

Pedagogies for Transformation: Challenging Student's Intellectual Assumptions

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Abstract

In this paper the authors show how to move beyond fostering active participation to challenging students' ideologies and assumptions in order to pique curiosity and encourage engagement in critical self-reflection, leading to a more effective, meaningful learning experience. The most important pedagogical principles are that individuals remember most accurately and longest what they say and do, and that active learning is a step on the way to real growth. Instructors can be agents of change and also can give the support that encourages students to construct their own learning and ideas. Some of the purposes informing these authors' pedagogy are to foster cognitively active learning, to establish more honest and direct contact between students and professor and among students, and to communicate high expectations. Also vital are giving prompt feedback and showing that the course's content is intrinsically challenging to students.

1. Introduction

Students come to any class with different experiences, prior knowledge, abilities, learning styles, attitudes, and values. Whether they realize it or not, students are emotionally as well as intellectually committed to certain versions of truth and meaning. College classrooms can be ideal environments for seeking change by challenging these emotional and intellectual commitments. In this paper the authors show how they move beyond fostering active participation to challenging students' ideologies and assumptions in order to pique curiosity and encourage engagement in critical self-reflection, leading to a more effective, meaningful learning experience. Some of the purposes informing these authors' pedagogy are to foster cognitively active learning, to establish more honest and direct contact between students and professor and among students, and to communicate high expectations. Also vital are giving prompt feedback, showing that the course's content is intrinsically challenging, fostering a dialogue in which students play a large role and in which each student's

own ideas as well as those of others are at issue, and encouraging students to take risks.

Content alone does not provide a vehicle for knowledge transformation. Classroom climate is the key to fostering perspective transformation. Mezirow [1] defined perspective transformation as:

...the process of becoming critically aware of how and why our assumptions have come to constrain the way we perceive, understand, and feel about our world; changing these structures of habitual expectation to make possible a more inclusive, discriminating, and integrating perspective; and finally, making choices or otherwise acting upon those new understanding (p.16).

Active learning is a step toward transformational learning. Active learning strategies have different meanings for different faculty. Some professors think that all learning is "active" because students are actively involved while listening to a presentation. Some active learning strategies are better than lectures for developing critical thinking skills. More importantly, active learning strategies make it more likely that students will engage in higher-order thinking skills such as analysis, synthesis, and evaluation [2]. Those skills are at the highest levels of Benjamin Bloom's Taxonomy of Educational Objectives [3]. The process of analysis is subdividing information to demonstrate how it is structured. Synthesis involves creating a unique product that may be a combination of different ideas to form a new whole. Evaluation, which is at the pinnacle of Bloom's Taxonomy, is developing opinions and judgments or resolving controversies that involve differences of opinion. Educational methods that move more students from mere mastery of content/information toward active construction of new learning are vital to teaching for critical thinking and transformation.

Even though active learning has had great popularity in the past two decades, because students appear to be actively engaged in their own learning process, some theorists have questioned the efficacy of active instructional techniques. Mayer [4] suggested that active learning techniques in the classroom do get students involved, but that they are only involved

behaviorally. Mayer distinguished two kinds of active learning: behaviorally active learning, when students engage in doing something without making sense of the actions or the objectives; and cognitive active learning, when students engage in sense-making such as self-explanation/self-reflection. Mayer [4] argued that students need to be cognitively active in addition to being behaviorally active if their learning is to be truly significant. He advocated that instructors create meaningful interactions between the learner and the academic material, and work to facilitate the learners' processes of selecting, organizing, and integrating information. The focus is more on constructive learning, which is active learning in which the learner uses a variety of cognitive processes. Cognitively active learning moves students beyond participation in an exchange of information toward active use of that information in new contexts and for new purposes. It is a useful bridge from an externally participatory learning environment to one in which students are challenged to reflect. The authors of this paper believe that students must go beyond both behaviorally active and cognitively active learning to transformative learning.

Transformative learning involves a true paradigm shift. It envisions a change in what students view as constituting knowledge and in their reasons for seeking knowledge. It is not just adding to existing knowledge or refining their awareness of the dominant paradigm and their ability to manipulate it. According to Mezirow [1], students must be confronted with a "disorienting dilemma" that cannot be answered or resolved by applying readily available intellectual tools or approaches. Students must reflect on their experiences and on their encounters with challenges posed by new irreducibly different perspectives on things they thought they "knew".

