SOS POLITICAL SCIENCE AND PUBLIC ADMINISTRATION

MBA FA 401

SUBJECT NAME: COMPUTER APPLICATIONS IN FINANCIAL ADMINISTRATION

UNIT-V

TOPIC NAME: MULTIMEDIA

Multimedia is content that uses a combination of different content forms such as text, audio, images, animations, video and interactive content. Multimedia contrasts with media that use only rudimentary computer displays such as text-only or traditional forms of printed or hand-produced material.

Multimedia can be recorded and played, displayed, interacted with or accessed by information content processing devices, such as computerized and electronic devices, but can also be part of a live performance. Multimedia devices are electronic media devices used to store and experience multimedia content. Multimedia is distinguished from mixed media in fine art; for example, by including audio it has a broader scope. In the early years of multimedia the term "rich media" was synonymous with interactive multimedia, and "hypermedia" was an application of multimedia.

TERMINOLOGY:

The term multimedia was coined by singer and artist Bob Goldstein (later 'Bobb Goldstein') to promote the July 1966 opening of his "Light Works at L'Oursin" show at Southampton, Long Island. Goldstein was perhaps aware of an American

artist named Dick Higgins, who had two years previously discussed a new approach to art-making he called "inter media".

On August 10, 1966, Richard Albarino of Variety borrowed the terminology, reporting: "Brainchild of song scribe-comic Bob ('Washington Square') Goldstein, the 'Light works' is the latest multi-media music-cum-visuals to debut as discothèque fare." Two years later, in 1968, the term "multimedia" was re-appropriated to describe the work of a political consultant, David Sawyer, the husband of Iris Sawyer—one of Goldstein's producers at L'Oursin.

In the intervening forty years, the word has taken on different meanings. In the late 1970s, the term referred to presentations consisting of multi-projector slide shows timed to an audio track. However, by the 1990s 'multimedia' took on its current meaning.

In the 1993 first edition of Multimedia: Making It Work, Tay Vaughan declared "Multimedia is any combination of text, graphic art, sound, animation, and video that is delivered by computer. When you allow the user – the viewer of the project – to control what and when these elements are delivered, it is interactive multimedia. When you provide a structure of linked elements through which the user can navigate, interactive multimedia becomes hypermedia."

The German language society Gesellschaft für deutsche Sprache recognized the word's significance and iniquitousness in the 1990s by awarding it the title of German 'Word of the Year' in 1995. The institute summed up its rationale by stating "Multimedia has become a central word in the wonderful new media world".

In common usage, multimedia refers to an electronically delivered combination of media including video, still images, audio, and text in such a way that can be accessed interactively. Much of the content on the web today falls within this definition as understood by millions. Some computers which were marketed in the 1990s were called "multimedia" computers because they incorporated a CD-ROM drive, which allowed for the delivery of several hundred megabytes of video, picture, and audio data. That era saw also a boost in the production of educational multimedia CD-ROMs.

The term "video", if not used exclusively to describe motion photography, is ambiguous in multimedia terminology. Video is often used to describe the file format, delivery format, or presentation format instead of "footage" which is used to distinguish motion photography from "animation" of rendered motion imagery. Multiple forms of information content are often not considered modern forms of presentation such as audio or video. Likewise, single forms of information content with single methods of information processing (e.g. non-interactive audio) are

often called multimedia, perhaps to distinguish static media from active media. In the fine arts, for example, Leda Luss Luyken's ModulArt brings two key elements of musical composition and film into the world of painting: variation of a theme and movement of and within a picture,
making ModulArt an interactive multimedia form of art. Performing arts may also be considered multimedia considering that performers and props are multiple forms of both content and media.

FEATURES:

Multimedia presentations may be viewed by person
on stage, projected, transmitted, or played locally with a media player. A broadcast may be a live or recorded multimedia presentation. Broadcasts and recordings can be either analog or digital electronic media technology. Digital online multimedia may be downloaded or streamed. Streaming multimedia may be live or on-demand.

Multimedia games and simulations may be used in a physical environment with special effects, with multiple users in an online network, or locally with an offline computer, game system, or simulator.

The various formats of technological or digital multimedia may be intended to enhance the users' experience, for example to make it easier and faster to convey information. Or in entertainment or art, to transcend everyday experience.

