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Using the Case Method to Teach Online Classes: Promoting Socratic Dialogue and Critical Thinking Skills

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With increasing interest in online education, instructors must have a repertoire of tools available to promote the critical thinking skills of their students. This paper will present the case method as one pedagogical approach for teaching online courses. Example cases are provided. Pedagogical approaches to working with new and seasoned online students are addressed. Further, the benefits of using the case method to promote learning in the virtual classroom are explained. The case studies presented for online classes present concrete situations that can be used to stimulate analysis, requiring students to project how they might respond to a set of circumstances. Case studies promote Socratic dialogue and higher order thinking skills. Further, the case method can be a good vehicle for stimulating students' thought about step-by-step planning.

The use of the case method to teach is not particularly novel. It has been used for some time in face-to-face classes. Conant (1949) of Harvard University was the first professor to center his entire course on the use of the case method. As colleges and universities go through technological innovations, such as offering classes online, the case method can be adapted to the virtual classroom to promote critical thinking skills. For the most part, case studies have rarely been used to teach online, undergraduate courses. One critical challenge is to engage the online learner in the material presented and to foster higher order thinking. The case method is an active learning strategy that engages students and fosters higher order thinking. Also, the case method also facilitates problem solving skills (Levine, 1994).

Problem-based learning (PBL) is an instructional method that challenges students to actively learn by working cooperatively in groups to seek solutions to real world problems.

> The ideas embodied in problem-based learning have a long history, ranging back at least to the use of cases in Harvard Medical School in the nineteenth century and extending through John Dewey's philosophy, Jerry Bruner's discovery learning, and the development of simulations in the 1960s. (McKeachie, 1999, p. 175)

The case method, like other problem based learning strategies, "are intended to develop student ability to solve problems using knowledge, concepts, and skills relevant to a course. Cases provide contextualized learning, as contrasted with learning disassociated form meaningful context" (McKeachie, 1999, p. 177). These problems are used to engage students' curiosity and initiate learning the subject matter. PBL prepares students to think critically and analytically, and to find and use appropriate learning resources. Problem based learning can be set up in a variety of formats. The next section will describe such formats as well as defining the case method approach.

Case Method Defined

What is meant by the term, case method? "Cases are often actual descriptions of problem situations in the field in which the case is being used; sometimes, they are syntheses constructed to represent a particular principle or type of problem" (McKeachie, 1999, p. 177). The case method is an inductive process by which students learn through their joint, cooperative effort as opposed to the professor conveying views to students (Herreid, 1994). This is in direct opposition to what Friere (1971) termed, the banking method of education. With the banking method of education, students are repositories for the instructor's information. The students then spit back the facts that the instructor as provided – there is no critical thinking involved in this practice. With the case method, students and the professor engage in a Socratic dialogue which fosters critical thinking skills; thereby, eradicating the banking method of education in the virtual classroom. The case method is designed to enhance student understanding of core concepts of the course as well as to encourage critical thinking.

In using cases, students become active, similar to the Bau Hause method, which is 'learning by doing': It is an active learning strategy. The case method follows this line of philosophy. Cases provide students with the opportunity to exercise decision making, whether individually or in a team format. For the disciplined student, cases help increase motivation (Washull, 2005). Further, it provides them with real life examples (Brooke, 2005). Some students have difficulty connecting the theory to real life, practical examples. The case approach ameliorates this problem.

The method is easy to implement. As you will see in the following sections, I created short case scenarios and integrate them in the presentation of the course material. The difference between face to face classes and online classes is in the length of the case study. Shorter, abbreviated problem based cases are used to effectively teach online classes. The following section looks at types of cases that instructors can utilize in the online classroom to motivate students to learn.

Types of Cases

There are a variety of venues for presenting cases such as discussion, debates, and trials, and public hearings. I regularly use discussion, debates, and trials. The public hearings can be quite complex for a face to face classes and may be very difficult to implement in an online environment; therefore, public hearings will not be discussed here.

The discussion approach is perhaps the best known for presenting cases (Herreid, 1998) and is one that I utilize often in the online classroom. Instructors can present a case that requires students to make an evaluation. In my abnormal psychology online course, I present cases where a person may or may not be suffering from a mental disorder. Students try to diagnose the case according to Diagnostic Systems Manual (DSM) criteria. Here is an example:

> How would you diagnose the following case and what treatment approach would you use? Use theory to support your response: This is a case of a woman who is quiet, reclusive, and withdrawn. She has no close friends and resents it when people try to intrude on her solitude. She works in a library in the stacks and prefers not to deal with the public. Her co-workers find her to be unresponsive, unemotional, and she does not seem to be interested in interacting with them. She reads at night and rarely goes out. She is often described as a loner.

