

Incorporating Constructivist Elements into an Adult Literacy Classroom

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Introduction

Incorporating constructivist theory into an adult literacy class seems like the next logical step in the ever changing face of adult literacy. Literacy classes have changed radically in the last few years as literacy moves away from traditional definitions and classroom structure toward blended classes and online learning. Traditional literacy classes incorporate some elements of constructivism with their student centred, active learning approach.

However, literacy instructors can further incorporate constructivist elements into their adult literacy classrooms by teaching critical thinking skills, using authentic problem-based learning, recognizing the importance of social culture, valuing diversity, keeping learning active, redefining the roles of the instructor and the learner, using computers in the classroom, and motivating learners using modern material and tools. Based on my own experience as a literacy instructor I will show how literacy instructors can move from the current situation to the proposed changes.

The Current Situation

Adult literacy classes are student centred with instructors helping students develop personal individualized goals. Instructors guide students with action plans and demonstrations that measure their progress. Instructors teach literacy skills using visual, auditory and kinaesthetic material to engage learners. Students are in charge of their own learning which is self-paced and self-directed. Students keep portfolios to show progress and to reflect on what they have accomplished over time.

Therefore, classes are somewhat constructivist but are missing important elements like collaboration, creation, and interaction. Students would benefit from constructivist learning

strategies that would help them attain critical thinking, problem solving and computer skills. Au (n.d.) suggests that “social constructivism offers implications for reshaping schooling in ways that may correct the gap between the literacy achievement of students of diverse backgrounds and that of mainstream students” (p.297). Students could benefit from instructors using constructivist pedagogy in the adult literacy classroom.

Constructivist Pedagogy

Constructivism is based on the work of theorists like Piaget and Vygotsky who believe learning is social and that people learn by constructing knowledge during interaction with others. Learning is active, relevant, and engaging: “learners arrive at meaning by actively selecting, and cumulatively constructing, their own knowledge, through both individual and social activity” (Biggs, 1996, p. 348). Bullen (2007) suggests that “learning [is] an active process of constructing, rather than acquiring, knowledge” (p. 74). Furthermore, constructivists suggest “meaning is created by the learner, not imposed by reality or transmitted by direct instruction” (Biggs, 1996, p. 348). Therefore, learners need authentic and engaging activities in order to create meaning. People learn by combining the social cultural knowledge of individuals with the interaction of others. Through social interaction, learners create a knowledge community of trust where they can communicate, interact, collaborate and reflect.

Furthermore, constructivists value the background of learners and recognize that people have their own knowledge or culture that impacts how they view new knowledge. In other words, they fit new knowledge into their existing realities and this fit allows them to accept new knowledge as important and relevant to their lives. Biggs (1996) suggests “learner[s] bring an accumulation of assumptions, motives, intentions, and previous knowledge that envelopes every

teaching/learning situation and determines the course and quality of the learning that may take place” (p.348).

Elements of constructivist theory that would work well in adult literacy classrooms are based on student centred active learning and the goals of independence, employment and further education. These elements would support critical thinking, problem solving, researching, reading, writing, reflecting, communicating, and evaluating. Instructors would use constructivist pedagogy to help literacy students attain these goals.

Proposed Changes

Instructors could incorporate constructivist pedagogy into literacy classes by teaching critical thinking skills, using authentic problem-based learning, recognizing the importance of social culture, valuing diversity, keeping learning active and engaging, redefining the roles of the instructor and the learner, using computers in the classroom, and motivating learners using modern material and tools.

Teaching Critical Thinking Skills

Instructors can teach critical thinking skills and provide collaborative exercises. Literacy learners can problem solve together using each others’ ideas and life experiences to solve authentic problems. Students learn critical thinking skills through collaboration, discussion, and reflection with other students: “from social constructivist perspectives, interactions such as those achieved through classroom discussion are thought to provide mechanisms for enhancing higher-order thinking” (Palincsar, 1998, p. 357).