Enhanced levels of interactivity are made possible by combining multiple forms of media content. Online multimedia is increasingly becoming object-oriented and data-driven, enabling applications with collaborative end-user innovation and personalization on multiple forms of content over time. Examples of these range from multiple forms of content on Web sites like photo galleries with both images (pictures) and title (text) user-updated, to simulations whose co-efficient, events, illustrations, animations or videos are modifiable, allowing the multimedia "experience" to be altered without reprogramming. In addition to seeing and hearing, hap tic technology enables virtual objects to be felt. Emerging technology involving illusions of taste and smell may also enhance the multimedia experience.

Usages/ application:

Multimedia finds its application in various areas including, but not limited to, advertisements, art, education, entertainment, engineering, medicine, mathemati cs, business, scientific research and spatial temporal applications. Several examples are as follows:

Creative industries:

Creative industries use multimedia for a variety of purposes ranging from fine arts, to entertainment, to commercial art, to journalism, to media and software services provided for any of the industries listed below. An individual multimedia designer may cover the spectrum throughout their career. Request for their skills range from technical, to analytical, to creative.

Commercial uses:

Much of the electronic old and new media used by commercial artists and graphic designers is multimedia. Exciting presentations are used to grab and keep attention in advertising. Business to business and interoffice communications are often developed by creative services firms for advanced multimedia presentations beyond simple slide shows to sell ideas or liven up training. Commercial multimedia developers may be hired to design for governmental services and nonprofit services applications as well.

Entertainment and fine arts:

Multimedia is heavily used in the entertainment industry, especially to develop special effects in movies and animations (VFX, 3D animation, etc.). Multimedia games are a popular pastime and are software programs available either as CD-ROMs or online. Some video games also use multimedia features. Multimedia applications that allow users to actively participate instead of just sitting by as passive recipients of information are called interactive multimedia. In the arts there are multimedia artists, whose minds are able to blend techniques using different media that in some way incorporates interaction with the viewer. One of the most relevant could be Peter Greenaway who is melding cinema with opera and all sorts of digital media. Another approach entails the creation of multimedia that can be displayed in a traditional fine arts arena, such as an art gallery. Although multimedia display material may be volatile, the survivability of the content is as strong as any traditional media. Digital recording material may be just as durable and infinitely reproducible with perfect copies every time.

Education:

In education, multimedia is used to produce computer-based training courses (popularly called CBTs) and reference books like encyclopedia and almanacs. A CBT lets the user go through a series of presentations, text about a particular topic, and associated illustrations in various information formats. Edutainment is the combination of education with entertainment, especially multimedia entertainment.

Learning theory in the past decade has expanded dramatically because of the introduction of multimedia. Several lines of research have evolved, e.g. cognitive load and multimedia learning.

From multimedia learning (MML) theory, David Roberts has developed a large group lecture practice using PowerPoint and based on the use of full-slide images in conjunction with a reduction of visible text (all text can be placed in the notes view' section of PowerPoint). The method has been applied and evaluated in 9 disciplines. In each experiment, students' engagement and active learning has been approximately 66% greater, than with the same material being delivered using bullet points, text and speech, corroborating a range of theories presented by multimedia learning scholars like Sweller and Mayer. The idea of media convergence is also becoming a major factor in education, particularly higher education. Defined as separate technologies such as voice (and telephony features), data (and productivity applications) and video that now share resources and interact with each other, media convergence is rapidly changing the curriculum in universities all over the world.

Educational technology:

Multimedia provides students with an alternate means of acquiring knowledge designed to enhance teaching and learning through various mediums and platforms. This technology allows students to learn at their own pace and gives teachers the ability to observe the individual needs of each student. The capacity for multimedia to be used in multi-disciplinary settings is structured around the idea of creating a hands-on learning environment through the use of technology. Lessons can be tailored to the subject matter as well as be personalized to the students' varying levels of knowledge on the topic. Learning content can be managed through activities that utilize and take advantage of multimedia platforms. This kind of learning encourages interactive communication between students and teachers and opens feedback channels, introducing an active learning process especially with the prevalence of new media and social media. Technology has impacted multimedia as it is largely associated with the use of computers or other electronic devices and digital media due to its capabilities concerning research, communication, problem-solving through simulations and feedback opportunities.

