

Infusing Constructivism into a Curriculum Development Course: A Constructivist Approach in the ESOL Teacher Education Classroom

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Abstract

This article provides a look at constructivism through the eyes of an English-as-a-second-language professor sharing how it was applied in a ESOL teacher education course on curriculum development at Niagara University. The article describes how the professor and the students worked collaboratively to develop curriculum in a constructivist manner for a new program being developed at the University for visiting scholars from China.

Introduction

Constructivism is a theory of learning. Recently, constructivist learning has greatly influenced the field of higher education. Within the context of classroom learning, constructivism emphasizes how individual students construct personal meaning and understanding. Phye (1997) argues that a) the classroom learning situation should be most appropriate for constructing academic knowledge and b) the most critical tools are used in the construction process. A good classroom learning situation, therefore, should have two easily observed attributes. The first attribute involves the physical setting. The students should be working cooperatively with fellow students and also interacting with the professor. The second attribute involves the manner in which the learning episode is structured. When appropriate, the learning task should be framed as a problem-solving activity that requires the development and use of higher-order thinking skills.

Current research on constructivism asserts that learning is the active process of constructing rather than passively acquiring knowledge. Students must be allowed to become actively involved in their learning acquisition (Flynn, Mesibov, Vermette, & Smith, 2004; Forman, Minick, & Stone, 1993; Foote, Vermette, & Battaglia, 2001; Reid & Stone, 1991; Swanson, 1991; Wong, 1993). Further, instruction is the process of supporting the knowledge construction by the learners rather than the mere communication of knowledge (Nanjappa & Grant, 2005; Vermette, 1998). Therefore,

when constructivism is applied to higher education classrooms, professors should first present real-world situations that emphasize a context in which learning is relevant. They then focus on realistic approaches to solving real-world problems. Further, *constructivist* professors are coaches who encourage proper strategies to solve problems. They stress conceptual interrelatedness providing multiple representations or perspectives on the content being taught and provide tools and contexts that help their students to interpret the multiple perspectives of the world (Flynn, Mesibov, Vermette, & Smith, 2007; Murphy, 1997).

This paper shows an example of how constructivism can be used in an English-to-speakers-of-other-languages (ESOL) teacher education classroom at Niagara University. It discusses the rationale for applying constructivism and provides an example of how constructivism was applied in teaching EDU435 (Curricular Applications in Teaching ESOL), an undergraduate course in the curriculum.

Rationale for applying constructivism in teaching the course

EDU 435 (Curricular Applications in Teaching ESOL) is one of the ESOL core courses that all ESOL teacher candidates are required to take. This course emphasizes an historical overview of methods and approaches to ESOL teaching and also models used to develop an ESOL curriculum. In the Fall 2007 version of the course, the instructor used a major “ESOL Curriculum Development” project in order to create a *constructivist* classroom learning environment for the ESOL teacher candidates. This project aligns perfectly with both the course objectives and the University’s effort to internationalize its curricula and campus.

Alignment with course objectives. As clearly stated in the course description, EDU 435 focuses on basic constructivist, student-centered theories, providing models of curriculum development and their application to ESOL classrooms. For the course in Fall 2007, an original curriculum development project was selected. The project was intended to develop a teacher training program for Chinese scholars:

“Twenty English teachers from different Chinese universities will come to Niagara University to receive training for a four month period of time. The training will be focused on further developing their skills as English teachers in China. There will be three main components to the training: English language, American culture, and teaching methodology.”
(see Appendix A for project description, format, and grading rubric)

The ESOL Curriculum Development project aligned well with the course objectives. The course instructor had been contacted by several Chinese universities for possible English teacher training programs at Niagara University, which naturally motivated the instructor and his students to work on the project. Further, this project provided the instructor and his students with a real-world classroom learning environment, i.e., a *constructivist* classroom learning situation that employs the context in which learning is relevant.

Alignment with the University’s goals. This ESOL curriculum project paralleled Niagara University’s effort to internationalize its curricula and campus. Internationalization is a major trend that has developed into a worldwide phenomenon. Internationalization in higher education is the process of integrating an international perspective into a college or university system (Ellingboe, 1996; Bond, Jun, & Huang, 2003; Harari, 1992; Johnston & Edelstein, 1993). Niagara University has successfully integrated an international perspective into the university system. It values international exchanges and co-operations and it also has the vision of internationalizing its campuses and classrooms. Niagara University has several international studies and study-abroad programs and is currently trying to build partnerships with Chinese universities.

Throughout the course of the Fall 2007 semester, this project allowed teacher candidates to work cooperatively with each other and also with the instructor. All class members worked as a team. In this sense, the project created a perfect constructivist classroom learning environment.

How was constructivism applied in teaching the course?