Collaboration can also include group writing, peer editing and reflecting (Palincsar, 1998, p. 363). Vygotsky believed that students could learn from each other: “perhaps the best known of Vygotsky’s formulations is the *zone of proximal development*, by which he sought to explain the social origin of higher mental functions” (Au, n.d. p.300). This ‘zone’ is the distance between what students are capable of learning alone and what student are capable of learning when collaborating or working with others who have more knowledge.

Using Authentic Problem-based Learning

In order to engage learners in active learning, instructors need authentic material. Project, problem and case-based methods of problem solving allow learners to develop critical thinking skills while discussing situations that reflect real life. Bullen (2007) suggests “using case studies and real-world examples to help learners move from simpler to more complex understandings of concepts” (p. 179). Au (n.d.) suggests that “research on school literacy learning conducted from a social constructivist perspective assumes that students need to engage in authentic literacy activities, not activities contrived for practice” (p. 300). With these examples, students ask questions, reflect on what they have learned, collaborate and ask more questions (Bullen, 2007, p.76).

Furthermore, learners can learn in groups by collaborating and reflecting. Instructors can teach cooperation and group work skills by facilitating cooperative groups. This involves instructors “designing collaborative activities so that all members of the team must participate for the team to achieve success” (Bullen, 2007, p. 180).

Recognizing the Importance of Social Culture

Hein (1991) and Dewey believe that learning is social (p.1.).Social culture is important because students learn while interacting and collaborating with real people who have diverse backgrounds: “social constructivism includes the idea that there is no objective basis for knowledge claims, because knowledge is always a human construction.” (Au, n.d. p. 299). Therefore, literacy students would learn best while collaborating and interacting with others.

Valuing Diversity and Different Cultures

Literacy instructors recognize background diversity as important but more as a barrier to education. For example, literacy students often feel marginalized because of their diverse backgrounds. Constructivists suggest diversity should be regarded as a benefit and students should use their life experiences in collaborative groups to build knowledge. Therefore, instructors should recognize and value different types of learners because “human activities take place in cultural contexts” (Palincsar, 1998, p.371). Then, instructors should pass this belief to the learners.

Keeping Learning Active and Engaging

Learning occurs during the construction of knowledge using active, engaging interaction in real life situations. Instructors can use collaboration, communication and creation methods to engage students in literacy classes which are traditionally quite passive. Bullen (2007) suggests that “meaning-making works most effectively through interactions with others” (p. 177). Instructors can also use the computer to engage students with visual, auditory and kinaesthetic material.

Redefining the Role of the Instructor

Literacy instructors work individually with learners at the learners' own pace to help them understand and learn new content that is relative to their own personal goals. Learners direct the learning and instructors guide students to the next literacy level.

Constructivists suggest that instructors should facilitate, mentor and guide learners in pursuit of knowledge: "a rich learning experience occurs when students have opportunities to gain guidance, advice; support, and feedback from their mentor" (Bullen, 2007, p. 178). Instructors can use an apprenticeship model, scaffolding and Vygotsky's "zone of proximal development" to engage learners in meaning learning activities (Au, p.300).

Furthermore, constructivism suggests that instructors can facilitate learning, provide content, encourage independence, mediate conflict, encourage learning, design courses, allow students to lead, value diversity, participate, share the stage, provide feedback and encourage discussion. Palincsar (1998) suggests " , teachers play an important role in mediating classroom discourse by seeding the conversation with new ideas or alternatives to be considered that push the students thinking and discussion and prepare them for conversation" (p. 366). Overall, instructors create an environment of trust, design the courses, scaffold the learning and support the learners.

Redefining the Role of the Learner

Literacy learners define their own goals and engage in learning activities to achieve these goals. Goals include independence, further education and jobs. Learners decide what they want to learn and instructors help them attain it. Learning is independent and student centred.

Constructivists suggest that learners should learn actively, collaborate, interact, communicate, reflect, construct knowledge, think critically, problem solve, create, self assess and reflect. Furthermore, learners should value their own experiences and cultural background to help them integrate and gain meaning from new knowledge. Learners can achieve these new skills by working together in groups to communicate, collaborate and create.