Social work:

Multimedia is a robust education and research methodology within the social work context. The five different multimedia which supports the education process are narrative media, interactive media, communicative media, adaptive media, and productive media. Contrary to long-standing belief, multimedia technology in

social work education existed before the prevalence of the internet. It takes the form of images, audio, and video into the curriculum.

First introduced to social work education by Seabury & Maple in 1993, multimedia technology is utilized to teach social work practice skills including interviewing, crisis intervention, and group work. In comparison with conventional teaching method, including face-to-face courses, multimedia education shortens transportation time, increases knowledge and confidence in a richer and more authentic context for learning, generates interaction between online users, and enhances understanding of conceptual materials for novice students.

In an attempt to examine the impact of multimedia technology on students' study, A. Elizabeth Cauble & Linda P. Thurston conducted a research in which Building Family Foundations (BFF), an interactive multimedia training platform, was utilized to assess social work students' reactions to multimedia technology on variables of knowledge, attitudes, and self-efficacy. The results state that respondents show a substantial increase in academic knowledge, confidence, and attitude. Multimedia also benefits students because it brings expert to students online, fits students' schedule, allow students to choose courses that suit them.

Mayer's Cognitive Theory of Multimedia Learning suggests, "People learn more from words and pictures than from words alone." According to Mayer and other scholars, multimedia technology stimulates people's brains by implementing visual and auditory effects, and thereby assists online users to learn efficiently. Researchers suggest that when users establish dual channels while learning, they tend to understand and memorize better. Mixed literature of this theory are still present in the field of multimedia and social work.

Language communication:

With the spread and development of the English language around the world, it has become an important way of communicating between different people and cultures. Multimedia Technology creates a platform where language can be taught. The traditional form of teaching English as a Second Language (ESL) in classrooms have drastically changed with the prevalence of technology, making easier for students to obtain language learning skills. Multimedia motivates students to learn more languages through audio, visual and animation support. It also helps create English contexts since an important aspect of learning a language is developing their grammar, vocabulary and knowledge of pragmatics and genres. In addition, cultural connections in terms of forms, contexts, meanings and ideologies have to be constructed. By improving thought patterns, multimedia develops students' communicative competence by improving their capacity to understand the language. One of the studies, carried out by Izquierdo, Simard and

Pulido, presented the correlation between "Multimedia Instruction (MI) and learners' second language (L2)" and its effects on learning behavior. Their findings based on Gardner's theory of the "socio-educational model of learner motivation and attitudes", the study shows that there is easier access to language learning materials as well as increased motivation with MI along with the use of Computer-Assisted Language Learning.

Journalism:

Newspaper companies all over are trying to embrace the new phenomenon by implementing its practices in their work. While some have been slow to come around, other major newspapers like The New York Times, USA Today and The Washington Post are setting the precedent for the positioning of the newspaper industry in a globalized world.

News reporting is not limited to traditional media outlets. Freelance journalists can make use of different new media to produce multimedia pieces for their news stories. It engages global audiences and tells stories with technology, which develops new communication techniques for both media producers and consumers. The Common Language Project, later renamed to The Seattle Globalist, is an example of this type of multimedia journalism production.

Multimedia reporters who are mobile (usually driving around a community with cameras, audio and video recorders, and laptop computers) are often referred to as mojos, from mobile journalist.

Engineering:

Software engineers may use multimedia in computer simulations for anything from entertainment to training such as military or industrial training. Multimedia for software interfaces are often done as collaboration between creative professionals and software engineers.

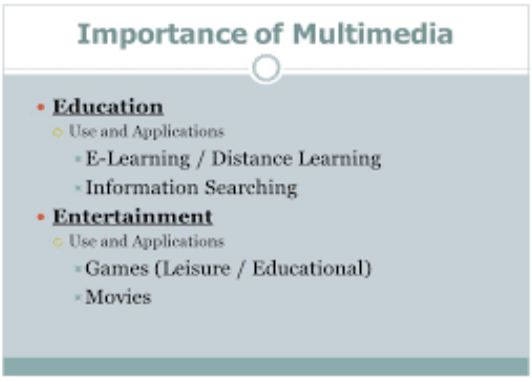
Mathematical and scientific research:

In mathematical and scientific research, multimedia is mainly used for modeling and simulation. For example, a scientist can look at a molecular model of a particular substance and manipulate it to arrive at a new substance. Representative research can be found in journals such as the Journal of Multimedia.