This brief version has worked well for online cases that utilize discussion questions, such as the University of Phoenix, where classes meet for only five weeks. For online classes which meet for 14 weeks, so I can use more extensive cases, such as the one I co-authored with a colleague: The case of Maria (Brooke & Martin, 2004). To view the case, please go to: http://www.sciencecases.org/therapeutic_relationship/therapeutic_relationship.asp. To see the teaching notes, go to: http://www.sciencecases.org/therapeutic_relationship/therapeutic_relationship_notes.asp. The discussion approach can be used with online classes that have 25 students or less. For this approach, the instructor must make sure that students stay on track with the discussion.

Debates are an interesting way to deal with subjects that have two extremes or opposing views. For instance, when I teach child development online, I split the class into two teams, those who support co-sleeping with infants and those who do not support co-sleeping with infants. This is a good way to bring up cultural variations in the way children are raised. Students have the opportunity to see evidence on both sides of the debate. Additionally, some students who have had one point of view at the beginning of the class have changed to the other point of view after the presentation of evidence in the debates.

For online teaching, instructors can also use the trial method. The trial should be focused on the material in the lecture. I have both teams write an introductory statement. They write it collaboratively in their teams, using references to support their work. I create a work area in the course management system for each team; only the team members have access. In addition, I assign the members. After the posting of the introductory statement, each team creates a rebuttal in direct response to the opposing team's introductory statement. Next, they pose one question to the opposing team. Time permitting, there can be more questions. Each team ends with the closing argument or statement. The debate format works well with a smaller group of students, 15 or less. The following case study is an example of one the scenarios that I have used in introductory psychology courses:

> A woman's twelve-year-old daughter had been approached sexually by her grandfather, the woman's father. The grandfather, as is often the case, was a responsible member of the community, a proverbial "pillar" of family rectitude. The child's experience had triggered a memory that the mother had long repressed: when she was the same age as her daughter, her father had sexually molested her. As a young teenager, she had dealt with it fairly well, told no one, and repressed the incident altogether. Though she had managed reasonably well to overcome her feelings of fear and guilt, in retrospect she realized that it had inhibited her sexual responsiveness and healthy adjustment to adulthood. When she confronted her father with the truth, he denied it absolutely and acted as if she had imagined the whole thing. Her own mother accused her of hating her father and plotting to destroy the family. Now she wants to bring her father to trial for sexually abusing her as a child.

Students can be quite dramatic with this approach and find it a beneficial learning experience. I assign the roles of lawyers, grandfather, grandmother, mother and daughter. The lawyers ask a question of their witnesses

and the witnesses respond. The trial ends with the lawyers making their closing statements. “Whatever the case, it typically involves the possibility of several alternative approaches or actions and some evaluation of values and costs of different solutions to the problem posed” (McKeachie, 1999, p. 177).

Beginning Online Students

The pedagogy of teaching beginning online students differs greatly from that of seasoned online students. In some sense, there is a great deal more hand holding and direction from the instructor. Students are challenged to acclimate to the online environment in addition to learning the course content. Some online institutions require that students work in virtual teams so the instructor needs to facilitate their experience in working in groups online. In addition, many students are new to this format, so instruction in communicating online and netiquette is essential. Please see Appendix A for the Communicating Online Tips sheet that I use to teach online classes.

New students will need assistance with tone. When we meet people face-to-face, we usually have a clear sense of what is appropriate in the way we act and communicate. Meeting people over the Internet similarly requires a certain level of awareness. On the Internet, we cannot read body language such as smiles, nods of the head, or looks of disapproval. We cannot hear the tone of another person's voice. Tone is conveyed through word choice in the virtual classroom. Sarcasm in particular comes across poorly in Internet communication. For example: Think of a simple question such as, "Are you serious?" In a friendly situation, this could be sincere. In a loud and aggressive tone, it could mean something quite different, perhaps "Have you lost your mind?" When using electronic communications, it may be difficult for others to know what you really intended to convey. Students must be guided into communicating carefully and effectively, particularly at the start of a course.

Conflict between students, most often in the team areas, is an issue with beginning online students. It is important for the facilitator to guide the groups from destructive conflict to constructive conflict. For instance, destructive conflict involves disagreements centered on personality, whereas constructive conflict involves substantive conflict or disagreement with ideas and group issues (Tannen, 1998). I have found that the case method ameliorates destructive group conflicts by building cohesion and promoting positive group interaction skills such as brainstorming and conflict management. For more information on promoting positive team decision making, see Porter’s (2003) article.