Creating in the classroom a safe place to engage in critical self-reflection as students consider where their views may have originated is a basic condition for transformative learning [5]. By providing an activating event, or a way to stimulate students to examine their culturally held beliefs and to consider the limitations of those beliefs, teachers can use a variety of techniques to be agents of change and also to provide the support to encourage transformative learning.

The transformative learning theory lists different conditions and processes that are a part of the transformative learning experience [6]. (1) There must be an activating event that helps a student realize the limitations of his/her current knowledge. (2) The student needs to have opportunities to identify and describe his/her assumptions. (3) The student needs to be able to articulate where those assumptions originated through critical self-reflection. (4) The student needs to be able to discuss with other students

and the instructor how those assumptions influenced him/her. (5) Through the classroom discussions, the students can examine alternative ideas. (6) The students can then apply any new perspectives they have gained through the experience. According to Cranton [6], once students have applied these processes they are more likely to utilize them in different environments.

2.Transformative Learning at IUPUI University

One author teaches Psychology courses at IUPUI University. This includes courses in Psychology and Educational Psychology. The area of the United States in which I teach is generally rather conservative socially and politically. When presented with an activating event, students can be reluctant to disavow or even to question the beliefs they have held. Creating a warm, accepting classroom environment where each student can feel open to expressing his/her opinion is critical to transformative learning.

Each week students in my Social Psychology class were required to participate in an online discussion forum before coming to class. In the forum, students were presented with a problem or issue to be resolved using the content of the textbook for that particular week. After students posted their own comment to the forum, they were to respond to a peer's posting. One chapter in our Social Psychology text covered "prosocial behaviors" and what motivates individuals to help others, or not to help. The forum for that chapter posed the following issue – "On the evening news you learn about a devastating earthquake in California that has destroyed homes, leaving families without shelter or food. The announcer gives a telephone number and an address for those who want to contribute money or food. Also, volunteers are needed to help with the cleanup. Do you ignore this information, or do you decide to contribute money, food, or your time? What factors with respect to the disaster itself, where it occurred, and your experience with such a situation might influence your decision? List the kinds of social psychological processes that could be operating." Students interacted online and again in class when we discussed their forum comments, the reasons behind their answers, and the cognitive processes they used to reach their conclusions. Each class provided students with an activating event, and an opportunity to interact with each other and the instructor. Through interactions, their peers and I provided students with immediate feedback on both the content and cognitive processes utilized. These and other activities, by bringing students into direct contact with their own and others' thought processes and emotional responses to issues

and experiences, pose challenges that can produce transformative learning and show the need for critical thinking.

The design of my curriculum provided students with both formative and summative assessment. Continual feedback to students during the discussions in class and the interactive online discussion forums provided formative assessment. The summative assessment design for this course was to give four exams during the semester in which students were assessed both on content knowledge and on their ability to “synthesize” [3] the information and relate it in their own words through the filter of their self-constructed learning. Another assessment instrument I used was to have students write a reflection paper at the end of the semester describing what they learned from the course both in terms of both cognitive learning and social interaction. Evidence of transformative learning that was revealed in the reflection papers was that 60 out of 75 students were able to specify significant changes in their assumptions and beliefs because of the course.

Since some of the content of my classes is controversial, I have ample opportunities to provide activating events. One such activating event that I use in a Human Development class is titled “What’s in a label: Investigating what we buy, wear, use, and throw away...”. In this exercise students select an item of clothing or an accessory. They write down the manufacturer’s brand name/label and where the item was made, the price, and why they purchased the article. They also think about the demographic at which the product is aimed. Then, they find as much information as they can about the corporation’s manufacturing practices. For example, is child labor exploited in the manufacture? I also provide websites, such as the International Labor Organization Child Labor and the International Labor Organization, that cover many countries’ policies regarding child labor. Students bring all this information to class, and we discuss their findings and whether the information they have found has changed their minds regarding the articles they had chosen. This assignment always leads to a lively discussion because not many people consider where clothing was made or under what conditions before they purchase it. Most of the students wrote in their reflection paper that they would most certainly start reading labels before considering purchasing articles of clothing and other apparel.

When studying retirement in my Adult Development and Aging class, I ask my students to go to a website regarding retirement and complete the retirement calculator to determine how much money they would need to put aside for their retirement during their working years. I assign articles for them to read regarding the state of the Social Security system and whether there is really a retirement crisis. After

reading the articles, I have them write their impressions of what they read. This challenges them to reflect on the findings. We end the class with a discussion. Through class discussions, students identify their current assumptions by explaining their thinking process. In this particular exercise, they have assumptions regarding their retirement, such as that they have plenty of time to think about retirement and that, if all else fails, Social Security will be there to supplement. After completing the exercise students had different beliefs regarding the amount of money they would have to save and whether there would be enough money for them to live the way they choose. Transformative learning occurred when students critically reflected on their assumptions about retirement and decided they needed to implement a new plan to save for retirement.

