

Utilization of ICT Learning in Senior High School Teladan Medan

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Abstract— The integration of ICT in this life nowadays has given many changes including in the education field. The use of ICT offers many opportunities for better learning experience. It become a challenge to realize the integration of technology and learning process. Changes in learning patterns are required to perform the update following the dynamics of the changing times of increasingly rapid developments triggered by technology. This study used a qualitative approach with descriptive models to analyze and explain how the use of information and communication technology in learning at SMA Swasta Teladan Medan. Based on the study conducted, it might be submitted that the paradigm of the teacher when utilizing information and communication technologies in learning is still mainly limited to the use of power point presentation. Internet usage is limited to browse information about the material to be conveyed not used as a new integrated learning system. Similarly, social networking is not widely used as a new learning system to improve further the effectiveness and efficiency of the learning process.

Keywords: utilization, ICT, learning

I. INTRODUCTION

Information and communication technology in this era is growing very rapidly, starting with the invention of the computer system to the virtual world of communication. But there are still many lay about the ICT. It is seen from less optimal in the use of technology in everyday life.

There are various benefits of ICT one of the benefits of ICT in the world of education, especially in the learning process. ICT has become a supporting factor in the learning process, one of which is utilization as a learning medium, thus facilitating the teacher in delivering the subject matter and facilitate the students capture the material given. In addition the internet is also very supportive of learning, because through the internet we can easily access the various information we want quickly, so it will add insight and our knowledge as teachers and learners such as the use of the website, blog, micro blogging site, electronic mail (e-mail), Yahoo Messenger (YM), Google talk (Gtalk), and that is now being a prima donna in all circles is a social network.

Miarso (2004) said factors that influence or support the realization of quality learning process in an effort to achieve educational goals, one of them is the use or utilization of ICT

in the process of education and learning. ICT in learning is known as educational technology, UNESCO officially uses the term ICT which is then adopted into the Indonesian language into information and communication technology or ICT (Surjono, 2010).

Changes in the pattern of learning is very needed to make a renewal in a conventional learning system that is considered outdated and irrelevant to the dynamics of the development of the fast growing and intensive era triggered by the development of science and technology. ICT in learning acts as a liaison in the execution of science transfer without completely eliminating the early model of learning that takes place face to face in the classroom.

Utilization of ICT in learning is done in order to improve the effectiveness in the implementation of the learning process which ultimately is expected to improve student learning outcomes as well as the individual quality of the learners in terms of the use of technology more precisely and useful.

Ased on what has been submitted, the authors are interested to explore more related to the utilization of information and communication technology in learning with the location of research in SMA SWASTA TELADAN MEDAN. This is because researchers see still many teachers who in the learning process is still not utilizing ICT in learning.

II. METHOD

This research, using qualitative approach to analyze the utilization of information and communication technology in learning in SMA SWASTA TELEDAN MEDAN, what are the factors inhibiting and supporting the utilization of ICT in learning, and how the school efforts in optimizing the utilization of ICT in learning in SMA SWASTA TELADAN MEDAN.

Qualitative research is a method used to examine the condition of natural objects. Qualitative approach in research by matching between empirical reality with valid theory by using descriptive method (Sugiyono, 2009, Moleong, 2013).

The informant is a person who is considered capable by the researcher to give a description, the story of the person beside himself and especially the other individual, the situation and conditions that become the problem in the

research (Hamidi, 2010). Informants in this study are the principal, wakasek, and students.

III. RESULTS AND DISCUSSION

Utilization of ICT in Learning

The model of ICT utilization in the learning process in this study refers to Munadi (2013) which classifies the use of computers in learning into how many forms including the utilization of multimedia presentations, then related to the use of the internet in learning which includes the use of e-mail and website. And the utilization of social networking in the learning system. The results obtained during the implementation of research related to the utilization of information technology in learning in SMA SWASTA TELEDAN MEDAN as presented in table 1.