Although literacy learners usually work alone, literacy learners should become group members because of the “zone of proximal development” (Au, p.300). Vygotsky believed learners could work together to increase their knowledge. Furthermore, students could learn social skills and critical thinking skills in these groups. Overall, student roles include independent learner, group member, collaborator and knowledge creator.

Using Computers in the Classroom

Students need computer skills to be functionally literate in today’s society. Instructors can use constructivist pedagogy to choose educational technology for their classrooms. Examples include online assessment tools like quizzes, eportfolios and computer journals: “these new forms of assessment are consistent with current views of literacy in focusing on the process of meaning construction” (Au, n.d. p. 313). Instructors can use a learning management system like Moodle to create interactive courses which allow students to communicate, collaborate and create. Tools may include blogs, journals, forums, chats, or “concept-mapping tools” which can be engaging and motivating (Bullen, 2007, p.74).

Motivating Learners Using Modern Material

Often, material in adult literacy classes is outdated. Au (n.d.) suggests that modern material motivates learners by engaging them with interesting information (p. 310). Learners need information that is relevant to their ages, cultures and backgrounds. Using relevant material gives value to students' prior knowledge and diversity: "educators with a diverse constructivist perspective agree that skills should be taught within the context of authentic literacy activities" (Au, n.d. p.313). Instructors can use the computers to find visual, kinaesthetic and auditory material on a variety of subjects that can engage learners. Overall, instructors need to pay "attention to the motivational and emotional dimensions of literacy, as well as the cognitive and strategic ones" (Au, n.d. p. 300).

Literacy instructors can use constructivist teaching methods and tools in face-to-face, blended and online classrooms. Examples include case studies, real life situations, problem-based learning groups, co-operative groups, jigsaw methods, learning management systems, synchronous and asynchronous tools, blogs and journals. However, despite the vast array of constructivist methods available, limitations do exist.

Limitations of Constructivism in Literacy

Instructors need professional development, more time, and newer computers. Teachers and students may be reluctant to give up their traditional roles. Furthermore, attendance is an issue in the literacy classroom which can affect collaborative learning. Also, literacy learners may be at various learning levels, lack interpersonal skills, be different ages, have negative views of school, have learning disabilities, and not know how to self learn or interact with others. Finally, students may be dependent on teachers and overwhelmed with too much information.

However, professional development and student encouragement can overcome many of these barriers allowing literacy students to benefit from the constructivist principles of learning.

Conclusion

Overall, Incorporating constructivist strategies, principles and activities is the next logical step in the field of adult literacy because instructors are already using many of the ideas. Furthermore, students would benefit from the collaboration, communication and interaction skills taught with constructivist methods. As Web 2.0 tools become part of our world, interaction, communication and critical thinking become even more important. Therefore, literacy learners would benefit from the engaging principles, ideas and methods of constructive learning.

References

- Allen, Maryellen. (2008). Promoting critical thinking skills in online information literacy instruction using a constructivist approach. *College & Undergraduate Libraries* .15(1)p.21-38. Retrieved from http://pdfserve.informaworld.com/750343_770885140_903747044.pdf
- Au, Kathryn H. (n.d.). Social constructivism and the school literacy learning of students of diverse backgrounds. *NRC Online*, 30(30.2.7), 297-313. Retrieved online March 2, 2010 from http://www.nrconline.org/jlr/archive/v30/article_30_2_7.pdf
- Bates, A.W. (2000) *Managing Technological Change: Strategies for College and University Leaders*. San Francisco: Jossey Bass, pp. 7-75.
- Beers, Maggie. (2007). Using e-learning to promote excellence in polytechnic education. In M Bullen & D.P. Janes (Eds.) *Making the Transition to E-Learning: Strategies and Issues*, pp. 66-83, Hershey, PA: Information Science Publishing.
- Biggs, John. (1996). Enhancing teaching through constructive alignment. *Higher Education*, 32(3), 347-364. Retrieved online March 5, 2010 from <http://www.jstor.org/stable/3448076?seq=2>
- Bullen, M. & Janes, D.P. (2007). Preface. In M Bullen & D.P. Janes (Eds.) *Making the Transition to E-Learning: Strategies and Issues*, pp. vii-xvi, Hershey, PA: Information Science Publishing.
- Dym, C. L., Agogino, A. L\M., Eris, O., Frey, D. D., Leifer, L. J. (2005). [Engineering Design Thinking, Teaching, and Learning](#). *Journal of Engineering Education*. Jan.

