

PROBLEM-BASED LEARNING MEETS WEB 2.0: USING A YOUTUBE VIDEO TO TEACH INFORMATION LITERACY IN A PROBLEM-BASED LEARNING FORMAT

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INTRODUCTION

The widespread lack of knowledge of media and visual literacy are limiting the ability of our students to think critically. It is a broad generalization to say that most people get their information from news broadcasts via television or Web; however, it is probably an accurate observation. Therefore, incorporating visual media into an information literacy instruction session will help students of any age to be better informed and more critical information consumers. The problem with many information literacy efforts is that they are limited to a 50-minute session. However, by including a film clip as the jumping-off point for an instruction session, students can quickly learn how to find key ideas in a visual medium, and then find books and articles to expand on their knowledge of the problem. More than that, they learn the process of inquiry, and that they need to pay attention to what is omitted in news broadcasts. The librarian acts as a guide on the side, asking questions of the students to draw their knowledge and experience into the class, thus creating more interest and buy-in on their part. Furthermore, it can be done in a 50-minute session.

DESCRIPTION

Most of the available knowledge about NetGen or Millennial students indicates that they are visual and kinesthetic learners who like to work in groups. They get their information from news media on television or the Web. To capitalize on these characteristics, we developed a powerful

way of teaching information literacy combining Problem-Based Learning techniques with a 3-minute BBC news clip. After watching the clip, the students were asked to work together in small groups to list facts given in the video, define the problem using the key words (facts), and determine what other information they needed. They were then shown how to find books and articles on the topic, and were asked to propose a solution based on what they had learned.

ABOUT PROBLEM-BASED LEARNING

In brief, Problem-Based Learning (PBL) is a method of helping students learn about the research process and how to conduct research. It is based on an ill-defined problem, one which mirrors life, since most problems which arise are not clear-cut and are often difficult to define. Greenwald (2000) finds that problems have three characteristics: (1) an initial state, where attempts to solve the problem begin; (2) a projected "goal" state, which is basically the situation which is desired; and (3) a set of actions which will bring about the goal state. In PBL the student is given a scenario which has several aspects to it, some of which are relevant, some of which are incidental. Deciding which aspects are relevant or causal, or, possibly, easier to work with, necessitates critical evaluation on the parts of the students. They must define the facts they know, then use them to create a problem statement, which will hopefully point to a state which can become the goal. They will also need to determine further information or facts which they need in order to be able to understand the problem, and which will enable or lead to a solution.

In the instruction session the students were given a worksheet which asked three sets of questions, which, briefly, are: What do we know? How can we define the problem? What further information do we need in order to be able to come

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to a solution? From this, the need follows naturally for finding books and articles on the topics. Throughout the process, the librarian acts as a “metacognitive” coach (Gallagher, 1995), helping the students refine their ideas and moving them toward more productive lines of inquiry. A copy of the worksheet can be found in the appendix.

This is a very brief description of PBL. There is much more to it, such as the iterative process in which students periodically review their information needs and adjust to new discoveries of what is available. PBL is really intended to take place over several weeks, giving students a good introduction to problem solving and research. However, to remain within the 50-minute time slot allotted to most library instruction, the process was trimmed down to the basics. There are two websites given in the bibliography which will help in understanding the process.

BACKGROUND

Our instruction sessions were done in collaboration with a college freshman-level Communication Studies class, better known on other campuses as Speech. This class is a large-enrollment class, usually containing over 800 students. It is taught as a blended course and is divided into numerous sections of approximately 25 students each, taught by teaching assistants. There is a two-week time span in which all the classes are assigned time slots to come to the library.

The professor for this class, Dr. Karen Anderson, chooses different social problems each semester for the students to study, on which they base their speeches, PowerPoint presentations, and other assignments. This paper will describe two phases of the project: the initial pilot and the more formal approach used for the entire class.

WHAT WE DID

In the pilot, during Fall, 2008, several groups of students, ranging from four to approximately twenty, were shown a 2:55 minute clip from the BBC on YouTube. Because of problems encountered with the production of the online textbook, which Dr. Anderson wrote, the normal “library day,” in which all the students are brought into the library for instruction, was not possible. Therefore, we decided to offer several workshops for which the students received extra credit for attending. We considered it as a pilot program, to test how the new format would work.

The clip showed the air pollution in a Chinese village, and the effects on the environment and the people, both children and adults. This was especially relevant to the students because of the well-reported problems encountered by the athletes in the Beijing Olympics the previous summer, and is one of the reasons this video was chosen. (Another reason is that it was produced by the BBC, a well-known and trusted source for news.) The students were given worksheets (See appendix) asking them to list the facts gleaned from the video, then develop a problem statement using the facts as key words, and decide what further information they would need to develop

a solution. They were also asked what they were not told in the video, in other words, what further information was needed for them to be able to suggest a solution. We also pointed out to them the powerful effect of the visuals included in the clip, asking them to summarize what was being said with the pictures alone. The title of the video is “BBC News - China’s Grime Belt Air Pollution Extreme,” <http://www.youtube.com/watch?v=-1DNjJd2YfA>.