Table 1

Recapitulation of the form of utilization of ICT in learning in SMA SWASTA TELEDAN MEDAN

No	Guru Studi	Bidang	Perangkat TIK yang digunakan dalam pembelajaran		
			Computer (presentasi)	Internet (website, blog, email)	Jejaring social
1	Agama				
2	Bahasa Indonesia		✓	✓	
3	Bahasa Inggris		✓	✓	
4	Matematika				
5	Kewarganegaraan				
6	Kimia		✓		
7	Bilogi		✓		
8	Fisika		✓		
9	Sejarah		✓		
10	Sosiologi				
11	Geografi		✓	✓	
12	Seni budaya		✓		
13	Elektronika				
14	Bagasa Jerman				
15	PENJASKES		✓		

Utilization of multimedia presentations from the data obtained can be quite high. Presentation is one of the learning methods and, multimedia presentation occupies the highest frequency compared with other methods. The use of presentation-based multimedia has a very big influence, it is expected that using the main learning media presentation can improve student learning outcomes. The use of multimedia

presentations in learning aims to accommodate the overall utilization of the senses of learners both audio, visual, and audio visual (Rusman, 2011; Munadi, 2013; Rusman, et al 2012).

Through the utilization of the media it is expected that the potential use of the senses of learners can be accommodated to the maximum so that the level of student learning outcomes will increase. One aspect of the superior media is able to improve student learning outcomes is a media that is a combination of elements of media such as text, images, and animation, and multimedia presentations can accommodate all these elements.

Utilization of e-mail, website and blog in learning, based on the data obtained at the time of the implementation of research can be submitted that the majority of teachers in SMA SWASTA TELEDAN MEDAN not using e-mail or website as a learning system and means of communication to students and to support the interests implementation of learning such as assignment and others. Utilization of the internet is limited to browsing activities for the purposes of seeking additional material to be submitted or looking for other information.

This is very unfortunate given the use of the internet, especially websites, blogs, and e-mail can be used as a new learning strategy so that it can facilitate the students to learn from anywhere and anytime by sticking to the material presented in the classroom. The presence of the internet as a medium of instruction can give the characteristics of its own uniqueness as what was delivered by Purnomo (2008), namely: 1) as an interpersonal and mass media; 2) is interactive; 3) enable communication directly or indirectly. Characteristics of the internet allows learners to communicate with a variety of sources of knowledge more widely when compared to using only conventional media in the classroom.

Utilization of internet in learning in SMA SWASTA TELEDAN MEDAN not run with the concept put forward by Sudarma (2008) which in one of his book argues that, Information technology and the Internet has penetrated into everyday life, including in the field of education. The purpose of the statement is in the era of openness now the internet is no longer a luxury item, even now has become an integral part in everyday activities both among the community, especially students.

Teachers are expected to utilize the Internet as a new learning system strategy, not only used as a learning resource by simply browsing to find support material that will be taught only.

Warsita (2008) in one of his books argues that, the growth rate of information technology users and the internet shows such fantastic numbers, even the internet has become part of the needs in a household and educational unit. This phenomenon shows that in the coming year information technology will master most of the learners pattern of learners.

Utilization of the Internet can be used as a system to create a more effective and efficient learning situation, so that

teachers can better optimize face-to-face learning in the classroom towards more useful things not only limited to the exposure of material which should be made in the form of writing simple and shared via website, blog or e-mail to the students. The Internet is a global network that connects thousands and even millions of computer networks and personal computers, enabling every connected computer to reach multiple computers at any time and from anywhere in the hemisphere to send news, obtain information or transfer data (murni, 2008).

Munadi (2013), in his book said that the internet has a significant effect on the process and learning outcomes both inside and outside the classroom. Utilization of the internet allows the process of independence, acceleration, enrichment, expansion, effectiveness and productivity in the implementation of the learning process.

Utilization of the internet in learning is expected to stimulate students to learn more independently and sustainably in accordance with the skills and natural potential. Development of creativity and independence of learners is also open very wide by making the Internet as a new learning system. Utilization of the Internet as a learning system is quite useful to reduce the distance between teachers and students. With e-mail teachers can deliver messages to students without time and space constraints, students can also consult at any time and from anywhere.

