CONCEPT MAPPING AS A TEACHING/LEARNING TOOL ABOUT RACE RELATIONS

Flora V. Calderón-Steck, San José, Costa Rica Email: floracalderonsteck@yahoo.com

Abstract. In this poster, I demonstrate how I used concept maps in an introductory university course on race relations in the United States. The process of learning a theoretical framework that can foster the cognitive and affective goals of Ethnic Studies needs to involve the students in an active exploration, analysis, and synthesis of new knowledge (Alex-Assensoh 2000; Jadallah 2000). As a key component of my student-centered pedagogical approach, I used concept mapping to promote students' critical thinking skills on key issues of power and inequality in society. The visual format (Plotnick 2001) of information organized and represented in a concept map allowed the students to gain an overview of how historical, social, political, and economic factors influence the positioning of ethnic groups in everyday life. The article includes student sample concept maps developed as part of their course work in the Introduction to Ethnic Studies course at a U.S. Midwestern university.

1 Introduction

One of the goals of the field of Ethnic Studies is to promote understanding of historically unequal power relations among racialized ethnic groups with an emphasis on the realities, challenges, and contributions of ethnic groups that have subordinate status. Related to this goal of deepened understanding of historical, social, political, and economic racial inequalities is that students will use the acquired knowledge to participate in the project of self and social transformation to reduce those inequalities. Understanding historically unequal power relations among social groups requires the acquisition of a multidisciplinary conceptual framework through which students can incorporate and interpret new knowledge. The process of learning a theoretical framework that can foster the cognitive and affective goals of Ethnic Studies needs to involve the students in active exploration, analysis, and synthesis of new knowledge (Alex-Assensoh 2000; Jadallah 2000).

2 Theoretical Framework

The first section of the Introduction to Ethnic Studies course I taught was dedicated to learning the concepts and their interrelationships to create a framework that can enable students to think critically about the experiences of subordinate ethnic groups in the United States. I have experimented with a variety of teaching techniques that allow students to grasp and retain the theoretical framework needed to make informed judgments about our social reality. Political scientist Yvette Alex-Assensoh (2000) argues that an effective pedagogical strategy to prevent students' emotions (likely to arise when dealing with issues of inequality) from overriding their intellects is to facilitate active learning which encourages students to own the concepts they encounter. In addition to lectures, texts (using sociological, psychological, historical, and activist perspectives), videos, and small group work to respond to ideas presented, I used the technique of concept mapping both for teaching and for student-centered learning.

A concept map is a visual representation of concepts and the relationships between them; concepts are usually enclosed in some sort of box and a connecting line (links) between concepts indicates the relationships between them. The links can be one-way, two-way, or non-directional. Cross-links indicate relationships between concepts in different parts of the concept map and they often represent creative leaps on part of the knowledge producer (Novak). Concept maps are, thus, a visual representation of conceptual understanding that can be described as the richness of interconnections and relationships made between concepts and the structure that organizes those concepts (Novak and Gowin 1984 in Taricani 2000). The visual format (Plotnick 2001) of information organized and represented in a concept map allows the students to gain an overview of how historical, social, political, and economic factors influence the positioning of ethnic groups in everyday life. Being able to demonstrate to themselves and others that they understand how ideologies, social interactions, and social institutions help to explain patterns in groups' life opportunities allows the students to challenge, in their own words and images, ideologies of meritocracy and to explain how white supremacy works. Creating a concept map, by themselves or in groups, encourages students to formulate their own connections making their learning process meaningful. The process of drawing the maps provides a space in which students not only reflect upon a specific topic (Abrams 2002) but also apply the concepts they are learning. Romance and Vitale (1999) argue that concept mapping, as a student-centered

technique, is an effective way of moving students from a novice state to that of expertise; concept mapping serves as a form of guided apprenticeship, a valuable method of teaching Ethnic Studies.

3 Using Concept Mapping in Teaching Ethnic Studies

Originally developed as a way to evaluate students' understanding of science concepts, concept maps have emerged in the education literature as a new and successful teaching technique in a variety of disciplines (Abrams; Koehl; Romance and Vitale 1999). I have not come across a study that documents the use of concept mapping as pedagogical tool to teach about race relations in the United States. In my experience, teaching students not only the concepts necessary for a critical analysis of race relations, but also the skills to learn how to learn, concept mapping has been a highly successful technique. As a teaching technique, concept maps allow me to illustrate how knowledge is constructed and structured by showing the connections among key course concepts.