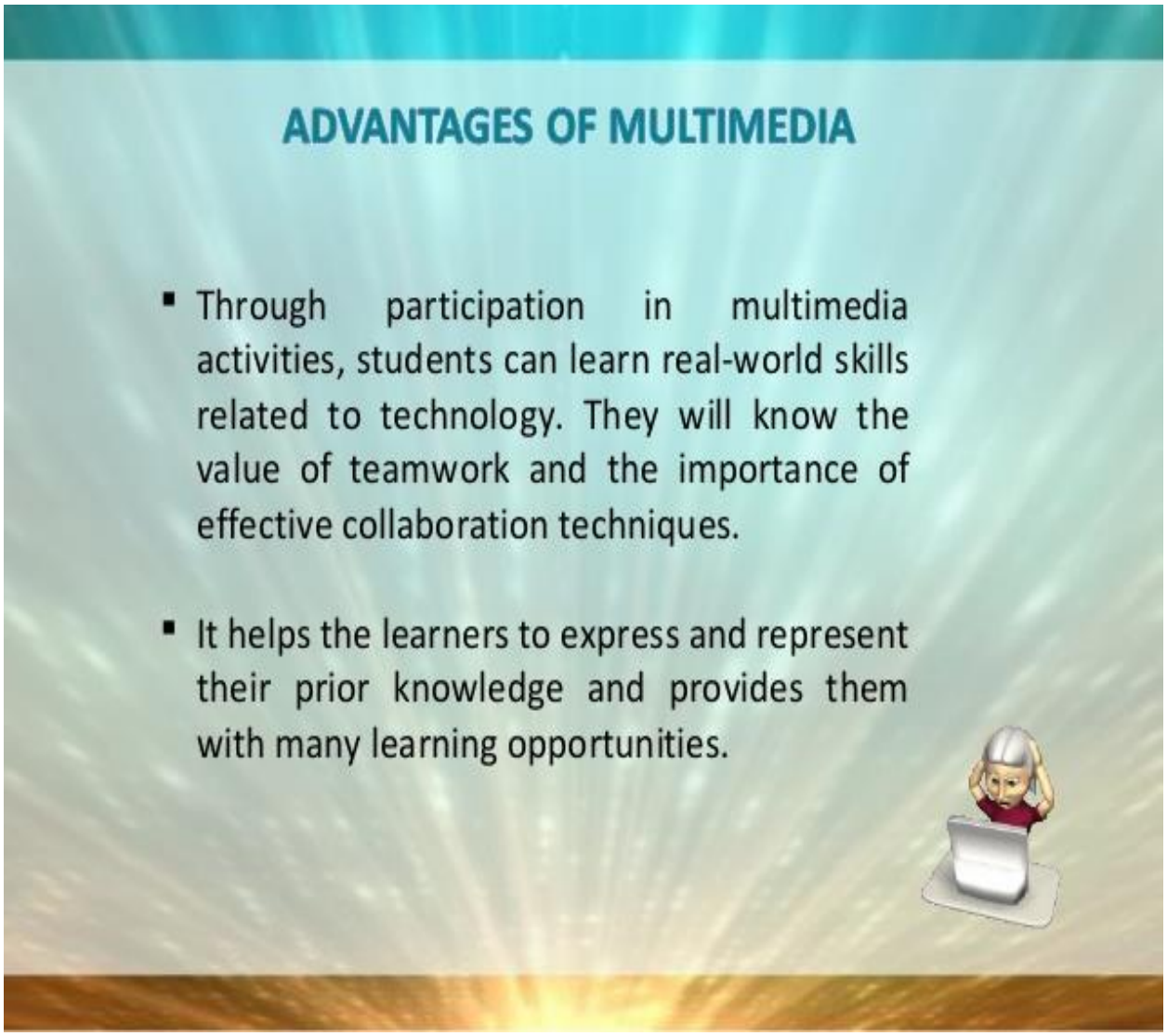
Medicine:

In medicine, doctors can get trained by looking at a virtual surgery or they can simulate how the human body is affected by diseases spread by viruses and bacteria and then develop techniques to prevent it. Multimedia applications such as virtual surgeries also help doctors to get practical training.

IMPORTANCE OF MULTIMEDIA:



ADVANTAGES OF MULTIMEDIA:



DISADVANTAGES OF MULTIMEDIA: