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Implementation of ICT in Teaching and Learning English

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Abstract—**In the modern era, the rapid development of ICT has had an influence on various aspects of life. The academic environment is one area that is also affected. Today's education system is greatly enhanced by the availability of convenient access to technology, which is supported by the state to develop technology in the teaching and learning process in the classroom. This study aims to measure the degree to which the use of ICT is being incorporated in the teaching and learning system, especially in English lessons. The research also seeks to examine what benefits and challenges English teachers have encountered.**

Keywords: ICT, English, education

I. INTRODUCTION

ICT development is hardly replacing traditional teaching pedagogy slowly. Online communication is replacing face-to-face classroom interaction, conventional white and blackboard is replaced by an interactive whiteboard, and online resources are replacing books or written materials. Technology is known to be able to lead our area of education from the dark period to the light era. This is because in education, the introduction of ICT can give advantages to some products. Nevertheless, we have to tackle its immense difficulties in order to gain those advantages. These may vary from school to school, region to region, and country to country.

Tape recorders, images, televisions, radios, and projectors used to be the most popular devices in English language teaching until English language teachers were dropped. Computer and internet innovations have now introduced the unquestionable transformation / revolution of English into learning and teaching. The different technologies of information and communication do not alter the English language learning and teaching themselves. The teacher will use or exploit them correctly to change their teaching methods / strategies. Therefore, educators must combine the ICTs ' experience with training and professional expertise to take technologies into the classroom. Of example, of English Language teachers, the various traditional methods of teaching language skills (listening, talking, reading and writing) remain important. Nevertheless, ICTs allow teachers to change teaching and learning methods to create student-centered learning environments rather than the conventional teacher-centered environment that exists for a long time.

ICT can increase the literacy of boys. As Adonis (2006, p. 16) has stated, the active use of ICT can boost the literacy and numeracy of the students. For example, Microsoft word can inspire children to learn the ability to write. We will enjoy typing some new words using a machine and be enthusiastic about it. It can also develop the speaking and listening abilities of children. It is because they can collaborate with their peers, educators, and parents / adults in partnership. Some kids need to hear what others are doing and tell them what they want to know. The children can also improve their reading skills through internet-accessed stories. ICT therefore plays an important role in the cycle of scaffolding to boost the literacy of children.

Use ICT can not only help the students ' cognitive development, but also increasing their learning motivation and communication. As noted by Davies and Birmingham (2002, pp. 19-20) describe three benefits of using storyboard system technology, kar2ouche, to facilitate Macbeth character training for students. Such three types of strengths are mental, motivational and interactional. Cognitively, students should tell what's going on in the story without being told by the educators. Motivationally, they enjoy and have fun with their learning process so that training isn't boring or drained. Interactively, they can interact with their teachers and peers together.

The above concepts in this article will be the central focus. The subject is divided into two main parts in this essay. The first chapter deals with the study of the teaching and learning advantages of ICT. The second part deals with the topic of high school difficulties.

The Potential Benefits of ITC

ICT can be of great benefit in promoting reading. Students can be effective learners through the use of software in their learning. They will be aware of what information they need, why they need it, and how they can get it. As said by Bransford, Brown, and Cocking (cited in Huffaker, 2003, p. 357) Active learning allows students to decide when they need a particular piece of information and whether or not they have already learned it. Such active learning also involves learning independently. The students will not depend entirely on the teachers by getting access to the internet in their schools. We can search the information on the internet, find the information we want, copy it and find more and more information. The students also become self-managed in their learning process through the use of this learning system. As Jarold and Sue (1992, p. 50) noted, self-managed learning enables students to be self-motivated and self-directed learners who can respond quickly, easily and efficiently to the

rapid change in knowledge. For example, the use of blogs may allow teachers and students to be very up-to-date on issues and discussions in educational or other fields. So we don't have to wait for the newest update of printed educational books or newspapers to learn for a longer time what's going on in our education sector.

ICT can also serve as a flexible and collaborative learning process. Our education is not limited to the hours of school, demographically where we are and who our teachers are by using the internet. Anytime and anywhere, we can access the internet. As Uhomoibhi (2006, p. 9) has reported, e-learning allows students to get information from anywhere and anytime faster. Technology also helps us to cross borderline populations. Students in rural areas can access information from urban areas, obtain information and share knowledge with other students or teachers in the same region or even other countries. In addition to immersive education, ICT enables all human components of schools; leaders, educators, IT coordinators, and students to participate in cooperative learning and shape learning groups. By working together, as described by Moodiel (2000, p. 2), we can do what we cannot do individually.

Interactivity and collaboration are the most important aspect of learning in collaborative learning that we want to achieve using ICT. "Good learning happens when students are interactively involved in a learning activity," as Rodrigues (2002, pp. 134-135) said. "Learning through ICT is more than learning by memorization. This allows learners to understand their learning processes, be interactive, enjoy innovation and have fun. As Rodrigues (2002, pp. 136-137) has said, using technology to support collaborative learning, there will be communication not only between human and machine, but also between human and person. For example, web-based learning background allows students to communicate with machine-mediated teachers or other students.

ICT may lead us to understanding meta-cognitive. As noted by Monteith (cited in Monteith, 2002, p. 21) we can learn how to learn rather than learn a particular skill by using ICT in our education. It helps us to understand that learning new technology and new information is no easier than learning old knowledge / skills. This awareness is very important as many people fear learning new technology as they find learning something new (new technology) to be more complex and difficult than the old ones. In addition, most new technologies can often be found to be easier to learn and operate than the old ones. Through incorporating ICT in our education, the old paradigm can be modified. Paris and Winograd (cited in Phelps, Graham, and Kerr, 2004, p. 50) note that meta-cognitive training has two important elements. That's self-assessment and self-management. With self-assessment, learners are able to reflect and evaluate their own skills and development of knowledge. The learners can plan, select, and use learning strategies that they prefer to gain knowledge by having self-management.