Beginning students will need opportunities for proactive problem solving. Working in teams seems to be the most troublesome area for students. Through my experiences of teaching online for the past several years, I developed case vignettes that allow beginning students to resolve team issues before the even start working in their own learning teams. Here is an example:

> Learning Team A is made up of Frank, Omar, Lisa, Jackie, and Shawn. Frank volunteers to be the team leader and takes control rather easily. He notices Lisa is the last person to make comments and suggestions. Also, she shows up in the main folder but not the group folder. The deadline for the first project is in two days and Lisa has not contributed much. If you were in Learning Team A, how would you first define the problem?

Not only does this give students an opportunity to deal with problems before they may arise in the team, it gives them the chance to exercise their critical thinking skills. In this case, I ask students to first think of the possible reasons why Lisa might be inactive prior to jumping in to problem solving. They are exposed to different points of view on the possible reasons for Lisa’s behaviors. After this, I then ask them how to resolve the dilemma. Here is one beginning student’s response to the cases I developed for beginning online students:

> I thought that the case studies were interesting. I learned a lot from them because I had to perform more research to understand what the studies were about before I could reply on them. They opened my eyes up to topics that I would not ordinarily had been interested in, sought after on my own, or been aware of. They also made me aware of how much I do and do not agree with certain aspects of a topic. Also, they corrected my perception on certain aspects of subjects. All in all, the cases are very informative, prompt an awareness, and was good practice for enhancing my research skills.

Teaching students how to create substantial discussion responses to the cases is the critical task of the instructor. This holds true for beginning as well as seasoned online students. Writing, “I agree with you” or “Good point”, is not enough and certainly not a substantial response. I require that students build on their peer’s response and use references and theory to support their work. Please see Appendix B for my post to students on creating substantial responses.

Seasoned Online Students

The principles for teaching the case method for new students will occasionally have to be reinforced with seasoned students. With seasoned students, cases can be taken a bit farther by having students actively apply the course material to the case. The cases can be more complex, challenging students to spend more time analyzing the problems and issues of the case. This promotes a highly interactive discussion. For seasoned students, I try to find real life cases to which they can apply the theory from the course and exercise their critical thinking skills. Here is an example that I use for my online philosophy class:

> Cities around the country are preventing Wal-Mart from opening new stores on the grounds that these stores would "threaten" other businesses and replace higher paying jobs with lower paying ones. Develop a logical argument which presents your support or lack of support of this idea.

Students have a variety of stances on this particular case, sometimes challenging one another because their views are diametrically opposed. In this case, I can also teach about the logical fallacies, such as ad homonym. It is important that they logically respond to the ideas of a post and not attack other students. The Manoa Writing Program (2005) provides some good suggestions for students when they respond to a peer's post.

The Wal-Mart case is quite controversial. I noticed that this case promotes a great deal more interaction between the students and the attendance in the online classroom increases. Here is what one student said about the Wal Mart case:

> Case One regarding Wal-Mart was one of the most growing experiences I have had of the four cases posted. I think the controversy of that topic had the most passion of all the discussion questions we had. It really made me see how divided people can be over an issue and made me more aware of how references can really help drive your side of the argument home. It also opened my eyes more of how the other side feels on this issue. I still don't agree with them but I know in this class I was highly out numbered and I started wondering if the odds are the same outside of this class.

Benefits of Using the Case Method

According to Herreid (1994), traditional lectures have only 50-65% student attendance. On other hand, when using the case method, Herreid (1994) reports 95% student attendance. I noticed an increase in student participation with the cases. I use an evaluation form, see Appendix C, to gather student feedback on the case method, from which the student comments were derived for this article.

There are several benefits to using the case method to teach online classes. The goal of the case approach is to develop student's analytical and decision making skills (Erskine, Michiel, & Mauffette-Leenders, 1981; Gragg, 1953). In addition to analysis, other learning outcomes include application of theory, synthesizing material, and making evaluations. By providing opportunities for application, analysis, synthesis, and evaluation, the case method goes beyond the recall and recognition tasks that are associating with the banking method of education (Friere, 1971; Gross, 1999).

Problem based learning is one method that dedicated instructors use to help students learn. The case approach is one form of problem based learning that activates the student's prior knowledge base. According to Barrows and Kelson (2005), problem based learning (PBL) is:

> both a curriculum and a process. The curriculum consists of carefully selected and designed problems that demand from the learner acquisition of critical knowledge, problem solving proficiency, self-directed learning strategies, and team participation skills. The process replicates the commonly used systemic approach to resolving problems or meeting challenges that are encountered in life and career. (para. 1)

Through the use of the case method and thought questions, the instructor can promote active engagement in the virtual classroom. Since many cases focus on real life problems and dilemmas, the students will be able to transfer this information to other settings, such as their work environment. Many online students already have careers so the practical applications of the case method approach are immediately applicable.