Euthanasia is a highly controversial topic, in part because it centers on decisions regarding who should control life. Does that right belong solely to the individual, the person’s physician, his/her dependents, the government, or some deity? Students in the Life Span Development class research euthanasia and write an opinion paper on their findings. In class, students discuss the many different topics they have discovered on euthanasia, such as Dr. Kevorkian’s “suicide machine”, or which state in the United States passed a “right to die law” making it legal for an individual to take medication to end his/her own life, the difference between passive euthanasia and voluntary active euthanasia, and cultural differences regarding euthanasia. Through the class discussions, students have opportunities to identify and describe their assumptions regarding euthanasia. There seem to be many activating events on this topic in that most students have not thought about or openly discussed death, much less euthanasia. Since most of the students are nursing students, they are very surprised to learn that one survey found that 20% of nurses admit to deliberately hastening a patient’s death at least once, and other experts assert that euthanasia is far from rare. By discussing the topic with other students and the instructor, interacting with guest speakers who are experts on the topic, and self-reflections, students have the opportunity to examine alternate ideas and apply any new perspectives they may have gained through the experience.

Transformative learning can be both a social and solitary process [7]. Having students involved in critical reflection is the solitary part where they examine their own assumptions. Discussing their assumptions in class is the social part where they hear others’ views on the topic. Critical discourse offers students opportunities to reflect through conversation. With the introduction of technology, discussions can be asynchronous through online discussion boards, which

further extends the discussion time offering students a reflective period to digest new information presented in class.

3. Transformative Learning at Butler University

The second author teaches in Butler University's Global and Historical Studies Program, which is part of Butler's core curriculum. The core curriculum emphasizes learning objectives and outcomes that make transformative learning a priority. In terms of both content and pedagogy, the core curriculum/Global and Historical Studies course, *Modernizing and Contemporary Europe*, provides excellent opportunities for transformative learning. The particular learning objectives defined for Global and Historical Studies could have been derived from some of Mezirow's [1] theoretical components of transformative learning. The learning outcomes include appreciating cultures as dynamic, heterogeneous, and constantly in dialogue with each other, and recognizing the benefits and difficulties of living in a culturally diverse and increasingly globalized world. Students are challenged to change their meaning schemes, that is, their specific beliefs, attitudes, and emotional reactions. A change in "mental models" [8] often occurs. It is made explicit, in the course syllabus and in the introductory lecture, that such change is a goal of the course.

In this course, students engage in investigation of and reflection on cultures both different from their own and inextricably connected with them. Americans' sense of what it means to be individuals and their understanding of self and society are tied closely to cultural developments and values that they share with Europeans. Students generally come to the class confident that they "know about" Europe. At the same time, and increasingly, there are important differences between contemporary American culture and the European culture developing in, and in large part because of, the European Union. These convergences and divergences are looked at closely in the course. Europe's importance in shaping the modern world and, now, the growing influence of the European Union, make Europe a vital source of insights and challenges.

The course begins with students recording, as a group, elements of their conception of Europe and of modernity and mentioning the likely sources of those ideas. This process gives them an opportunity to see their own assumptions and those of their fellows. I then ask the students, again as a group, to contemplate some of the possible relationships among the elements of what they see as characteristic of Europe and of modernity: technology and war, for example, or

aristocracy and high fashion, monumental architecture and monarchy.

Our sense of what it means to be an individual and our sense of self are tied to cultural developments and values that we share with Europeans. In this introductory phase, students are invited to contemplate, as the course develops, the ways in which the values that we "share" with Europeans—individualism, self-determination, free inquiry, equality before the law, etc.—have been betrayed by actual behavior. Students respond both intellectually and emotionally to these challenges. Their "knowledge" that the United States is the world's moral leader and that modernity is continuous progress, and their emotional commitment to those assumptions, are at issue as we reexamine Europe from the Renaissance to the debate over Turkey's possible membership in the European Union. Near the end of the course, as we study the European Union, students are challenged by readings arguing that the EU has become a successful rival of the USA for economic and moral leadership in the world. Not every student will experience "a fundamental shift of the psychocultural assumptions" which determine the horizon of expectations [9], but most will show some growth and progress.

