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BRIDGING THE DIGITAL LEARNING RESOURCES GAP THROUGH MULTIMEDIA UTILIZATION USING ICT PRINCIPLES IN INSTRUCTION

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ABSTRACT

The most crucial gap is the technology gap. The gap is a picture of the condition between presence and absence 1) Internet access, 2) telephone network.The concept of ICT in learning does not require digital learning resources available online. The principle of the development of instructional mediarealize the digital learning resources in a multimedia format. Results of the development of digital learning resources in a multimedia format involving the simultaneous use by multiple media formats. Multimedia does not make the narrow paradigm behwa digital learning resources more effectively be achieved through presentations that are informative. The main focus of the multimedia design using the concept of plural media, so that the information presented in various formats both characterized on-line and off-line.

Keywords: Inequality, ICT, Multimedia

PRELIMINARY

The triumph of the human race is rooted in the ability to develop, utilize and manage the technology. Costello (2000) stated that the heyday occurred when the technology is being built on the foundation of knowledge. As such, and are used more in education. The owner heyday are those who have knowledge . In a society as plural conditions triumph always be blasted with a form of inequality, the rich and the poor because it will impact on, the emergence of the educated and the uneducated.

The most crucial gap adalh technology gap. Gaps are seen illustrates the ends of the digital divide , the digital divide is not the purpose of the ownership of the material, but rather describes the educational divide everything in digital form. Demand for human resources and educational tools to increase as the impact of evolving technology,

This book should illustrate how the form of digital divide and overcome the digital divide. To do so this paper provides a more detailed explanation of the nature in the form of digital divide on such a scale associated with exposure to ICT. Next are the characteristics of learners. The solution is a possibility, because the solution is not general, but is local. Because the solution is not necessarily to be accepted as a companion cultural or behavioral use of digital technology in various parts of the world.

INFORMATION AND COMMUNICATION TECHNOLOGY

Various educational institutions use the term trends of ICT (Information and Communication Technology). Association of African Universities [2000, p.3] defines ICT as "an abbreviation for computers, software, networks, satellite links and associated systems that allow people to access, analyze, create, exchange and use of data, information, and knowledge

in a way that , until recently, almost unimaginable. It refers to the infrastructure that unites people, in different places and time zones, the multimedia tools for data, information, and knowledge management in order to expand the reach of human ability. "

Internet is now the most important driving force behind the transition of IT (Information Technology) to ICT. Beginning in the Defense Force as a network for e-mail and file transfer, internet has now become a public network for everyone. Rijsenbrij [1997] states that through the Internet, people will be exposed and combine the use of multimedia on their PCs more and more. Therefore, as a result of advances in global telecommunications, there is the appearance of a worldwide network comprised of both wired and wireless technologies, with a very large transmission capacity. This network manifests itself from the integration of all forms of telecommunications including telephone and cellular networks, internet and intranet technologies and network entertainment (TV, radio, cable, satellite) [Matsumoto, 2001].

DIGITAL DEVICE

Ownership of digital technology has shifted from issues of tertiary needs become a primary need. This explanation relates to the current condition. It is recognized that there is a group of people, in terms of membership parts of the world, who for social or economic reasons, do not have access to computers or resources relatively valuable, reliable telephone service, especially the wealth of information and services provided by the Internet service.On the other hand, of course, a group of people to have what no previous group. Differences between two groups of people are often used to describe the digital divide. But in a certain sense, the digital divide is the gap to share digital content owned and split from the group of people who meet as a group of ICT users.

The ability of digital devices can not be underestimated in many ways .. Planting [2000] emphasis on the implications of the use of digital technology will destroy the digital divide by showing that on the one hand, developed markets could lose the opportunity to develop new markets for trade due to globalization, developing countries will lose the opportunity to grow because there is no stability locally. Worse, there is a risk of an increase in social and economic turmoil that could arise from the exclusion of the majority of the world population of the New Economy. These consequences can endanger the stability of the local, regional and international.

INFRASTRUCTURES DEVICE IN THE FORMAT DIGITAL MULTIMEDIA

Digital device is a vehicle for the development of multimedia. Multimedia usually involves the simultaneous use of multiple media formats, but it can be said that the more effective education can be achieved through a more informative presentation. Traditionally the main focus of the multimedia design using the concept of plural media, so that the information presented in various formats. But for understanding modern multimedia media focuses more on form Yag developed. In the integrated model Hede, there is a direct information flow between Visual and Auditory input, which serves to highlight the impact that visual and auditory stimuli to the attention of learners. It has been found that the learners have to divide their attention in some input when presented with instruction in both auditory and visual

modes (Mousavi et al., 1995). In the digital device activity learners are more divided attention. Loss of gap usually through the optimization of the delivery of information processing. In concrete, the loss is put a gap in multimedia multimedia functions can be of assistance in providing a more effective learning outcomes. Allowing learners to focus on a single media resource at a particular time can indeed offer many advantages over providing simultaneous channels of information. However, if the media can be presented with more complex design or message delivery is offered, it is important for the user to provide some functionality to allow control of the input of individual learners.