Students gain a great sense of meaning and can actively apply theory to support the solution to a problem presented in a case. In some ways, this is a proactive approach to problem solving, particularly with beginning students first learning how to work in virtual teams. Enhancing intrinsic learning, combating retroactive inhibition, increasing encoding specificity, and developing more diverse schemes are other benefits of using the case approach to teach online course (Brooke, 2005). In summary, the case approach promotes social change in that students reflectively and critically examine their own thoughts in relation to the course material and other student's responses.

Conclusion

Using the case method to teach online classes promotes a learning-centered cultural milieu (Brooke, 2004; Brooke 2005). By learning-centered, I am referring to students developing responsibility for their own learning. The instructor is the facilitator and further refines critical thinking skills and analysis. Using the case method allows for a balance of power between teachers and students. Additionally, cases are highly motivating as demonstrated by increased attendance (Herreid, 1998). Instructors have a wealth of information for creating cases. For my short, five week classes, case vignettes are appropriate. For beginning students, I use past student problems to help current students engage in proactive problem solving. For seasoned students, they can be challenged to view another side to a topic, thereby allowing further refinement of their thoughts on the matter. The case method is a didactic, pedagogical approach for promoting learning in the virtual classroom.

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Appendix A

Communicating Online Tips

Hello Everyone!

Remember that conveying meaning is extremely important since there are no facial, voice or body clues that are transmitted with your message. In class you may be able to say *No* in a sarcastic tone, and everyone will know that you don't really mean it. Online, you must make sure that the words that you use to communicate your message are accurate and appropriate. In no time at all, you'll feel *techno-savvy* and completely comfortable with online communication!

Netiquette:

Many members of the electronic community have contributed to these guidelines. A couple of URLs are included below that may be helpful as you learn to communicate in the online world.

Arlene Rinaldi, Florida Atlantic University wrote *The Net: User Guidelines and Netiquette*: http://www.fau.edu/netiquette/net/index.html

Delaware Technical Community College posts this web page about Netiquette: http://www.dtcc.edu/cs/rfc1855.html

Albion.com (a San Francisco-based Internet reference publishing firm) publishes a web page labeled *The Core Rules Of Netiquette* excerpted from the book *Netiquette* by Virginia Shea: http://www.albion.com/netiquette/corerules.html

An unknown author has posted a web page on GeoCities that provides the reader with etiquette for chat rooms: http://www.geocities.com/SouthBeach/Breakers/5257/Chatet.htm

Emoticons:

It is often difficult to express emotion or humor when communicating online. Adding *Emoticons (Smileys)* to your e-mail or chat message may help you to convey more clearly the meaning of your message. Remember, though, you are in an academic setting – too much humor is probably not wise!

From MIT, this web page has been posted: http://www.mit.edu:8001/people/cordelia/smileys.html

A professor from Tokyo International University of America posted this web page with emoticons: http://www.mit.edu:8001/people/cordelia/smileys.html

About.com provides this web page of smileys: http://netforbeginners.about.com/internet/netforbeginners/gi/dynamic/offsite.htm?site=http://rcswww.urz.tu-dresden.de/~jloeffle/smiley_dict.html

Appendix B

Creating Substantial Discussion Responses

Discussion Responses:

- A good response to the question should be one or two paragraphs, and address all of the issues that are raised.

- A good response to others is not something like "I agree." Please find something that you can analyze, add to, critique, explain, disagree with, or something. It should be a few cogent sentences. It should contain something that shows your knowledge of the book, as well as additional materials you might bring to class from the web and elsewhere.

- A good response to a written question should be one to two pages in length, and address all of the issues that are raised.

- You must use references to support your work. You *CANNOT* copy a website and paste it as your response. If you want to use a website, summarize it, outline the pertinent information, and then cite the webpage. If you copy a webpage as your response, you will earn 0 points for the module.

- Think of this as your opportunity to teach. Create substantial responses which expand on a point and present information on the topic. Your responses should demonstrate your critical thinking on the topic.

Appendix C

Case Evaluation Form

Name: (optional) _____

Class: _____ Date: _____

Content and Organization	***Points Earned***	**Comments:**
Please rate with a 1 (strongly disagree) to 4 (strongly agree) Scale in the Points Earned Column		
All key elements of the cases were covered in a substantive way.		
The cases were comprehensive, accurate, and /or persuasive.		
The cases developed a central theme or idea, directed toward the appropriate audience.		
The cases helped me link theory to relevant examples of current experience and industry practice and uses the vocabulary of the theory correctly.		
Cases were stated clearly; are supported by specific details, examples, or analysis; and are organized logically.		
I learned more about the course topic through the use of the cases.		
The cases allowed me to develop new perspectives with respect to the course content.		
Add your own criterion here:		
This section will be tallied by me.	***Points Earned***	**Comments:**