One of the first historical phenomena I ask the students to contemplate is the advent of mechanical printing. This seems natural to them, since technological change is always one of the aspects of both Europe and modernity that they mention at the beginning. We explore the ever-widening circle of implications of this innovation: cheaper and more widely distributed information, the commercialization of knowledge, the strengthening of vernacular languages and of the new nation-states, easier access to the Bible and other foundational cultural texts, private reading by individuals, and the ability to imagine an international community of scholars and scientists. A critical point here for challenging students' assumptions about how history "happens" is that mechanical print itself was dependent on another technological novelty: paper. That paper was introduced to Europe from China via Islam prepares them to recognize that the world has always been "globalizing," and that the interpenetration and mutual enrichment of cultures are not new. They also encounter a paradox that characterizes the history of modernity: the same technologies that contributed to liberation also provided new means for consolidating power.

The next major topic in this course is the French Revolution. Here, too, everyone has some ideas or assumptions that lend themselves to being challenged. The most obvious and useful one is implicit in the very phrase, "French Revolution." In fact, as was true of the American Revolution among Americans, there was

much opposition to the revolution among the French. Having the students read some of the pamphlets and broadsides produced by revolutionaries emphasizes once again the importance of print technology—in this case, for mobilizing the Parisian populace, who really made the revolution, and for increasing the power of leaders. In addition, by reading Robespierre [10], students are challenged to see how some of the seemingly noble ideas of modernity could be used to justify murderous extremism. It is not a long leap to the subject of dissonance between high-minded justifications and savage realities today. Again, one principal goal here is to challenge students to rethink, or re-imagine, how ideas are actually produced and used and how events actually happen. The dialectical relationship between ideas and experiences, and the ways in which practice can betray principle, is a major theme of the course. A new meaning scheme is needed for appreciating this.

The Industrial Revolution, Charles Darwin and Social Darwinism, colonialism/imperialism, the World Wars and Cold War, and the European Union are the remaining major topics of the course. Learning that industrialism and free-market capitalism are best understood as reactions to the mercantilist economic policies of the eighteenth-century monarchies adds important nuances to students' understanding of those concepts as they are used today. Recognizing that "new" ideas must be understood in terms of what they oppose and seek to supplant, and in terms of a specific material context, is vital. Darwin is an obvious challenge, not least as a subject requiring a respectful environment for discussion. Close reading of passages from Darwin permits discussion of the ways in which, though a spectacularly innovative thinker, he was also a man of his times. To see Social Darwinism not merely as opposition to social welfare, but as an ideology useful to racists and eugenicists, is a revelation to most students. Each semester, a significant number of students choose to do their research papers on resemblances between Hitler's racism and Social Darwinist writings. Juxtaposing Adam Smith's abstract theorizing about market economics and Friederich Engels' concrete description of the horrors of working-class life in Manchester [10] further challenges facile assumptions about capitalism and industry. It is of course also educational in the best sense for students to see that today's issues have a long history and many very deep implications. The sense that modernization may have gone off the rails during the period of the "White Man's Burden" and through most of the twentieth century prepares the way for consideration of the European Union and the contemporary world. Many students *want* to reach clear, definitive conclusions about whether industrialism has been a good thing, or whether the

European social model is superior to what they take to be the American social model. They have to recognize that conclusions in these matters can only be based on criteria that they themselves develop, and for which they must take responsibility.

In the latest edition of this course, fully half of the students in my class chose to do their research/reflection papers on quality-of-life indices. This is typical. Most students, again typically, expressed shock at finding the United States well down the list, and behind many EU countries, in life expectancy, healthy life expectancy, infant mortality, and a number of other indices. They admitted being disturbed. They had felt secure in the assumption that they lived in the best of all possible countries. At the minimum, they had to reconsider how to understand relations among self, community, and world and, more concretely, how to assess their own selves and communities. At the same time, they had to recognize that the current financial crisis in the EU may raise doubts about the long-term viability of the European social model. Clearly, all of this bears on the issue of how students "construe, validate, and reformulate the meaning of their experience." [11] The course qualifies, in my view, as a deconstruction of meaning schemes [7] and a challenge to change frames of reference [12]. It encourages students to take themselves seriously—and responsibly--as thinkers.

4. Conclusion

Our experience indicates that transformative learning can take place in a wide variety of courses and indifferent institutional contexts. We have recounted here our experiences in professional preparation courses with very specific content and in a general education course whose goals and objectives are extremely broad. By beginning with activating events or by posing dilemmas to our students and following up with activities that continue to challenge their intellectual and emotional commitments to certain types of knowledge; we have helped many of our students achieve a significant degree of perspective transformation.

5. References

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