

TEACHING DIVERSITY ONLINE: USING CONCEPT MAPS TO ENHANCE LEARNING OUTCOMES

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Abstract. Diversity education is now a requirement for students on most college campuses in the United States. For this reason, there is a need to provide such courses in formats designed to accommodate the needs of an increasingly diverse learner pool. Concept maps have found increasing support not just for use in asynchronous learning environments but also with multicultural education. However, no study thus far has sought to examine the use of concept mapping as a pedagogical resource in teaching a diversity course online. This case study examines learning outcomes associated with the use of concept mapping in a course on the American Civil Rights Movement. Implications for practice and further research are considered.

1 Introduction

Diversity education is now a requirement for students on many college campuses in the United States. This area may be classified under such headings as multicultural education, ethnic studies, American Studies, Native American Studies, Africana Studies, Latin American Studies, and many others. Courses in cultural diversity prepare students to effectively navigate a global landscape by encouraging an understanding of cultural differences and facilitating collaborative skill development (Day and Glick 2000, Garcia and Van Soest 2000). For this reason, there is a need to provide such courses in formats designed to accommodate the needs of an increasingly diverse learner pool. More full-time college students who are also parents, and/or have full-time jobs outside the home, are interested in taking their classes online. Non-traditional part-time and traditional full-time college students are also expressing a greater interest in distance learning courses. The flexibility and autonomy offered by such courses is appealing, as is the ability to develop skill and proficiency using online technology. However, while courses in science and business are frequently available to students online, students tend to have less access to diversity courses offered using the same format. This is not because the content offered in diversity courses through traditional college classrooms cannot be effectively adapted for distance learning, but, because many teachers are simply uncomfortable with the idea of teaching online. Some educators feel that education occurs most optimally in a face-to-face learning environment. This is more likely to be the case with diversity courses, in which some topics addressed may require skilled facilitation of collective dialogue and exchange. Some teachers are also uncomfortable with changing their teaching styles to accommodate the needs of distance learners (Rockwell et. al.). As a result, they use electronic pedagogical tools (i.e. PowerPoint) in a manner designed to replicate teacher-centered rather than learner-centered outcomes (Yearwood 2005). The inefficient use of educational technology may perpetuate the beliefs of some academics that technology is a “crutch” or a “substitute for effective teaching”. Research studies employing effective pedagogical resources in asynchronous learning environments may effectively resolve reservations held by some educators about teaching diversity courses online. One such resource is concept mapping.

Concept maps have gained increasing support for use in distance learning courses because of their effectiveness in visually depicting the relationship between complex concepts (Cardellini 2004). They have numerous educational applications, and are particularly useful for facilitating critical thinking and problem solving among students in asynchronous learning environments (Freeman and Jessup 2004; Chang and Lee 2003; Prester and Moller 2001; Milam et. al 2000). At the same time, their impact on learning outcomes in diversity courses offered online has not been examined. This pilot study seeks to contribute to this objective.

2 Description and Purpose of Study

I teach several courses at a large research university that pertain to diversity and multicultural education. One of these courses is called the American Civil Rights Movement (ACRM). My teaching objective in this course is to facilitate a learning environment in which students develop a broad appreciation of the factors and conditions which led to the ACRM of the 1950s and 60's, a critical examination of strategies employed during this period, and a consideration of the contemporary impact and relevance of ACRM activities and initiatives. Most of the students who take this class in a traditional class setting are upper level undergraduate college students who have some familiarity with the subject matter. Many of them have also developed some internet savvy even if they have not

actually taken an online class, so my task in some respects is easier than it typically is with introductory courses. At the same time, teaching the civil rights class online presents some different challenges in terms of creating opportunities for students to develop an understanding of relationships and experiences that might typically be represented through the use of videos, or in-class discussions. Concept maps have found increasing support not just for use in asynchronous learning environments but also with multicultural education. They have been used to evaluate student learning outcomes (Enger 1996), train teachers to work with diverse student populations (Jensen and Rowley 2002), and assess the cognitive transformation of students taking diversity courses (Artiles and McClafferty 1998). However, although numerous resources exist online for teachers of diversity courses (Helms 1997), no studies have been done to examine the use of concept maps in multicultural education or diversity courses offered via distance learning. This case study attempts to fill that void by examining learning outcomes associated with the use of concept maps in an online course on the American Civil Rights Movement. It asks the question, How does the use of concept mapping influence perceived student learning outcomes in an online diversity course?