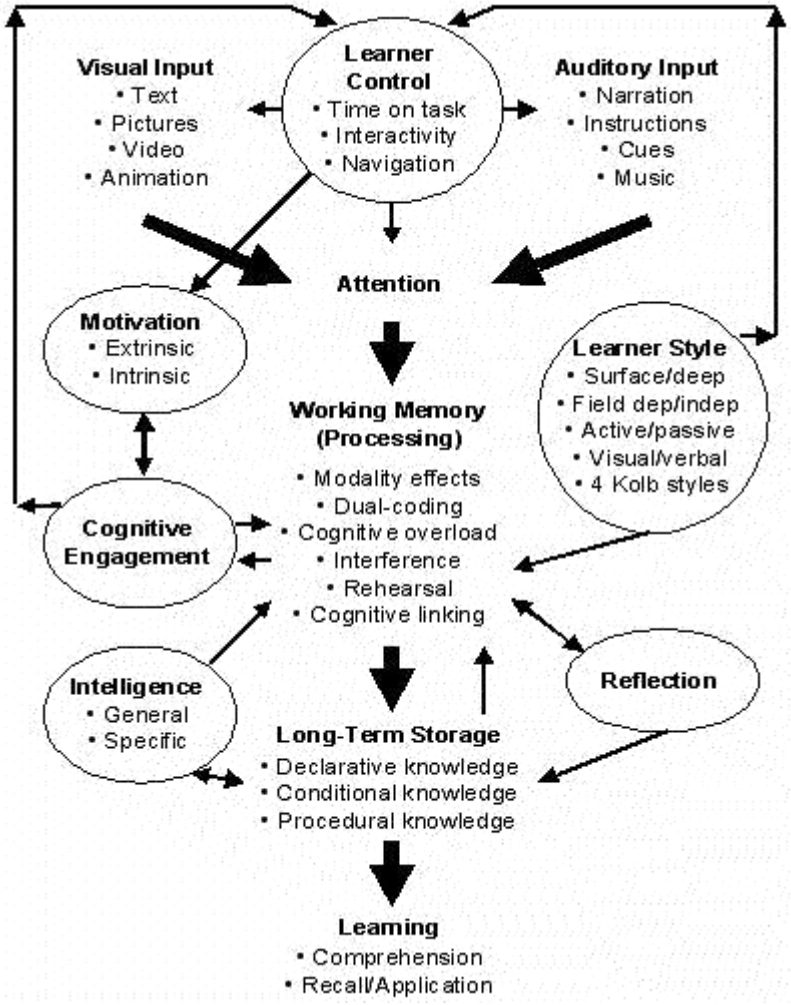

Figure 1: Integrated model of learning multimedia effects

MULTIMEDIA IN PACKAGING ICT LEARNING

Side of the coin goes for ICT. With wider distribution and transmission of new technologies will bring adverse consequences overall. There is a clear belief that countries with people who are more educated and scientists will use the latest ICT and science will be a jump away. Concretely faster than countries with those less educated. It is obviously the risk of creating digital content exchange chasm.

If this is the effect of the digital divide, and what factors are able to do as a reflection material before designing a solution? According Heeks [1999], the main problem is the transparency of resources, understood as inequality use, although the most significant is the visible physical

access. It refers to the geographical conditions of the user materials to be physical infrastructure (wired or wireless) and to the application and (TV that is.) equipment. The second limiting factor is access to finance , which indicates whether the user has the economic means to pay consistently for ICT services he needs. The third factor, *access to cognitive* [Lelliott, 2000]. ICT capacity to provide appropriate curriculum in areas such as mathematics and natural sciences that are widely appreciated for their contribution to the economy stable

SHARE THE CONCEPT OF DIGITAL TECHNOLOGY HERSELMAN

The solution to this problem can be seen as a gradual process, based on information collected from Costello [2000], Akst and Jensen [2001], Lelliott [2000], Plenting [2000], US Department of Commerce [2000] and the Model by Heeks [1999], illustrated in Figure 2. The model developed, describes the stages or phases that must be passed through the stages of systematic, in order to devise a solution to the problem of the digital divide.

Figure 2: The Digital Divide Bridge Herselman

The first step towards bridging the digital divide, as illustrated in Figure 2, is to understand the gap itself, therefore we have to be sensitive to privilege a particular place.

Some people [Harkins, 2000; Akst and Jensen, 2001] showed that the possible solutions for bridging the digital divide may be *a mobile phone*. Access to the internet via wireless technology becomes more and more of a viable option. But, as mentioned earlier, solutions need to bridge the gap should be applied and can be accessed by RD persons.

While the solution described may be a way to bring multimedia to specific ang community and thus provide access to technology, I believe that what this community needs is the future of digital devices involving serious integration of television and other electronic entertainment media with the computer and Internet. There is a tendency to prioritize access to the media for entertainment, such as television, before education. We must not ignore this trend, but to understand and use it for profit. Key questions that need to be considered for possible future:

- Multimedia and connectivity change how education? • How to make a charge "can be suppressed"?
- How to make the quality of multimedia applications? • How to develop a better platform?
- How to achieve mastery and integration of modern technology?

CONCLUSIONS AND DISCUSSION

Malang State University academic community must understand that the revolution of information and communication in the form of digital multimedia offers a dramatic opportunity to leapfrog into the future, hope the use of multimedia is out of decades of stagnation or

decline. Malang State University academic community should be qualified in that condition, however, take advantage of this opportunity quickly by implementing innovative solutions and really Civitas academic University of Malang have to get out of the digital divide globally. If the State University of Malang academic Civitas can not make a profit from the information revolution and surf this great wave, then with changes in technology, academic Civitas University of Malang can be destroyed by it.

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APPLICATING THE *CYBERWELLNESS LEARNING RESOURCES* (CLR) TO FILTERING DANGEROUS CONTENT ACCESS AND LEARNING NETWORK ON INTERNET

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