In the next semester, Spring 2009, all students in all sections were brought to the library for an instruction session within a two-week time span. The teaching format was again used, this time with a short video on poverty in Bangladesh, produced by a student from Notre Dame University. This video was chosen because it fit in with the overall theme used in the course that semester, which was world poverty. Another reason for choosing it was that it was created by someone close in age to our students. The title of the video is “The End of Poverty: The ‘Homework’ for Our Generation,” <http://www.youtube.com/watch?v=tnOJHVdZbJ0>.

PRACTICAL TIPS

It was helpful to begin the session asking students how many of them got their news from the radio or from newspapers. No one raised their hands. Then ask if they got it from television, and finally the Web, which produced the most hands. Then we would summarize: their information came almost exclusively from video sources, and that was why we were going to watch a short video and work with the information conveyed in it.

We found it worked best to tell the students what to watch for before they watched the video – i.e., to pay attention to the facts that were included in it. After viewing the video, we instructed them to discuss the facts in their small group for about three minutes. In the course of working with them, we found that it helped to obtain a Post-it easel pad, which could be hung on a portable white board. After calling on the students for their facts, the librarian would write them on the Post-it, tear it off the pad, and mount it on the wall nearby. If participants had difficulty in coming up with facts, we would go back to the familiar journalism model – who, what, where, why, when, and how – which helped get the ball rolling.

When they were asked to formulate a problem statement, we gave them examples taken from another video which we described. After three minutes, or however long it took for the noise level to subside, we would ask them for their problem statements and again write them on the Post-it.

The final questioning step involved figuring out what information was missing. When possible, we took this opportunity to point out that the best way to mislead people is to give them a lot of information, but omit what one wants to conceal. This was why it was important to look for the missing facts during the exercise. After a few minutes, while they discussed what else they needed, the results were listed again.

At the end of the process we had three giant Post-it notes hanging on various walls inscribed with the information

the students had found. Note that these were their ideas. Drawing the information from them made it theirs, and gave them more of a sense of ownership. We may have pointed out a few things or asked leading questions to elicit more of the salient points, but the students were responsible for the content.

Then came the construction of searches for the catalog and for the databases. We asked them which of the terms they had found would be most important to find in the documents that were needed. We underlined the choices, wrote the search down on another Post-it sheet, then showed the students how to use the resources. They were asked to write down the bibliographic information on their worksheets and were shown where to find each component.

It's important to keep the video clips short, about three minutes. It's easier for them to put everything together, besides which, it's the general length of the news clips they see on TV or the Web every day. Choosing the BBC video enabled us to point out the importance of using a well-known and respected source. However, although the second video was made by an amateur, it included footage of a presentation by a well-known speaker, Dr. Jeffrey Sachs, who was lecturing at Notre Dame. As mentioned earlier, it was chosen over another by a television journalist because it was done by someone of the same age as the students. In some ways it was easier for the students to glean the information from the BBC clip; it was well-designed and made the most of both visuals and narrative. It ended with a shot of the Chinese flag, which was discolored and dirty, and when asked what that meant, the students came through marvelously.

RESULTS

In the pilot, the students were given paper questionnaires and asked to comment on the experience, and how well it "worked" for them. Their comments indicated that they felt they learned from it and one of the things they felt was most important was its relevance. In the Spring, 2009, semester, they were asked to fill out a survey online. The results are in the process of being evaluated.

The skills they learned in this course are transferable; they learned how to question what they are shown on the Web and on television, and how to find relevant information on the problem using more customary sources, such as books and articles. The format can be used in almost any subject discipline. One of the librarians who helped teach the classes teaches basic English instruction sessions, and plans to locate a short video that will allow her to show the students how to do a critical analysis of a work of literature.

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APPENDIX: LIBRARY RESEARCH WORKSHEET

1. What do we know? What facts can we list that were in the video? Was there something puzzling or strange in the video?

2. Develop a statement of the problem or problems. Look for patterns or relationships among the ideas and facts you listed above. Then create a statement that describes the problem.

3. What do we need to find out? Once you have the problem or problems defined, what else do you need to know to solve it? Are there more facts that you need that are not spelled out in the video?

4. Locate a book by using the UNT Library Catalog that will give you background information on the general topic. Provide a bibliographic citation for the work.

Title:

Author / Editor:

Publisher:

Date and Place of Publication:

Call Number:

5. Using Academic Search Complete, find an article that will give you more current information on the topic. Provide a bibliographic citation for the work.

Title:

Author:

Journal Title:

Date:

Volume:

Issue #:

Pages:

6. What should we do? Based on the research you have done, what are some solutions that may solve the problem described in the video?