The ESOL teacher training program for Chinese scholars at Niagara is a relatively new program. EDU 435 was offered in the 2007 fall semester for the first time and there were only two students in that class. The ESOL curriculum development project within the course at that time involved three components and each of the class members (two students and the instructor) was responsible for the development of one component. For each component, two individual courses were developed for the new training program for Chinese scholars. The English language component of the program was to include “Advanced Written English and Reading” and “Advanced Spoken English.” The American culture component was to include “American Holidays and Traditions” and “Popular American Culture.” The teaching methodology component was to include “ESOL Methods, Materials and Strategies” and “Theories in Language Teaching and Learning.” Together these six courses would form a comprehensive program to provide visiting Chinese scholars with a well-rounded study of various aspects of the ESOL field.

Brown’s second language curriculum model (1995) was used as the theoretical framework for the ESOL curriculum development project in Fall 2007. Brown (1995) describes curriculum development as “a series of activities that contribute to the growth of consensus among staff, faculty, administration and students.” He further explains that this “series of curriculum activities will provide a framework that helps teachers to accomplish whatever combination of teaching activities is most suitable ... that is, a framework that helps students learn as efficiently and effectively as possible in a given situation” (p. 19). Brown’s model provides a practical comprehensive model that outlines the various phases and activities involved in developing and implementing an effective curriculum, and it was adapted for use in the constructivist-based EDU 435 course. Brown’s systematic curriculum design includes the following elements: needs analysis, goals and objectives, materials, teaching, testing, and evaluation of the curriculum being developed. Accordingly, the EDU 435 project contained the same six elements.

Needs analysis. A needs analysis was first conducted by the EDU 435 class members to help determine the needs of the Chinese scholars. Two different data collection procedures were used to determine the needs of the participants. A survey was emailed to 10 different Chinese ESOL teachers or professionals. The survey helped determine the professional strengths and weaknesses of the participants and identified areas about which the scholars wanted to learn more. To follow up the survey and resolve unanswered questions, a focus group interview with three invited Chinese scholars was conducted on campus at Niagara University to further understand the needs of Chinese ESOL professionals. The data were analyzed and the results served as the basis for the development of the three components of the proposed 4 month program for Chinese ESOL teachers. At present, plans are in place at Niagara University for the program to take place in the near future.

Goals and objectives. The two EDU 435 students and the professor then translated the findings of the needs analysis into course goals and objectives, which were then used to guide the development of the remaining elements of the curriculum. The remaining elements of the curriculum were created, modeled, and revised based on the goals and objectives. Therefore, the goals and objectives guided the development of the materials, teaching, testing, and evaluation of the curriculum (Brown, 1995).

Materials. Materials include the items, techniques, and exercises that will be used in classroom teaching. Materials will help enhance instruction by providing students with a physical resource they can use to develop their understanding of the topics being discussed (Brown, 1995). For each component, textbooks and other materials including audio- and video-materials were selected. These textbooks and materials were carefully evaluated and were chosen for their clear, in-depth coverage of the topics highlighted in the needs analysis and goals and objectives.

Teaching. Teaching includes the activities carefully selected by the teacher or program developers that help students learn. Curriculum developers must be aware of the kinds of teaching that will help facilitate the achievement of the program goals and objectives

(Brown, 1995). A variety of teaching strategies were proposed to ensure that all students have an equal opportunity for learning despite learner differences such as learning styles and strategies. In this case, the choice of activities was aligned with constructivist theory throughout all six of the proposed courses for the program for Chinese scholars.

Testing. Testing allows the teacher and students to evaluate their learning and ensure that the material is being understood and progress is being made. A variety of different testing techniques can be used to measure the amount of course material that each student has learned. A standardized test can be used or assignments can be given to ensure that material is being understood. Assignments give students the opportunity to demonstrate their learning in a less stressful, more authentic way (Brown, 1995). In alignment with constructivist theory, assessments determined by the EDUC 435 class accommodated for variations in prospective students' learning styles and also modeled multiple assessment and evaluation strategies. A variety of assignments were proposed to evaluate students' performance in the courses being developed for the Chinese scholars.

Evaluation of the curriculum. Evaluation is very important, especially as we begin to implement this program. Both courses in each of the three program components will be continuously evaluated to ensure that quality instruction and learning are occurring throughout the duration of instruction. A variety of evaluation strategies were proposed to assess the effectiveness of the instruction being offered. These included instructor's self-evaluation, student evaluations, upper-level evaluations by experts appointed by the Chinese government, and additional non-governmental expert evaluations. These various evaluations include both formative evaluations, conducted while the course is taking place, and summative evaluation, conducted when the course has finished.