ICT can increase the literacy of children As Adonis (2006, p. 16) has stated, the active use of ICT can boost the literacy and numeracy of the students. For example, Microsoft word can inspire children to learn the ability to write. We will enjoy typing several new words using a machine and be enthusiastic about it. It can also improve the ability of the children to communicate and listen. It is because they can collaborate with their peers, educators, and parents / adults in partnership. Some kids need to hear what others are doing and tell them what they want to know. The children can also improve their reading skills by reading stories that are accessed via the internet. ICT therefore plays an important role in the cycle of scaffolding in order to improve the education of children.

Use ICT can not only help students ' cognitive development, but also through their learning motivation and communication. As noted by Davies and Birmingham (2002, pp. 19-20) describe three advantages of using storyboard system technology, kar2ouche, to facilitate Macbeth character training for students. Such three types of benefits are strengths of intelligence, motivation and communication. Cognitively, students can tell what's going on in the story without the teachers telling them. They enjoy their learning process motivationally and have fun so that learning is not painful and exhausted. We must connect to their teachers and peers interactional.

II. METHODOLOGY

This study uses secondary data as the basis of its discussion. The use of secondary data in this discussion brings a benefit. As noted by Bryman (2004: 202) the use of secondary information helps us to investigate what other researchers found, compare and contrast their results in order to see the entire picture of what they found.

III. RESULTS AND DISCUSSION

Implementing ICT in schools will also bring some potential benefits and difficulties, particularly in many public schools in Indonesia. For example, the implementation of windows movie maker will provide some advantages. Second, it can inspire each other's educators, IT coordinators, and students to participate in collaborative work. Second, it can inspire students to learn visually and audibly as they can see and listen to their presentation (the window movie maker). Fourth, by making attractive / interesting film on their own, it can encourage the students / learners to be creative. Fourthly, students can feel the challenge of making their own movie, watching it, and being excited to see that they can make excellent film.

Nonetheless, some potential difficulties may also hamper the potential benefits described above. Some of these obstacles are:

TABLE I. THE BENEFITS OF E-LEARNING

A	Being actively engaged in learning	The students are conscious of their own learning. That means they know what knowledge they need and how they will acquire that knowledge
B	Supports social learning	E-learning gives learners the opportunity to work together / collaboratively without being constrained by the dimension of environment / demography. Students should build a culture of learning.

C	Gives an opportunity for the teachers to give continuous feedback	There will be no slowing down in the e-learning teaching-learning process to wait for the slower learners to understand the knowledge. Teachers can guide the learning process based on the learning speed of each learner.
D	Transfer of learning	E-learning provides students with the opportunity to communicate and learn from others without a face-to-face contact.
E	Scalability and Modularisation	E-learning is extremely flexible. It can accommodate from small to large numbers of participants without having a drastic impact on its cost.

TABLE II. IMPLEMENTATION CHALLENGES OF ICT EXPERIENCED BY SENIOR HIGH SCHOOL TEACHERS

Difficulties	Cause
Technological difficulties	• Computer equipment shortage. There are some schools that have no computer equipment at all. • There are just few redundant computers in the classrooms. Such computers also operate very slowly and when using them, the students become impatient and de-motivated. It also takes a long time. • No maintenance is available. Many of the teachers know only how to do it. Many of them don't even know how to safely operate it.
Teachers' refusal	• Teachers are afraid to be humiliated if they don't know how to operate a machine unexpectedly stuck. • Most senior lecturers will retain their status quo, maintain conventional pedagogy and oppose the introduction of ICT • Teachers may also be fearful that machines will replace them. • Teachers may perceive that the teaching process is too mechanized; everything is strictly controlled and depends on computers / machines
	by using machine in their teaching.
Financial difficulties	• Many public schools receive only a small amount of government subsidies. These schools cannot purchase computers or run their maintenance.
Students' refusal	• They may not have home computers. They must therefore use computers in schools. • They may also find it difficult to gain access to school computers. One or a few days before they have to book it, and that's just one or a half hours. • We can say that learning windows filmmakers aren't their substantive topics, so they aren't serious about learning and thinking they "must not be able to."
School organizational issues	• Most school leaders are senior teachers who prefer conventional pedagogy to be used and valued more. • Most technology coordinators are often unwilling to share their computer skills / knowledge with teachers because they believe their teachers will be more knowledgeable and will replace them. • Most schools firmly believe that "technology is just a device, so if we don't have it, it will be perfect for us." As a result, some schools don't try to use technology at all in the classroom.
Academic dishonesty	• Teachers would find it very difficult to track whether or not their students are lying, plagiarizing or not
Filtering software	• The school should provide computer filterers to prevent the

	students from forming the danger of pornographic pages. This behavior can lead to conflict among the students as the students feel distrusted. We may also think their school is violating their privacy.

IV. Conclusion

There are many advantages and challenges in incorporating ICT in schools / education. Based on their contextual factors, each school has its own barriers. The difficulties can usually be divided into four groups of barriers. These are technical obstacles, the refusal of teachers, the rejection of students, and the technological structure of poor schools.

Some things need to be addressed in order to successfully introduce ICT in schools. It will waste a lot of time, energy and money if we don't understand those things before introducing this. These are the society, governance, ethics and technology management system of the schools.

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