

MULTIMEDIA TEACHING FOR DRAMATIC ARTS STUDENTS

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Abstract

Teaching as a process is first and foremost a professional gift and cultivated knowledge. Multimedia teaching occurs when a teacher in the field of dramatic arts, film or theatre directing, lectures and builds another mental representation, building from the words photography, recording, visualization, image.

This definition is theoretically broad enough to include book-based environments consisting of text and illustrations, animations, computer-based environments and advanced technology consisting of narration and animation, and virtual game environments consisting of interactive speech and animated microbots.

Keywords

Multimedia, Animation, Photography, Director, Actor, Professor

Introduction

Our main goal in this study is to approach the messages that emerge from multimedia teaching (which we also call multimedia messages) to dramatic arts students, how they perceive these presentations of multimedia material and how they use words and images that aim to promote learning.

Words, text, sentences, can be printed text (such as text printed in a window on a computer screen) or spoken text (such as speech presented through computer speakers). Images can be static graphics such as photos, drawings, maps, graphs, figures and tables or dynamic graphics such as video or animation. Table I summarizes definitions and examples of the key terms: multimedia learning and multimedia learning message.

Teaching In Multimedia – Focus on Dramatic Arts Students

Since its inception, the psychology of learning has favoured verbal, textual, rather than pictorial forms of learning—dating back to Ebbinghaus's (1885) classic studies on the learning and memory of lists of meaningless syllables. As research methods shifted from classical verbal learning paradigms to textual, involving lists of words and paired associates, learning from prose became the dominant paradigm (Mayer, 1996, 2001a).

However, with the advent of computer graphics and visualization tools, technological innovation, animation, and speech visualization, it is worth hypothetically asking whether learning might be affected when pictorial material is added to verbal material—a classic question that is being asked with increasing frequency (Mandl & Levin, 1989; Schnotz & Kulhavy, 1994; Willows & Houghton, 1987).

In short, as a university lecturer and lecturer in directing and multimedia, I am intrigued by the idea of how students of dramatic arts can achieve a deeper understanding when textual explanations are presented through visualization, photography, and animation.

The purpose of this research study is to examine how, through multimedia learning, dramatic arts students explore the other nature of learning, namely learning from words and images.

The Three Faces of Multimedia

Visualization is very important for understanding multimedia, multimediality, the process and ultimately multimedia teaching. Broadcast media plays a major role, because it is the instrument that conveys a meaning, a

word, a voice, a picture, an animation. Presentation methods also play a special role, because the quality of presentation and conveying the idea, to ultimately complete the teaching, depends on the method. Sensory modalities have a secondary role, because they are directly related to the first ones.

The definition

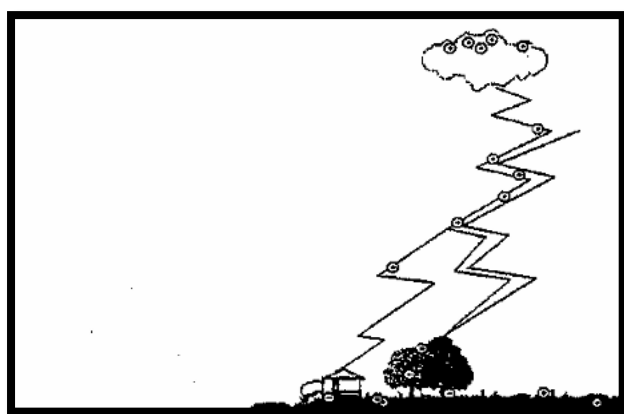
Two (or more) streaming devices will impact student comprehension. Verbal and pictorial representations are two criteria for multimodality. Auditory and visual senses are necessary and essential for greater effectiveness in implementing multimedia learning. An example of narrated animation, here an artist's secretiveness is involved, consisting of Amplified speakers (narration) and computer screen (animation) Words (narration) and pictures (animation). Sounds (narration) and pictures (animation).

