

## USING A VIEWING GUIDE TO IMPROVE COMPREHENSION OF VIDEOS AND DIGITAL MEDIA

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### ABSTRACT

On one hand there is the easily accessed video presentation. Supplemental video resources are widely available to augment marketing textbooks. Publishers make these resources available with most marketing principles texts as well as with texts for many other courses. These videos are helpfully correlated with the texts and are sometimes specifically prepared to go with them. In addition, commercial and educational television periodically produce documentary content that can provide relevant video for marketing courses. Videos provide professionally prepared visual segments dealing with major topics in a format that students find relevant and may, in fact, enjoy. Whether the medium is CD-ROM, DVD, VHS or Internet, video presentations can be a real asset to help faculty develop an interesting class with varied formats to hold student attention.

On the other hand, even though many faculty members use these resources, most have at least some doubts as to whether video resources are truly effective. In the author's observation, it has often seemed that discussions following a video don't have the desired results because students too often fail to recognize or grasp the concepts the video was meant to illustrate. This observation led to research on the challenge of using video effectively in class.

### LEARNING OBJECTIVES

When faculty use video in class, their objectives for the experience are more likely to be *implicit* than explicit (Kreiner, 1997). Implicit objectives require that students draw inferences about concepts based on the information in the video. Using new information to satisfy implicit objectives requires more effort than achieving the explicit objectives of merely learning the facts stated out-right in the video. So it can be said that implicit objectives are more difficult to achieve than explicit objectives.

Research published in 1986 by McKeachie found that video can be superior to lectures in terms of motivating curiosity and interest and achieving motivational outcomes such as building bridges between readings and lectures. More recently, Hart and Stevens (1995) struck a cautious note in observing that while students are receptive to using

videos as aids to learning, video use must be "carefully integrated into a coherent system of instruction in order to optimize their effectiveness."

Another consideration is a possible difference in learning style with chronological age. Student age is related to achieving learning goals according to Camp and Pignatiello (1998), who found that older adults under-performed younger adults when dealing with inferences, whereas older and younger adults performed equally well in the retrieval of facts.

### INTERACTION: UNLOCKING OBJECTIVES

A key to best using the popular and motivating video presentation may be found in the work of Cennamo, Savenye, and Smith (1991). They found that students perceive it significantly easier to learn from *interactive* video than from instructional television, and easier to learn from instructional television than from commercial television. According to Cennamo, Savenye and Smith, instructional television most closely resembles video segments prepared to accompany marketing texts. An example of commercial television that might be used in a class would be a clip from a news program or a documentary prepared for the general public. This would suggest that we might improve the effectiveness of our use of commercial and instructional video by adding an element of interactivity. This finding is not surprising considering that Slamecka and Graff (1978) noted that actively generating information improves recall over passively receiving the same information.

### INTERACTIVE ENHANCEMENT

Several options to assist students in gaining the desired learning from videos have been researched. These range from quite high technology to low technology, and vary in the amount of structure involved. The high technology options are generally highly structured, but the low technology options range in their degree of structure.

Fully interactive video, perhaps the highest technology, refers to the use of computers to control the video presentation, providing opportunities for students to demonstrate their comprehension and receive feedback. As pointed out earlier, Cennamo, Savenye and Smith found (even with the technology

available in 1991) that interactive video was more effective than simply watching videos and that students believe it is easier to learn interactively. A serious problem with computer-controlled interactive video is the limited availability of integrated systems. Developing these systems is time consuming and expensive. Thus the highest technology is generally not accessible to most faculty.

Low technology approaches are numerous, and some lend themselves to being used in combination with others. A simple method of encouraging more active student involvement is pausing the video at key points to ask questions (Kreiner, 1997). Kreiner also suggests that students might receive instruction about key points in the video prior to viewing. Walk (1991) gave students scripts prior to video viewing with blanks to be filled in. Herron (1994) gave students written summaries of important scenes where use of a foreign language in a video made comprehension difficult. Other researchers (Dalton and Hannafin, 1987; Heestand, 1980) gave students practice questions prior to viewing video materials and had them respond to the questions after the video. Students using this interactive method had higher post-test scores than students who watched the same video without the method.

