The Role of Information Technology in the Development of Visual Culture Art Education

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Abstract---The purpose of this study was to find out how the role of information technology in the development of visual culture art education (VCAE). One of the fields of art that is still new and strongly influenced by its development in information technology is visual culture art education (VCAE). Utilization of Information Technology as a learning media for visual culture art education can be through the use of the internet in e-learning and the use of computers as interactive media. The use of this media can stimulate the thoughts, feelings, interests and concerns of students so that the learning process can occur. Learning activities are more effective because the use of learning media enables the overcoming of obstacles in the teacher-student communication process such as physiological, psychological, cultural, and environmental barriers.

Keywords: information technology (IT), visual culture art education (VCAE)

I. INTRODUCTION

Information technology has become a very important part and is a major need in the world of education. Almost all levels of educational institutions ranging from early childhood education to higher education have used ICT as the main means of supporting activities in each education unit. These educational institutions have built infrastructure for hardware, software, and installation of internet networks to meet the needs of the education world for IT which aims to present effective and efficient learning methods.

Information and Communication Technology is a terminology that includes all technical equipment to process and convey information. ICT covers two aspects, namely information technology and communication technology. Information technology includes everything related to the process, use as a tool, manipulation, and management of information. While communication technology is everything related to the use of tools to process and transfer data from one device to another. Therefore, information technology and communication technology are two inseparable concepts. So Information and Communication Technology contains a broad sense that is all activities related to processing, manipulation, management, transfer of information [1]. In today's world education needs modern, moderate and simple technologies in order to meet its needs for its arrival and correct use. Education should perform policies, most important ones are [2]:

a) Expanding human sources of IT through educational programs and promoting skills for increasing work force efficiency in education.

b) Using IT for increasing educational institution efficiency for better education accompanying creativity.

c) Supporting IT, for example supporting costs related to research and expansion in education.

d) Establishing proper atmosphere and participation morale in education by the use of IT.

e) Establishing cooperation and coordination between various parts in the field of using the aforementioned tools.

f) Expanding the culture of using IT through providing and encouraging its consumption in education.

ICTs have various fields of study, because ICTs do not only discuss information technology and computer issues, but also discuss communication / telecommunications technology. The ICT study as follows: 1) e-Learning; 2) information management; 3) information technology; 4) computer technology; 5) management information systems; 6) internet; 7) telecommunications technology (handphone,

telephone, cable and wireless technology); 8) computer network technology; 9) Computer network security system; 10) database system [3].

IT is part of the ICT field, which in its implementation is interrelated with each other. Information technology is referred to the knowledge process and its applying methods, processing, transferring and making information in progress [4]. IT includes gathering, organizing, storing, publishing and using the information in the form of sound , picture graphic, text, number, … by using the computer and telecommunication tolls…[5].

One area that cannot be separated from the influence of IT is the field of art. As stated by Ahmed et al, that the interaction between information technology and communication (ICT) and art is increasing trend. Science, technology and technology have been connected since the 60's, when scientists, artists and inventors started to cooperate and use electronic instruments to create art [6]. Then Shanken suggested that In 1960 Marshall, predicted the idea that the era of "machine-age" technology was next to close, and the electronic media were creating a new way to perform art [7].

One of the fields of art that is still new and strongly influenced by its development in information technology is visual culture art education (VCAE). Visual Culture Art Education (VCAE) was emerging as a (inter-) disciplinary field of study and practice within art education. In some instances, it has been seen as a way to include popular culture and media into the art of curricula. Some examples of what is popular culture will be video games, fashion trends, and social media events [8].

II. METHOD

The method used is a literature study in which the writer uses various sources of references both derived from the results of research and the results of other writers' thoughts that were formulated by the author. So that presents a new concept in writing this article.

III. DISCUSSION

Information Technology in Visual Culture Art Education (VCAE)

Use of Information Technology in visual culture art education (VCAE) is crucial in the learning process. This is because 1) VCAE theory focuses on discovering the meaning of art in the visual world; 2) VCAE stresses the importance of visual literacy as a goal; 3) Relevance of material to student lives; 4) Students can learn to combat and recognize messages geared towards commercial marketing; 5) Visual culture can illustrate ways in which cultures view human concerns and issues; 6) Teaching VCAE helps students recognize stereotypes, biases, different viewpoints, advertising devices, and manipulation; and; 7) To teach students how to look outside of the typical, they have to understand what typical or popular is [9]

Utilization of Information Technology as a learning media for visual culture art education (VCAE) can be through the use of the internet in e-learning and the use of computers as interactive media. The use of this media can stimulate the thoughts, feelings, interests and concerns of students so that the learning process can occur. Learning activities are more effective because the use of learning media enables the overcoming of obstacles in the teacher-student communication process such as physiological, psychological, cultural, and environmental barriers [10].

The kind of use of ICT is a key factor for innovation, teaching and improvement of learning processes [11]

Information Technology as a Source of Learning for Visual Culture Art Education (VCAE)

Today billions of students are using internet. Through Google, MSN or Yahoo students can get various kinds of information with sudden click of a mouse. Internet has reduced the cost of buying books. It enables students to download books and learning materials from different websites, along with movies, games, pictures and so on which assist in their all round development. Besides these, the internet provides useful opportunities for students to access electronic libraries, e-book catalogues, scientific documents, and academic works. It also helps teachers, professors, research scholars to publish their articles, journals on websites. Launching the internet in the classrooms allows teachers to use on-line resources, educational videos, programs, visual aids and so on [12].

Information Technology as a Learning Media for Visual Culture Art Education (VCAE)

The relevance of educational media and multimedia technology is inestimable in teaching and learning activities if the most suitable and effective service delivery is adopted within the classroom setting. As the educational media and multimedia technology industry continues to grow, educators should endeavour to develop abilities and skills in the educational media and multimedia technology design and development for instructional purposes [13].

With the application of educational technology, students can independently progress in mastering teaching materials, to choose the pace of work, to repeat the material that is not sufficiently clear, that after tests performed immediately get results and track their progress. Interactive, multimedia content provides a great advantage of modern learning over traditional learning. With the application of educational technology we get feedback between the teacher and the student [14]

Information technology helps teachers and learners to participate cooperatively in the teaching learning process. It broadens their thinking, knowledge and enables them to perform various educational activities in the educational sector. Various kinds of technologies both hardware and software makes the teaching-learning process more interesting. Use of the advanced technologies has a tremendous scope in improving the products and processes of education. It fulfil many needs and requirements of the present age in the field of instruction and education like individualization of instruction, utilization of multi-sensory and multimedia aid material and efficient and effective management of different educational institutions. Information technologies guide teaching learning process in more productive fashion [15].

Information technology provides various kind of software through the use of computer media that can be used by students to improve their skill in producing artwork. Computer has become an important part of every walk of life such as on campus, at home and in office. Computer and related technologies have been used in distance learning through various ways such as Teleconferencing, video-conferencing, audio graphics, Teletext, video text, multimedia and hypermedia, e-books, online database, online discussion, on-demand call in course etc [16])

Today, computers have improved the quality of teaching and enhance the learning process with the help of various tools such as multimedia projector,

PowerPoint presentations etc. But information technology make learning process more interested through games, animated graphics etc. There are the following benefits of computer-aided learning [17]:
• Interest and motivation
• Individualization
• Compatible learning style
• Optimal use of learning time
• Immediate feedback
• Error analysis
• Repetitive practice
• Pre-determined to process syllabus

Computers were initially used in a limited way, only for the purposes of counting in administrative activities, but now computers are no longer only used as a means of computation and word processing but also very possible as a learning tool for educational purposes [18]. The use of computers in the learning of visual culture art education (VCAE) enables the individual learning process to take place by fostering independence in the learning process, so that students will experience a process that is far more meaningful than conventional learning. This is in accordance with the benefits of computers for educational purposes [19]

a) Computers can accommodate students who are slow to accept lessons because they can provide a more affective climate in a more individual way, never forget, never get bored, are very patient in carrying out instructions as desired by the program used.

b) Computers can stimulate students to do exercises, conduct laboratory or simulation activities because of the availability of graphic, color, and music animations that can add realism.

c) Control is in the hands of students, so the level of learning speed of students can be adjusted to the level of authority. In other words, computers can interact with students individually for example by asking questions and evaluating answers.

d) The ability to record the activities of students while using learning programs, providing better opportunities for individual learning and the development of each student can always be monitored.

e) Can connect with, and control other equipment such as Interactive CDs, videos, etc. with a controller program from a computer.

At present the software on the computer continues to grow and even the user is also able to interact directly with information sources both online and offline. Various forms of learning interactions

can take place with the availability of computer medium. This utilization is based on the capabilities possessed by computers in providing immediate feedback to the wearer.

Computer and its related technology have completely revolutionized our lives. Now, information technology is important in every walk in life. Undoubtedly, computer and information technology great impact in our education system. Various technologies have been used to improve the teaching and learning process. Information technology makes our education system interested and effective

Rapid technological development has a role that can be utilized in learning. The internet as a result of technological developments has had an influence in visual culture art education (VCAE). Indirectly the internet requires the suitability of learning material with the information flow of globalization. Directly the internet is used as a source and medium of learning for students in developing knowledge in the field of visual culture art education (VCAE).

Some of the advantages or benefits of learning via the internet are [20]:
a) Become a tool to realize effective teaching and learning situations.
b) Completing the learning process so that it attracts the attention of students.
c) Facilitate the improvement and storage of teaching and learning quality materials.
d) Helping participants to understand the subject matter.

The benefits of the internet in learning are not only as learning tools for students, but also useful for teachers to improve their knowledge towards professionalism. The computer network in the form of internet and web has opened access for everyone to obtain the latest information and knowledge in the field of visual culture art education (VCAE). Scientific discussion and interaction can be held through the availability of internet and web facilities with e-learning systems so as to enable students to access information flexibly without limited time and place.

The advantages of e-learning are as follows [21]:
a) Flexible because students can study anytime, anywhere, and with different types of learning.
b) Save time on teaching and learning processes.
c) Reducing learning costs.
d) Saves overall education costs (equipment infrastructure, books).

e) Reaching a wider geographical area.
f) Training learning more independently in gaining knowledge.

The benefits of e-learning from the perspective of students include:
a) Improve communication with educators and students.
b) More available learning material that can be accessed without regard to space and time.
c) Various information and material organized in one container of online learning material.

The benefits of e-learning from an educator's perspective include:
a) Increase the packaging of learning material from what is currently being built.
b) Implementing new and innovative learning concept strategies.
c) Efficiency.
d) Utilization of learner access activities.
e) Using resources found on the internet.
f) Can apply wider learning material and multisource learning.

IV. CONCLUSION

Based on description above, it can be concluded that information technology has a very important role in the development of visual culture art education (VCAE). As for the role of IT, namely as a medium and source of learning in visual culture art education (VCAE).

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