

The Six Literacy Model of Communication (2)

No class can be developed, and the outcomes of any educational experience cannot be assessed, unless we can clearly define what information and skills should be transmitted. The author feels that as a liberal arts college should create literate students capable of taking that literacy and applying to a distinct job field. In the author's opinion, literacy has six parts, one or more of each should be introduced in each class offered as part of the proposed media arts major. The six-literacy model includes information literacy, technological literacy, creative literacy, cultural literacy, quantitative literacy, and scientific literacy.

I. Information Literacy - Information literacy is a set of abilities requiring individuals to "recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information." (3) The Media Arts student will be able to work in an information rich society, which consists of being able to do these six items when faced with any problem:

- A. Determine the extent of information needed to complete a task.
- B. Access the needed information effectively and efficiently.
- C. Evaluate information and its sources critically.
- D. Incorporate selected information into one's knowledge base.
- E. Use information effectively to accomplish a specific purpose.
- F. Understand the economic, legal, and social issues surrounding the use of information, and access and use information ethically and legally.

II. Technological Literacy - Technological literacy is the ability to employ modern technology, particularly that of digital communication and data processing devices, to perform tasks including those of creative expression, communication, and information processing. Although many people think of technology as only those devices created since the scientific revolution, students should understand that technology use is a hallmark of human existence. Cave paintings and spoken language are technologies no less profound and society changing than bill boards and the digital computer. Media

arts students will know how to work with technology present in a modern society, which consists of being able to do these five items:

- A. Being able to use digital devices to communicate information in each of the five major modes of communication, text, images, graphics, video, and audio.
- B. Understanding the theory of how digital devices work and be able to apply that theory to learning new technologies as they present themselves.
- C. Understanding the history of technology and how it has been used to support complex societies, including the modern understanding of technology as a tool for empowerment of individuals, its role in creating the modern society, and its current uses in the emerging world.
- D. Being able to evaluate technology and choose the appropriate tools needed to complete a project, and be able to communicate these choices to stakeholders in the communication process.
- E. Understanding how to use technology in analytical study, using the tools to aid in critical thinking and the creative process.
- F. Understanding the four step model of communication (acquisition, manipulation, distribution, and archiving) and how this model applies to the process of completing communication processes.

III. Creative Literacy - Creative literacy is the ability to understand how human beings communicate using writing, vision and sound. Media arts students will know how to use creativity to solve problems, which consists of being able to do these four items:

- A. Understand artistic theories and how humans understand and process art.
- B. Understand the history of artistic movements.
- C. Be able the ability to create media in video, audio, images, graphics, and text that is effective at transmitting information.
- D. Understand the practical aspects of creativity as it applies to effective message creation and dissemination.

IV. Cultural Literacy - Cultural literacy is the ability to understand and appreciate the similarities and differences in the customs, values, and beliefs of one's own culture and the cultures of other. (4) Media arts students will demonstrate cultural literacy by:

- A. Working in their own community to explore and communicate culture close to their own doorstep.
- B. Developing an understanding of the history of western culture that allows them a baseline from which to understand other culture.
- C. Exploring and understand different cultures, including different modes of communication and different social norms for transmitting and understanding information.
- D. Demonstrating knowledge and practical skills at navigating social media and online culture, especially how it brings together people of diverse opinions and backgrounds.
- E. Demonstrate an understanding of meaning and how cultures place meaning to various expressions of culture.

V. Quantitative Literacy (5)

Quantitative literacy is knowledge of and confidence with basic mathematical/analytical concepts and operations required for problem-solving, decision-making, economic productivity and real-world applications; this entails the ability to:

- A. Understand quantitative methods of reasoning used in media arts, including accounting and statistics.
- B. Understand the counting of and measurement of audiences in determining relative success and value of medial properties success.
- C. Understand binary mathematics and how binary numbers are used to store and manipulate data by computers.

- D. Demonstrate basic problem-solving skills using mathematics, including calculation of time and monetary budgets.

VI. Scientific Literacy (6) - Scientific literacy is the knowledge and understanding of scientific concepts and processes required for personal decision making, participation in civic and cultural affairs, and economic productivity. For media arts students, this is understood to mean knowledge of how the sciences allow objective understandings of information, and to know in particular about how the sciences provided insight into successful communication. A media arts student should be able to:

- A. Understand the physics of light and how lenses modify and capture light as images..
- B. Understand color theory, especially additive and subtractive color theory used in print, in computers, and in lighting.
- C. Understand basic coordinate geometry as it applies to 2D and 3D art.
- D. Develop a basic understanding of other sciences, and how to take complex scientific understandings and communicate them to an audience.
- E. Understand the difference between objective and subjective truth, and know how to apply objective truth to professional choices.

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