As I lectured, I wrote on the blackboard the key concepts and draw arrows indicating how they related to each other. In doing so, I was not only modeling to the students how I use key concepts to build a model that helps me to understand key issues and "the big picture" in the study of ethnic group relations, but also keeping the instruction focused. I followed a more flexible style than the classic hierarchical Novakian concept mapping. I agree with Robert Abrams, who argues that some conceptual relationships are more dynamic than hierarchical and sometimes the concept maps that my students and I draw are a string of concepts linking to each other in circular pattern.

After an introduction of three sociological perspectives (functionalism, conflict, and labeling) and the psychological perspective on racial identity development, I introduced the concepts of dominance and subordinate status in relation to ethnic/racial groups. Next, I reviewed and explored the historical, economic, and political processes that lead to the creation of those status groups. Then, I discussed how the boundaries between those two groups are kept in place and I introduced the concepts of social construction of reality, social stratification, and consequent institutionalization of inequality, including the concepts of prejudice and individual and institutional discrimination. I then discussed how the ideological glue that holds it all together includes the myth of race, and consequently racism, white supremacy, meritocracy, and individualism, among others and how these ideologies are embedded in our commonly held values, beliefs, and laws and are reproduced in our daily lives both through social interaction in a variety of social institutions. I provided many examples and asked students to contribute some from their own experiences. In small groups, the students discussed assorted newspaper articles seeking to identify the concepts learned thus far, and their interrelationships. In small groups, students discussed the merits of each model, decided which sociological perspective best supported each model, and worked through examples.

Presenting this conceptual framework took about six weeks of mini-lectures, class discussion, small group work, videos, and short reflective writing assignments. I used the concept map as the centerpiece of my pedagogy. I started each class by drawing, with input from students, the conceptual framework we had worked on to that point. I found that the repetition of the interrelationships among key concepts and their visual representation was a valuable use of class time. It offered the space for reinforcing key ideas and demonstrating how concepts build on each other. I devoted two full class periods for small groups to work on their own concept maps and to present them to the class. Once they reached a consensus on their concept map summarizing the first section of the course, they presented and explained them to their classmates.

Taricani (2000) argues that concept maps are useful learning technique for students with different learning styles. The creative and analytical aspects of concept maps allow students to express their understanding in ways that are meaningful to them. My students, although they were exposed to concept mapping through my lectures, often grumbled that they did not know how to do it and suggested that it would be hard for each group to come up with a unique concept map. I responded by giving specific verbal and visual instructions on how draw a concept map and added that the beauty of concept maps is that they represent each group's consensus on how they see the concepts relating to each other. And because I did not adhere to hierarchical concept maps, allowing for more creativity for the concept map maker, students were free to start with a specific example and work their way to more general concepts. For instance, a group might have felt more comfortable starting with a concrete example of racial subordinate status, such as higher rates of infant mortality of African American children, and put it at the center of their map and try to find the linkages that help them explain that outcome. The important thing was that students use the exercise to practice their critical thinking skills by dialoguing among themselves and drawing a concept map that

illustrated their agreed upon understanding of unequal race relations in their society. In the seven semesters I used this learning technique in the classroom, students were surprised at the variety of concept maps and enjoyed listening to and seeing their classmates' learning process. I collected the concept maps and made suggestions and corrections and discussed them with each group when I give them back. Figures 1 and 2 below illustrate the results.