2.1 Method

In the Spring of 2006, I designed an optional learning exercise for 28 students enrolled in a course on the American Civil Rights Movement that involved the use of a concept map. The purpose of the map was to explore the relationship between school desegregation and educational outcomes for African Americans living in urban environments following the civil rights era. A focus question was provided consonant with suggestions made by Novak and Cañas (2006). It stated, “What impact did school desegregation have on urban communities?”, and was used to provide a focal point for student analysis. The relationships depicted in the map were explained through internet links contained on the course website and assigned readings. Students were instructed to study the map, and the relationships it represented. The map in Figure 1. attempts to relay a sense of both the continuity of the American Civil Rights Movement and the complexity of societal dynamics set into motion by activities of the civil rights era. Although focusing only on the outcome of school desegregation, it hints at important connections between this issue and others such as politics, economics, housing and health.

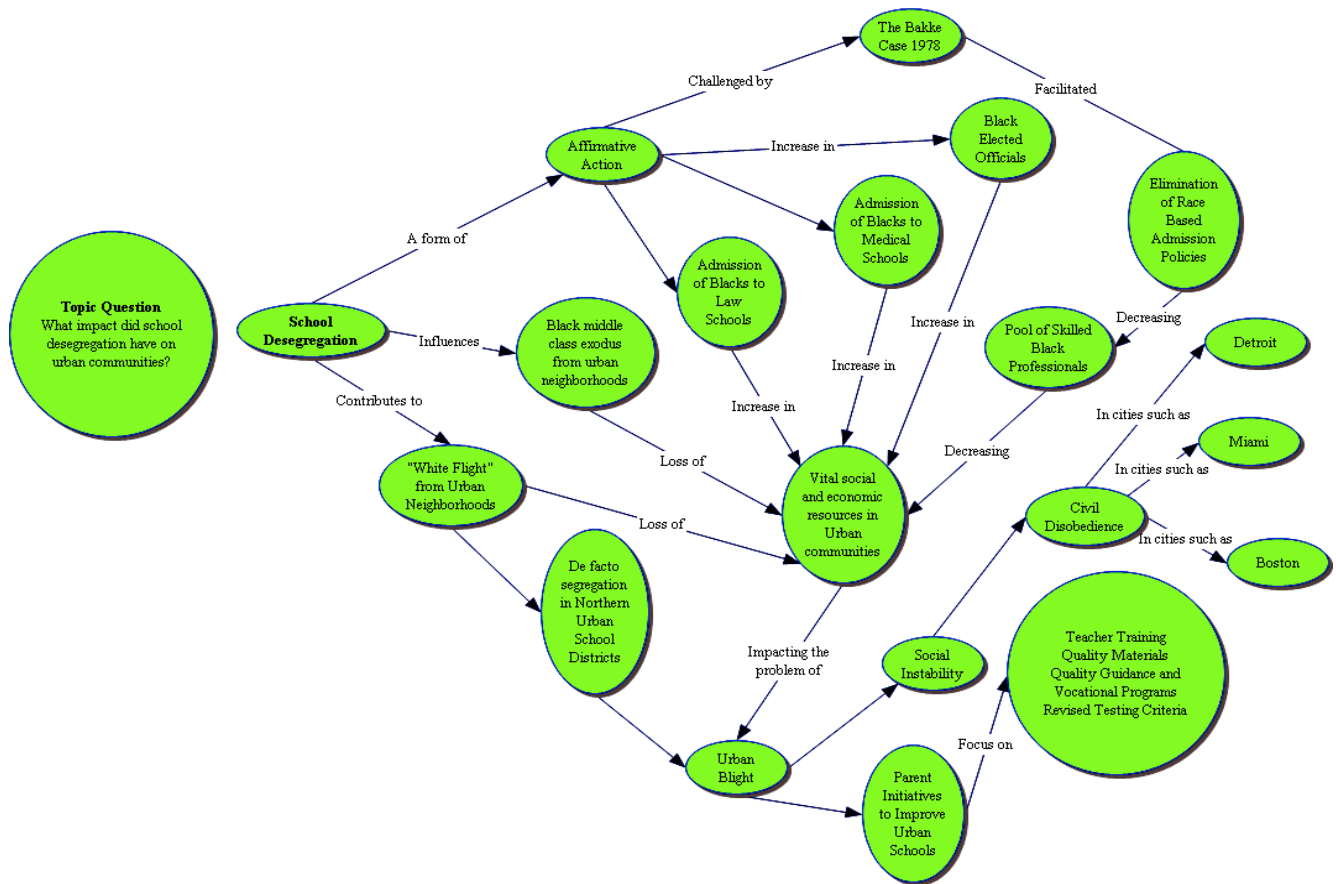


Figure 1. Concept map with topic question: “What impact did school desegregation have on urban communities?”