The use of website students can also play not only as a connoisseur of information but also as a researcher and analyst, by analyzing various data and information that has been obtained. Meanwhile, by using e-mail students are expected to communicate with teachers and other students and other online communities to be able to exchange information about the material being studied. Utilization of e-mail media or website or blog in learning is expected to remove the boundaries of space and time.

In connection with the use of social networking as a learning system has not been much oled by the teachers, this is because there are still many teachers who have not tried to start utilizing social networking as an alternative learning strategy. Social networking sites are familiar among students have the potential to be utilized as a means of learning, in order to replace the function of learning management system software. Compared with learning management system software, social networking has advantages because it can be used without having to hire or manage servers and most importantly is more familiar among students. Social friendship sites like facebook, twitter, myspace and so on have become a trend and seem to be the main requirement for everyone. Similarly among educators and among students, among students, facebook is accessed daily and various communities emerge.

Social networking sites can actually be used as a new alternative that can be utilized in the world of learning. This is related to efforts to improve the spirit of learning of students who ultimately expected to improve learning outcomes more leverage. The majority of students, teachers

and the wider community already have social networking accounts, and this should be well utilized to support the learning process, so that students have more variety in the learning process.

Many students a day log in to their social networking accounts more than once. This tends to make the students forget the time in the use of social networking sites so as to divert the time that should be used for learning or other more useful occupations. Social networks that are in great demand among students in addition to more interesting, of course easier to use because not only can be accessed in the classroom during the lesson, but can be from anywhere even through personal mobile phones.

A teacher should be keen to see progress, by making use of social networks to interact more personally with students, enabling teachers to be good leads and supervisors for students both inside and outside school. Examples of social networking that is commonly used today is facebook, teachers can create a group. In the group consists of students or classes from the subjects being taught. In a group of teachers can distribute teaching materials by uploading the file of teaching materials such as pdf, word, or power point or other files. That way students can download material files wherever and whenever needed.

With regard to communication, by utilizing the facilities of existing groups students can also ask directly to the teacher about the material that has not been understood, as well as other group participants can also listen to the question interactively. It's the same as when the teacher is in class.

Patria & Kristianus (2010) in an article conveyed so many features offered by social networks that can be used by users to facilitate the process of interaction between users. Various features offered by social networking that if reviewed further can also be used as a medium of learning in order to support the effectiveness and efficiency in the implementation of the learning process.

Factors inhibiting ICT Utilization in Learning

Based on the results of research conducted by through several stages it can be known some things that inhibit the utilization of ICT in learning, that is:

1. Technical problems, unstable internet network, it is very disturbing the various plans that have been made by the teacher of learning about the subject by using information and communication technology, although the entire school area has been covered by the hotspot wireless facility but can not connect to the internet network.
2. The next obstacle experienced in the utilization of ICT in SMA SWASTA TELEDAN MEDAN is the teacher feels burdened to be able to teach by utilizing the media of teaching, this is because with the teaching media teachers are required to be more creative and preparation of more mature teaching.
3. Lack of teacher competence in utilizing various ICT facilities that have been provided by the school this is sometimes influenced also by the age factor and the

competence of teachers concerned, in terms of age sometimes teachers who are aged difficult to follow the rapid development of ICT that ultimately makes it overwhelmed in utilizing these devices in support of the taught material.

Various obstacles found by the author can be said that the most dominant barrier is related to the competence of teachers in the utilization of ICT in learning.

ICT provide a vast new opportunity so that the creativity of a teacher becomes very important in exploiting new opportunities provided by technology, without the creativity of a sophisticated technological teacher of any kind will not give the optimal impact.

Whatever sophisticated technology is used in supporting the learning process, a teacher retains a central role as a content developer and learning tutor. The role of a teacher can not be replaced so that the creativity of a teacher is absolutely necessary in the utilization of technology in learning.

Factors Supporting ICT Utilization in Learning

Facilities and infrastructure directly have an important role in education to support the achievement of educational objectives, especially related to the use of ICT in learning.