Multimedia learning, with predefined themes as illustrative forms, 'Sunbeams and Lightning' is an example of how a multimedia learning message - a presentation that uses words and pictures that aims to promote multimedia learning in dramatic arts students. In this case, the words are represented as narration, the pictures are represented as animation and the intended learning outcomes are a mental model of how the system of sunlight and lightning works.

Multimedia learning occurs when you build a mental representation of the lightning system based on the words and pictures in the multimedia learning message. In this case study, we have built a cause-and-effect model of how a change in one part of the system causes a principle-based change in another part, and so on. For example, when cold air comes over a warm surface, the cold air heats up (by coming into contact with the warm surface) and rises (because hot air is less dense and less dense material rises).

To assess what you have learned, I ask you to answer a series of transfer problem-solving questions (each for 2.5 minutes).

To determine your transfer score, I give you one point for each acceptable answer to each question. For



example, acceptable answers to the first question about reducing lightning intensity include removing positively charged particles from the ground, removing negatively charged particles from the cloud, seeding the cloud with positively charged particles, placing an insulator between the cloud and the ground, and so on. I focus on problem-solving transfer tests because I am interested in promoting meaningful learning, and transfer is a better measure of meaningful learning than memorization (Mayer, 2002).

As another example of a computer-based multimedia instructional message, consider a 45-second narrated animation about a car's braking system that is summarized in the above-noted text (Mayer & Anderson, 1992).

The narrative describes the steps in the chain of activity when you press the brake pedal, and the animation shows the steps in the chain. Table III lists some transfer questions that the student should answer (each for 2.5 minutes). For example, some acceptable answers to the third question regarding "what could have gone wrong" include that brake fluid leaked from the pipe, the piston got stuck in one position, or the brake shoe did not touch the drum.

Multimedia learning in our case study occurs if you build a mental representation of the solar system and lightning based on the words and pictures in the multimedia learning message.

In this case, you need to build a cause-and-effect model of how a change in one part of the system causes a principled change in another part, and so on. For example, when cold air comes over a warm surface, the cold air heats up (by coming into contact with the warm surface) and rises (because hot air is less dense and less dense material rises).

In other studies, we could use not only the photograph of sunlight and lightning, but from this we could also create a moving computer game, which would aim to teach students with multi-narrative multimedia reactions (Moreno & Mayer, 1999a).

From a scientific perspective, multimedia theory, of delivery media, multimedia messages involve two or more delivery devices, such as paper, human voice boxes, blackboards, computer screens, amplified speakers, headphones, head-mounted displays, cassette players, CD players, overhead projectors, and video recorders. For example, in a book-based environment, ink on paper appears to be the only presentation device (unless you want to define the text portions of the page and the graphic portions of the page as different delivery devices); in a classroom environment, the delivery devices might be the instructor's voice and the projection system for PowerPoint slides; in a computer-based environment, we might present the material as on a computer screen.

Conclusion

Thus, our research on multimedia learning includes picture-based messages, computer-based messages, and e-books that explain how scientific systems work, as well as educational games aimed at teaching scientific and mathematical concepts. In all cases, multimedia learning messages use words and pictures to help people learn. Although the media delivery view is fairly objective in determining which devices are used to present a message, it does not offer much help in constructing a psychological explanation of how people learn. In general, I reject the media delivery view because it focuses on technology rather than on students. From a presentational mode perspective, multimedia messages include verbal and pictorial forms of representation (i.e., words and pictures), such as narrative animation, on-screen text animation, narrative diagrams, or printed text diagrams. In each case, the presentation includes words (in the form of narration or printed text) and pictures (in the form of animation or diagrams).

Drawing on the scholarly evaluations of Norman (1993), and (Mayer, 1999a, 2001b) I have distinguished between two approaches to designing multimedia instructional messages - a technology-centered approach and a student-centered approach to dramatic arts.

We have stopped at a technology-centered approach, our focus remains on the nature of the delivery technology as a starting point for message design. We manage to create a new approach to technology, technology helps teaching and is student-centered, stimulates all the functions of the human mind, helps in recognition, brings the unknown closer, records in memory.

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