4 Examples of Student Concept Maps for Ethnic Studies

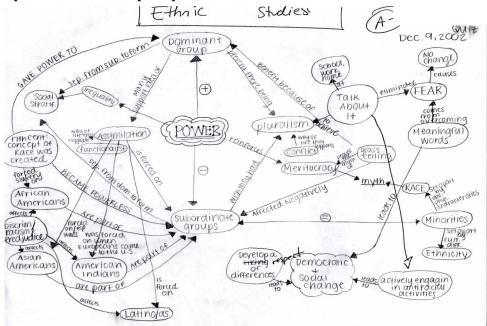


Figure 1: Concept Map

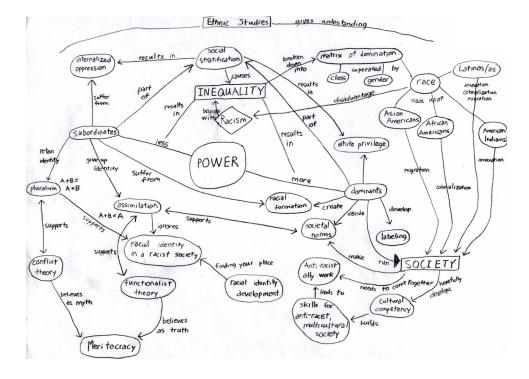


Figure 2: Concept Map

5 Evaluation of Use of Concept Mapping in Ethnic Studies

At the end of the section on learning the conceptual framework, the students anonymously evaluated the texts and reading guides I provided for them, as well as classroom activities such as concept mapping. One of the questions in the evaluation asked: *How useful was working in small groups [including concept mapping] in helping you understand the conceptual framework for the study of race relations in the US?* The possible answers were: very useful, useful, not very useful, and useless. The following are the combined results from three sections I taught in Fall 2001.

	Very useful	Useful	Not very useful	Useless	No response	Total
Section 1	6	6	3	1	5	21
Section 2	3	12	11	2	3	31
Section 3	9	8	1	0	0	18
Total	18	26	15	3	8	70

Table 1: Usefulness of Concept Mapping: Fall 2001 Sections

These results are not very precise because not all students responded specifically about concept mapping but instead responded to their evaluation of the effectiveness of small group work. Some of the responses in the not very useful category referred to their assessment of small group work. The no-response category can probably be understood by the fact that this question was on the back of the evaluation form. Those who did not respond to this question also did not respond to other questions on the back of the evaluation. It is possible that they did not realize that the form was two-sided. Imprecise as the results may be, they nonetheless show that students, 63% of those who turned in their evaluations, found the technique of concept mapping useful in their learning process.

In addition, I encouraged students to adapt their note taking, as they read, listened to lectures, and participated in small groups, in graphical forms; instead of writing sentences to identify key terms and demonstrate through the use of lines and words how they relate to each other. Students who did this told me that while it took more time than just reading and underlining key concepts, the time spent doing the concept maps was very helpful in working through the connections. Some even drew concept maps as their answers to short essay questions on their quizzes. These students, however, tended to be in the minority and were those who consistently produced high quality work.

6 References

Abrams, Robert, Kothe, Denise, Iuli, Rick. "A Collaborative Literature Review of Concept Mapping." *The Meaningful Learning Research Group Home Page*. http://www2.ucsc.edu/mlrg/clr-conceptmapping.html (18 January 2002).

Alex-Assensoh, Yvette. "Minority Politics Courses: Moving beyond Controversy and Toward Active Learning" *PS: Political Science and Politics*, 33 (2000): 201.

Hale, Steven. "Concept Mapping Handout" Handouts from Georgia Perimeter College. http://www.dc.peachnet.edu/~shale/humanities/composition/handouts/concept.html (18 January 2002).

Jacobs-Lawson, Joy M. and Douglas A. Hershey. "Concept Maps as an Assessment Tool in Psychology Courses." *Teaching of Psychology*, 29 (2002): 25-29.

Jadallah, Edward. "Constructivist Learning Experiences for Social Studies Education" *The Social Studies*, 91 (2000): 221.

Novak, Joseph D. "The Theory Underlying Concept Maps and How to Construct Them." Institute for Human and Machine Imaging. http://cmap.coginst.uwf.edu/info/printer.html (18 January 2002).

Plotnick, Eric. "A Graphical System for Understanding the Relationship between Concepts." *Teacher Librarian*, 28 (2001): 42.

Romance, Nancy R. and Michael R. Vitale. "Concept Mapping as a Tool for Learning." *College Teaching*, 47 (1999): 74.

Trepagnier, B. "Mapping Sociological Concepts." Teaching Sociology 30 (2002): 108-119.