With regard to the utilization of ICT in learning. Facilities and infrastructure should also be developed for the success of the education process in schools. Projector in each classroom and internet access is a mandatory means and infrastructure that must be owned by the school in the current era. Facilities infrastructure as one important element in educational resources must also continue to follow the rapid development of the era.

Efforts to Optimize ICT Utilization in Learning

Implementation of learning programs by utilizing ICT certainly provides a challenge for the school to seek more optimal use of ICT in learning.

Various efforts to always improve the professional competence of educators continue to be done, among others, improvement in developing learning materials that are taught in a more creative so that a teacher must always follow the development of existing technology.

The results of research conducted can be known various steps undertaken by SMA SWASTA TELEDAN MEDAN as an effort to optimize the utilization of information and communication technology in learning that is:

1. Schools implement various programs and strategies to complement facilities and infrastructure based on ICT. Such as complete the entire classroom with LCD, the addition of internet access bandwidth, and other equipment based on ICT.
2. Schools motivate teachers personally to utilize information and communication technology. This is because with the rapid development of ICT today, teachers are not only the only source of learning, students can find learning materials independently by utilizing the Internet network. Providing workshops and trainings to utilize ICT in the implementation of learning, whether the

training is carried out independently or training held by other parties.

3. Providing workshops and trainings to utilize ICT in the implementation of learning, whether the training is carried out independently or training organized by other parties.

IV. CONCLUSION

Based on the results of research that has been done can be concluded several matters relating to the utilization of information and communication technology in learning in SMA SWASTA TELEDAN MEDAN, that is:

1. ICT in learning in SMA PRESENT MEDAN TELEDAN not been utilized as a whole by all teachers. The paradigm of teachers when utilizing ICT in learning is still limited to the use of presentations, especially power point. The use of the internet is still limited to seek additional information about the material to be delivered is not used as a new learning system strategy that reintegration with the learning process undertaken, as well as social networking is still not well utilized as a learning system.
2. Professionalism of teachers can be said to still be a major obstacle that is quite disturbing use of ICT in learning, in addition to technical barriers.
3. Forms of effort undertaken by schools in order to optimize the utilization of ICT in learning is to provide personal motivation to the teachers regarding the utilization of ICT in learning and various trainings and workshops either organized by the school independently or from outside the school.

REFERENCE

- [1] Degeng, Nyoman Sudana. (2004). *Teori Pembelajaran*, Malang, Jawa Timur: UM Press.
- [1] Hamidi. (2010). *Metode Penelitian Kualitatif Pendekatan Praktis Penulisan Proposal dan Laporan Penelitian*. Cetakan ke-2. Malang: UMM Press
- [2] Miarso, Yusuf Hadi. (2004), *Menyemai Benih Teknologi Pendidikan*, Jakarta: Kencana
- [3] Moleong, Lexy J. (2013). *Metode Penelitian Kualitatif Edisi Revisi*, Bandung: Remaja Rosda Karya Munadi,
- [4] Yudhi. (2013). *Media Pembelajaran; Sebuah Pendekatan Baru*. Jakarta: Referensi
- [5] Murni, Sylviana. (2008). *Pemanfaatan ICT Dalam Pendidikan*. Jakarta: Makalah Seminar Nasional The Power Of ICT in Education, PPS UNJ, 15 April 2008
- [6] Patria, Lintang & Kristianus Yulianto. (2010). *Pemanfaatan Facebook Untuk Menunjang Kegiatan Belajar Mengajar Online Secara Mandiri*. Makalah tidak Diterbitkan
- [7] Sudarma. (2008). *Cara Mudah dan Cepat Memiliki Website Gratis di WWW.100webspaces.com dengan AuraCMS Langsung Praktik On Line Internet*. Yogyakarta: Gava Media.
- [8] Sugiyono, (2009). *Memahami Penelitian Kualitatif*. Bandung: Alfabeta
- [9] Surjono, Herman Dwi. (2010). *Pemanfaatan Teknologi Informasi dan Komunikasi dalam Peningkatan Kualitas Pembelajaran*, Makalah, Disajikan dalam seminar MGMP Terpadu SMP/MTs Kota Magelang.