After having 1-week to study the map, students were asked to generate a brief statement (1 paragraph to 1 page) that discussed the usefulness of the concept map in addressing the topic question. They were also asked to suggest ideas or concepts they would either add to or remove from the concept map to explain issues raised in the topic question.

2.1.1 Results

Seven students or about 25% of the class chose to complete this optional learning exercise. Three learning themes emerged from an analysis of their responses to this assignment. First, all of the participating students indicated that the concept map *enhanced their historical understanding of the topic*. Several discussed changes in race relations in the U.S. between the American civil rights era (1955-1965) and the 1990's, while another discussed how housing patterns in the U.S. have changed and been influenced by lending policies since the 1930's. Most of the responding students indicated both that the concept map *facilitated an understanding of the interrelationship between key concepts*, and that it *provided insight into potentially positive and negative outcomes associated with the same phenomenon*. Suggestions included incorporating more information on the impact of affirmative action policies on government employment, and (in future maps) correlating such key events as the 1963 March on Washington and the 2005 Millions More Movement. Two students also chose to construct concept maps of their own depicting the historical and contemporary role of religious leaders in civil rights activities and the role of government intervention in ameliorating social outcomes influenced by race.

3 Discussion and Summary

The challenge with teaching a course on the American Civil Rights Movement, even for students who are familiar with the topic is helping them to appreciate the contemporary relevance of many of the issues being addressed. I wanted an exercise that would enable students to relate the activity involved with desegregating American schools in the 1950's and 60's with societal changes that occurred decades later. Based on the student responses, I believe this goal was met. The drawback of the concept map on school desegregation is that, because I created it rather than having students do it themselves; the exercise limited their active involvement. However, by giving students the opportunity to comment both on the usefulness of the map as a learning instrument and on the ideas they would include/exclude from it, I believe students were nonetheless engaged in a purposeful interactive learning activity.

The fact that students were given an option as to whether or not to complete the assignment is both a strength and weakness of this case study. It is a strength in that students who chose to complete the assignment saw value in the time and effort it took to do so. At the same time, many students chose not to do the concept map assignment in favor of more traditional options such as book reviews and film critiques. Although all of the feedback I received from students about the assignment was positive, it is possible that students who chose not to complete this assignment were confused or intimidated by the idea or presentation of the concept map. While, I am encouraged by the fact that 7 students not only voluntarily chose to critique the concept map but that 2 went further and actually generated maps of their own, I recognize the need to approach this assignment in subsequent courses in such a way as to measure all student learning outcomes. In future offerings of this course, I intend to expand this exercise by having students work collaboratively in groups to design their own concept maps using an example such as the map in Figure 1 as a guide. Course management software such as Centra will be used to enable students to engage in live group dialogue. I will then provide all students with an opportunity to evaluate and discuss the maps generated within each group. This kind of exercise is likely to provide a more comprehensive assessment of student learning outcomes in an online diversity course and would also be a useful approach for others seeking to research this topic to take.

Earlier this paper addressed some issues that factor against courses in diversity being offered online. These issues which pertain to misconceptions about the viability of electronic pedagogical resources and asynchronous learning can be addressed through research demonstrating the efficacy of teaching online. Although the exploratory nature of this study prohibits its generalizability to other settings, it is an important point of departure for showing that students can learn at least as effectively in distance learning courses as they do in face-to-face settings. This is particularly the case when effective pedagogical resources are used. At the same time, there are other issues that affect the willingness of teachers to teach distance learning courses. Rockwell (et al 1999) notes that some educators fear that they will have to spend an inordinate amount of time preparing to teach distance learning courses. The authors also cite that issues including inadequate training; weak incentives, and a fear of essentially losing control

over the curriculum, all factor against educators developing distance learning courses. These are issues that can be addressed through the strategic and purposeful implementation of strong institutional supports for distance learning. These include professional development workshops in online course management, site licenses for effective online course management software, and funding and release time for online course development. Such support may not only enhance faculty productivity and teaching satisfaction but will contribute to the creation of stimulating and effective learning environments for all students.

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