

Expanding Digital Literacy: Research Questions & Literature Review

Research Questions

The research questions center around the concept of the difference between medium, specifically print versus video, when compared as a source for research. This falls under the greater umbrella of digital literacy.

Research question 1: How can we increase our students' levels of digital literacy?

Research question 2: How can our students effectively use video as a source to support their research and analysis process?

Research question 3: What is an effective tool to help students deeply analyze video sources for use in research and analysis?

Literature Review

Research supports the multimedia learning principle: that people learn better from words and pictures than from words alone. (Fletcher). Research studies have found superior retention and transfer of learning from words with pictures, as compared to words alone, although the research has also found that the effectiveness of combining imagery with text varies with the content to be learned. (Fletcher). While the aforementioned study found superior retention and transfer of learning from words with pictures, another study found that students who prefer visual input to verbal input will benefit more than those who are less visually oriented. (Smith). The results of the study suggest that the optimal teaching strategy depends on the type of students taught and a combination of multimedia and traditional lecture approaches would be useful to optimize learning for all students. (Smith). Both studies support the findings of

additional research which has shown that students given the opportunity to engage with digital literacies learn an array of new ways to explore and share ideas in order to solve problems, and recognize that new literacies have the potential to serve functions that can be vital. (Bond). These concepts and findings support the idea that building students' digital literacy is critical to improving their learning and retention of content material.

Additionally, research supports the importance of recognizing the expanding boundaries of literacy. Kinzer (2003) asserts that the many aspects of literacy that students use and need to learn, include: "keyboarding; layout and design skills for creating presentations and web pages; critical thinking about video, still images, audio, text, their interrelationships, and how they jointly convey intended and unintended messages; skill in using software of various types; information gathering, retrieval, and copying into presentation formats; scaling images; and so on." Extending literacy learning through collaborative projects was shown by Gehr, Saine and Wertz (2012) to be effective in engaging students through collaborative projects that extended their literacy learning with traditional print and technology.

In looking specifically at visual literacy, research has shown that the use of video clips to supplement traditional lecture-based teaching may enhance student attention and learning at the college level. (Dixon). Berk's (2009) research in multimedia teaching with video also shows that the verbal and visual components of a video potentially provide a best fit to the characteristics of this generation of students and a valid approach to tap their multiple intelligences and learning styles. At the high school level, research has suggested that an integrated video media curriculum intervention can positively affect student achievement and attitude across ability levels. (Harwood).

While the research has been primarily focused on the use of video by teachers as a way to supplement instruction, these findings also support the idea that using video as a supplemental source for research and analysis is a critical skill for this generation to develop. Further, for students to successfully analyze video sources, teachers need an effective tool to give students to use to deeply analyze video in the same way that they are able to deeply analyze print media.

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