Draper, Roni Jo. (2002) School mathematics reform, constructivism, and literacy: A case for literacy instruction in the reform-oriented math classroom. *Journal of Adolescent and Adult Literacy* 45(6)March 2002 p. 520-529. International Reading Association Retrieved from <http://www.ed.sc.edu/raisse/pdf/MathArticles/SchoolMathematicsReform,Constructivism,andLiteracy.pdf>

ETEC 510 Wiki (n.d.). Retrieved March 10, 2010 from <https://www.vista.ubc.ca/webct/urw/lc5116011.tp0/cobaltMainFrame.dowebct>

Gabriel, Martha A. (2007). Toward effective instruction in e-learning environments. In M Bullen & D.P. Janes (Eds.) *Making the Transition to E-Learning: Strategies and Issues*, pp. 173-190, Hershey, PA: Information Science Publishing.

Hein, George E. (1991). *The Museum and the Needs of People*. Retrieved March 5, 2010 from CECA Conference: <http://www.exploratorium.edu/IFI/resources/constructivistlearning.html>

Johnson, D. W., Johnson, R. T. (1998). Chapter 3: Basic Elements of Cooperative Learning. In: *Learning Together and Alone: Cooperative, Competitive, and Individualistic Learning*. Allyn & Bacon.

Kenny, Richard F. (2007). Using problem-based learning in online courses: a new hope? In M Bullen & D.P. Janes (Eds.) *Making the Transition to E-Learning: Strategies and Issues*, pp. 243-264, Hershey, PA: Information Science Publishing.

Learning Theories Retrieved March 8, 2010 from <http://learning-theories.com/situated-learning-theory-lave.html>

Literacy Changes Lives. (2000, December). Retrieved January 2009, from National Literacy Trust: <http://www.literacytrust.org.uk/Pubs/scrimshaw.html>

Ontario Ministry of Training, C. a. (n.d.). *Literacy and Basic Skills*. Retrieved January 2009, from Ontario Ministry of Training, Colleges and Universities: <http://www.edu.gov.on.ca/eng/training/literacy/flexible.html>

Palincsar, Sullivan A. (1998). Social constructivist perspectives on teaching and learning. *Annual Rev. Psychology*, 39(345). Retrieved online March 5, 2010 from <http://arjournals.annualreviews.org/doi/pdf/10.1146/annurev.psych.49.1.345?cookieSet=1>

Sangra, A., Guardia, L., & Gonzalez-Sanmamed, M. (2007). Educational Design as a Key Issue in Planning for Quality Improvement. In M. Bullen & D.P. Janes (Eds.) *Making the Transition to E-Learning: Strategies and Issues*, pp. 284-299. Hershey, PA: Information Science Publishing.

Savery, J. R., Duffy, T. M. (1995). [Problem Based Learning: An Instructional Model and Its Constructivist Framework](#). *Educational Technology*, 35 (5), p31-38

Stein, David. (1998). Situated learning in Adult Education. *ERIC Digest*, 3. Retrieved online March 8, 2010 from <http://www.ericdigests.org/1998-3/adult-education.html>

Understanding Essential Skills. (n.d.). Retrieved January 2009, from Human Resources and Skills Development Canada: http://www.hrsdc.gc.ca/eng/workplaceskills/essential_skills/general/understanding_es.shtml