Outcomes of the Project

Evidently, teacher-candidates in EDU 435 attempted to embed constructivism in the course curricula they developed for the Chinese scholars. First, constructivism was clearly stated in both the course descriptions and the goals and objectives of each

course. For example, the ESOL Methods, Materials, and Strategies course “focuses on current ESOL methodology and effective classroom practices. The class participants are required to contribute their own knowledge and expertise to classroom discussions and projects.” The Theories in Language Teaching and Learning course “requires the class participants to compare and contrast their own Chinese L1 [first language] and English L2 [second language] acquisition processes.”

Second, each course was framed within a constructivist perspective that embraces the belief that knowledge is socially constructed. In this perspective, learning was viewed as a developmental process that is enhanced when students learn to view problems and issues from multiple perspectives, constructing knowledge from their own interpretations of numerous pieces of evidence. In each course, teaching approaches were directed toward open-ended inquiry, critical thinking and reflection, and social interaction. Instructional methods were developed to include whole class and small group discussion, individual and cooperative activities, presentations by the instructor and classmates, internet and library searches, observations of instructional videos, field experiences, and research. (Flynn, Mesibov, Vermette, & Smith, 2004)

Finally, constructivist evaluation strategies were proposed to assess the effectiveness of each course. These include instructor’s self evaluation, student evaluations, external evaluations by supervisors or experienced staff members, outside evaluations by TESOL specialists, and Chinese government evaluations by appointed Chinese teaching professionals. The various constructivist evaluations include both formative evaluations, conducted while the course is taking place, and summative evaluation, conducted after the course has finished.

Conclusion

In the EDU 435 course taught in 2007, group projects allowed students and the instructor to work cooperatively with each other. Members worked as a team; and

therefore, this ESOL curriculum development project ¹ created a constructivist classroom learning environment in three important ways. First, the *authenticity* of the project motivated the students to learn how to develop a second language curriculum. Second, the entire course was framed within a constructivist perspective that embraced the belief that *knowledge is socially constructed*. Learning in the course was viewed as a developmental process that is enhanced when students learn to view problems and issues from multiple perspectives, constructing knowledge from their own interpretations of numerous pieces of evidence. Finally, this course was framed as a *problem-solving activity* that required the development and use of open-ended inquiry, critical thinking, and social interaction. Therefore, the very manner in which the course was structured is a good example of how constructivism can be used in an ESOL teacher training classroom.

In conclusion, constructivism is presented at two different levels in this project. At the macro-level, focusing on basic constructivist and student-centered theories, EDU 435 successfully created an ideal constructivist classroom learning environment by allowing teacher candidates to work cooperatively with each other and also with the professor. At the micro-level, teacher-candidates in EDU 435 successfully embedded constructivist strategies in the course curricula they developed for the Chinese scholars.

¹ Due to the fact that Niagara University is still in the process of building partnerships with Chinese universities, this completed curriculum has not been implemented yet.

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Appendix A

EDU435 Curriculum Development Project Description, Format and Grading Rubric

Twenty English-as-a-foreign-language (EFL) teachers from different Chinese universities will receive training at Niagara University for four months. The training has three components: English language, American culture, and teaching methodology. Please choose one component and develop a training program for that component.

Please follow Brown's procedures to develop your program: Needs analysis, goals and objectives, materials, teaching, testing, and evaluation. For each component you choose, you need to develop two courses for the candidates. The development of these two courses should be based on the needs analyses you have conducted. The goals and objectives should be clearly stated. Materials should be carefully selected. The chosen materials should be very appropriate for these specific students. Teaching methods, course grading (testing), and program evaluation procedures should be clearly described. The final report should include 1) introduction; 2) needs analysis; 3) goals and objectives; 4) materials; 5) teaching; 6) testing; 7) evaluation; and 8) appendices. This assignment is worth 60% of your total course mark. The grading criteria for this assignment are attached.

Curriculum Development Project Grading Form

	Criteria	Your Score
Introduction (5%)	The context of this project is introduced, and the purpose is clearly stated.	
Needs analysis (15%)	Needs analysis procedures are described (using minimum 2 different data collection procedures).	
Goals & objectives (15%)	For each training course, 2-3 main goals and 5-8 course objectives are provided.	
Materials (15%)	For each training course, 2-3 textbooks are recommended. For each textbook, a minimum 100- word annotated bibliography should be given.	
Teaching (15%)	Classroom instructional methods and techniques should be included. Additional activities and tasks associated with each course should also be mentioned.	
Testing (15%)	For each training course, specific assignments should be clearly described. How the final course grade is calculated should also be stated. For each course assignment, a brief description and grading rubric are also included.	
Evaluation (15%)	The evaluation process for this program should be clearly described. For example, the time, the people involved for each stage should be specified.	
Appendices (5%)	All supporting materials should be included in the appendices. For example, needs analysis survey, interview questions, data analysis tables, bibliography list, etc.	
Total	100%	