Particularly well researched is the use of structured worksheets *during* a video presentation. In 1997 Kreiner used guided notes, a worksheet with short questions on key concepts, to be completed while watching a video. Green, Klausner and Urquiola (1986) used structured worksheets to be answered during a video. They found that eighty-five percent of the group receiving the worksheets found them helpful while fifteen percent found them distracting. Students in both experimental and control groups were given a post-video quiz, and the experimental group receiving the structured worksheets performed significantly better (77% to 58%).

Research clearly suggests that increasing the level of interaction will increase student involvement in the viewing process. This helps focus students' attention on the important concepts of a video so they will be looking for specific information that may be understood only through inference.

### **VIEWING GUIDE EFFECTIVENESS**

My response to the research on effective video use has been to use Video Viewing Guides customized for each video presentation. The objective is to help make the common video a more interactive experience for students by using a method. From a faculty perspective, it is relatively low technology and

easy to implement. The Video Viewing Guides assist students in attaining the desired substance from videos in three ways. First, prior to viewing, students receive the Guide and a short oral summary of the video and of the concepts that the video will present. Second, during the video the students write answers to ten to fifteen brief, open-ended questions about the specific concepts arranged, as closely as possible, in the same order as the video presentation. Third, the Guide is used as a platform for post-video discussion. The result of following these three steps is substantially enhanced class discussions of substantive points and issues.

### **DEVELOPING VIEWING GUIDES**

Preparing a Video Viewing Guide is neither time consuming nor difficult. The Guide should be limited to one page, double-spaced, and organized in such a way that key concepts are in bold or italic lettering for easy identification while viewing. First review the content of the chapter or text segments that the video is meant to amplify, and prepare a list of the key concepts. Then, as you preview the video, write short, open-ended questions about the identified key concepts as they occur in the video format. It is probably best to phrase the questions in the same terms used in the video. Write questions that can be read quickly and answered with just a few words or a short sentence so students can participate interactively without substantially interrupting their attention from viewing. The objective is to have students learn by focusing their attention towards key concepts while they watch.

### **IMPLEMENTING VIEWING GUIDES**

Handed out immediately in advance of viewing, the Guide can serve as a basis for a preparatory discussion so students are aware of the purpose of the video. In some cases it is also helpful to discuss the setting and perhaps the role of the various individuals in the video. Some videos have settings that are so unusual that they divert student attention from class-related content. Clarifying the setting can aid students in looking past the interesting distraction to the relevant underlying content.

Following the video, the Video Viewing Guide becomes a guide to discussion. Having been involved interactively in the viewing, students are often able to discuss substantially beyond the questions in the guide. Their attention has been focused so that they have learned the basic concepts well. Indeed many students are prepared to discuss strategic concepts that have been implied but not specifically stated in

the video. This sort of discussion brings the class as a whole to a higher level of understanding. Some type of control is probably important to the effective use of a Video Viewing Guide. Collecting the Guides at the end of class helps control student accountability. Depending on the situation, Guides can be either graded or simply reviewed to assure that students are making a good-faith effort to complete them. I find that students complete the Guide satisfactorily almost without exception. Guides appear to lead students through the process of learning through videos by building success on success, as well as by directing their focus towards key concepts.

### SUMMARY

Research has shown that students more effectively assimilate beyond the explicit content of video presentations when an interactive teaching method is used. Interactive methods of presentation come in many forms, from high technology to low technology. Video Viewing Guides bring interactivity to videos. These Guides can be prepared efficiently by faculty. Guides effectively assist students with their learning process, as shown by student success in answering guide questions. Guide use can raise the level of post-video class discussion from merely seeking to identify basic concepts to the application of underlying strategic concepts only implicitly presented in the video.

A sample Video Viewing Guide is presented on the following page as an example. This Guide is a companion to the video *Levi's: Not By Jeans Alone*, which I often use at the end of my marketing principles course. The video and Viewing Guide together help students successfully synthesize the complexities and interrelated reality of all of the principles in the marketing principles course. Similar Video Viewing Guides are often used with other videos in my marketing courses.

