for further learning (Proulx, 2006).

There are implications for the educator who facilitates a constructivist learning environment. Planning time for constructivist learning activities is greater than for simple lectures and dispensing of information to students. For example, many hours of

preparation, planning, and coordination are required in order to place an average of 20 learners in various offices, both on campus and in the wider business community, several times during the semester. The instructor must truly be a facilitator of the learning environment as students individually construct new meaning through applied learning. Another implication is that administrative procedures required for constructivist learning experience may be prohibitive (Kerka, 1997). For example, securing funding for the business luncheon required advance planning and the support and approval of the campus administrator. While these issues may present challenges, the resulting sense of accomplishment the instructor feels while observing the depth of student learning can make the additional effort worthwhile.

The impact of applied constructivist theory is an enhanced learning environment. Anecdotal evidence indicates that students in SD1910 experienced a greater appreciation for the realities of the business office after having the opportunity to operate in a real office setting and engage in activities and projects that typify an administrative assistant's responsibilities. Students came to the learning environment with a positive attitude and a keen interest in seizing the opportunity to apply theory from past courses in practical ways within a new learning environment. As the course progressed, student confidence, creativity, and presentation skills were enhanced. Learners in SD1910 embraced the constructivist learning environment with the result being enhanced student learning.

6. Conclusion

Constructivist theory can be successfully applied in the adult learning environment, as demonstrated through the preceding examples from the SD1910 course. When learners are given the opportunity to engage actively in processing prior knowledge with new information to construct new meaning, the result is an enriched learning environment. Students benefit from the real-life learning provided through the constructivist learning environment that utilizes projects, site visits, presentations, reflective learning journals, case studies, and group interaction. While planning and preparation for constructivist learning may require a greater commitment of time from educators, observing significant learning taking place is its own reward. Applying constructivist theory in the learning environment will allow students' learning needs to be met, provide relevant learning opportunities, engage learners, and create a safe place to make mistakes and construct new meaning.

Author's contact Information

Sharon R. Collins, B.Voc.Ed. (M.Ed. candidate)
Office Administration Instructor
Grand Falls-Windsor Campus, College of the North Atlantic
5 Cromer Avenue, Grand Falls-Windsor, NL A2A 1X3

Phone: 709-292-5627 or -5600

E-mail: sharon.collins@cna.nl.ca

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