### REFERENCES

- Camp, Cameron J., and Michael F. Pignatiello. 1988. Beliefs About Fact Retrieval and Inferential Reasoning Across the Adult Lifespan. *Experimental Aging Research*, 14: 89-97.
- Camp, Cameron J., and Michael F. Pignatiello. 1992. Effects of Induced Dysphoric Mood on Fact Retrieval and Inferential Reasoning from World Knowledge. *Bulletin of the Psychonomic Society* 30 (6): 515-18.
- Cennamo, Katherine S., Wilhelmina C. Savenye, and Patricia L. Smith. 1991. *Mental Effort and Video-Based Learning: The Relationship of Preconceptions and the Effects of Interactive and Covert Practice* 39 (1): 5-16.
- Dalton, D. W., and M. J. Hannafin. 1987. The Effects of Knowledge- Versus Content-based Design Strategies on Information and Application Learning from Interactive Video. *Journal of Computer-Based Instruction* 14: 138-41.
- Green, Thomas G., Leopold H. Klausner, and Nancy J. Urquiola. 1986. The Effect of Structured Worksheets on Student Performance. *Journal of Dental Education* 50 (10): 616-17.
- Hart, Kenneth E. and Kevin Stevens. 1995. The Use and Evaluation of Video Supplements in the Teaching of Introductory Psychology. *Journal of Instructional Psychology* 22: 103-14.
- Heestand, D. E. 1980. The Use of Inserted Questions in Videotape Programs. *International Journal of Instructional Media* 7: 149-158.
- Herron, Carol. 1994. An Investigation of the Effectiveness of Using an Advance Organizer to Introduce Video in the Foreign Language Classroom. *The Modern Language Journal* 78 (ii): 190-98.
- Jones, Arthur P. 1993. Study Notes for an Interactive Videodisc Lesson: Post-hoc Analysis of a Comparison of Matrix Notes with Conventional Notes. *International Journal of Instructional Media* 20 (2): 97-104.
- Kiewra, Kenneth A., Nelson F. Dubois, Maribeth Christensen, Sung-Il Kim, and Nancy Lindberg. 1989. A More Equitable Account of the Note-taking Functions in Learning from Lecture and from Text. *Instructional Science* 18 (3): 217-32.
- Kreiner, David S. 1997. Guided Notes and Interactive Methods for Teaching With Videotapes. *Teaching of Psychology* 24 (3): 183-85.
- McKeachie, W. J. 1986. *Teaching Tips: A Guidebook for the Beginning College Teacher* (8<sup>th</sup> Ed). Lexington, MA: Heath.
- Peper, Richard J. and Richard E. Mayer. 1986. Generative Effects of Note-Taking During Science Lectures. *Journal of Educational Psychology* 78 (1): 34-8.
- Slamecka, Norman J. and Peter Graf. 1978. The Generation Effect: Delineation of a Phenomenon. *Journal of Experimental Psychology: Human Learning and Memory* 4 (6): 592-604.
- Stone, Leonie L. 1999. Multimedia Instruction Methods. *Journal of Economic Education* 30 (3): 265-75.
- Titworth, B. Scott. 2001. The Effects of Teacher Immediacy, Use of Organizational Lecture Cues, and Students' Notetaking on Cognitive Learning. *Communication Education* 50 (4): 283-97.
- Walk, Fredrick H. 1991. The Tale of the Tape: Making Video Viewing More Thoughtful. *Journal of Geography* 93: 197-203.

Video Viewing Guide: *Levi's: Not By Jeans Alone*  
(this video is used at the end of a marketing principles course)

1. Describe the *marketing objective* of Levi Strauss at the start of the case:

2. Describe the jeans market in 1980 in terms of the *product life cycle*:

3. Identify the *four major individuals* in the video and their roles:

a)

b)

c)

d)

4a. Market Segmentation: Why did Levi Strauss *segment the market*?

4b. On what *basis* did Levi Strauss *segment the market*?

4c. Describe the *market segments* Levi Strauss' *marketing research* found:

ID	Size %	Label	Descriptive Information
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Q1

Q2

Q3

Q4

Q5

5a. Product: What was Levi Strauss selling?

5b. Were there problems with the *product*?

6a. Place: To what type of store did Levi Strauss sell Tailored Classics?

6b. Were there problems with this strategy?

7. Price: Were there problems with their *price strategy*?

8. Promotion: Were there problems with their *promotion strategy*?

9. What were the *primary factors* involved in the *failure* of Tailored Classics?

10. What did Haggar do *differently* that helped them achieve *success*?