
THE USE OF ICT TO INCREASE LEARNERS' INDEPENDENCE

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ABSTRACT

A paradigm shifting from teacher-centered learning to student-centered learning in education has resulted in the creation of more opportunities for students to become the main focus of education. In this student-centered environment, students are expected to be more active and independent in their learning process. Nevertheless, not all students are able to be more active and independent in their learning, students need to connect between the terms “active” and “independent” including the students’ abilities to comprehend their materials and Information, Communication, and Technology (ICT)-based learning tools. The use of ICT in a student-centered learning environment is expected to significantly increase learners’ activeness and independence. A survey was carried out in order to investigate whether the use of ICT has increased learners’ independence or not. The result of the study showed that learners’ independence increased significantly because the use of ICT tools applying in the learning process.

Keywords: Students-centered learning, ICT, Learners independence, english language teaching, survey

INTRODUCTION

In Indonesian educational system for long time, the way of teaching has been mostly dominated by teacher-centered instruction. In this learning the control of the teaching and learning processes is mostly teacher dominant.

This instructional situation is less appropriate with the rapidly dynamics of science and technology. Unwise if the technological development is faster than the ability of teacher to customize the learning material, ascertained students will lack the mastery of knowledge or latest technology.

The shifting paradigm in the learning from teacher-centered learning becomes student-centered learning is expected to encourage students to be actively involved to acquire the knowledge, attitudes and behavior. Through the learning process with the active involvements of students means that the teachers do not take the students chance in learning by their selves. In students-centered learning, the students have the opportunity and facilities to build their own knowledge so that they will gain a deep understanding, and lately can increase the quality

of the students. It means that the student become independent in learning.

However, it is found that not all students are able to learn independently. The students having difficulties in gain the learning material by themselves. As independent learners, students are less reliant on teacher-directed learning, and more able to capitalise on, and even to create their own, opportunities for self-directed and peer-directed learning [1].

According the problem above, teacher should use a tool which help students to learn independently. ICT tools like E-Learning can be the appropriate tools to help students to learn independently. E-learning defined as a medium of computer technology that could be utilized to develop the application of learning and teaching [2].

Considering the problem above, this research attempts to fill the gap related to the implementation of using ICT in guide learning independently. This research aims to find out whether or not ICT significantly increase students independently in learning.

RELATED WORK

A. Students-centered learning

Students-centered learning expected in accordance with the current global condition, to be the challenges for students to be able in take the decision effectively in solving the problem they face. Through the practice of students-centered learning, students should be participated actively, constantly challenged to have critical power, able to analyze and solve its own problem.

Students-centered learning is a broad teaching approach that encompasses replacing lectures with active learning, integrating self-paced learning programs and/or cooperative group situations, ultimately holding the student responsible for his own advances in education [3].

Students-centered learning emphasizes each student's interests, abilities, and learning styles, placing teacher as a facilitator of learning for individuals rather than for the class as a whole. The teacher are still hold the important things in learning process. As we know, we can not put the students as the center of learning, for example in the beginning of learning process. Of course they are not bring enough knowledge to start the learning without the help from the teacher. It means that, the teacher a still have some portion of the learning process. The learning process should be a combination between the learners and teacher to hold the center of learning process.

According to the various definitions above, can be assumes that the students-centered learning is a learning model that puts the students as the center of the learning process. It is different with teacher centered learning that emphasizes the transfer of knowledge from teacher to the students that become passively. In applying students-centered learning, students are expected as an active and independent in their learning, responsible and initiative to identify their learning needs, build and presented their knowledge from discover the resources.

Based on the necessity above, the students need some tools in doing the learning process, which is will facilitate and help them.

B. Information and Communication Technologies (ICT)

ICT are generally accepted as a modern instrumental tool that enables the educators to modify the teaching methods they use in order to increase students interest. Its general definition covers any product that will store, retrieve, manipulate, transmit or receive information electronically in a digital form. It consists of hardware, software, networks and media for collection, storage, processing, transmission and presentation of information (voice, data, texts and images) (World Bank, 2002) [4].

New information and communication technologies (ICT) are significantly enhancing student learning and altering the most common methods by which children acquire information and knowledge. The 'C' in ICT stands for communication, linking computers through telecommunications networks allows teachers and students around the world to send text and picture to each other with ease. Through computers connected to the internet, we can communicate with, students, teachers, subject expert and people from anywhere in a way never before possible.

ICT generally relates to those technologies that are used for accessing, gathering, manipulating and presenting or communicating information. The technologies could include hardware e.g. computers and others devices, software applications, and connectivity e.g. access to the internet, local networking infrastructure, and video conferencing.

There are many reason why ICT is important in daily life, by learning with ICT helps to develop students the sort of transferable skill, such as problem-solving and communication. Furthermore, The Stevenson Report discussed the context of ICT in schools as follows:

- to administer schools;
- to train students in skills which they will need in further education and ongoing learning throughout the rest of their lives and for their future jobs;
- to provide access to information and communication outside the classroom walls;
- to support teacher development;
- to support and potentially transform the learning/teaching process in many and diverse ways [5].

According to the report above, ICT may be used as a cognitive tools in learning process. Cognitive is connected with mental processes of understanding. And cognitive tools are related to tools using process of thought and logic. The term ICT was introduced in the National Curricula of England and Wales, to define a set of tools used to process and communicate information. This term is different with Information Technology (IT), which is more often used in international business world to describe the same tools.

C. Learners Independence

There are some definition about independent learning. According to Zimmerman (1986) cited in Meyer, Haywood, Sachdev, and Faraday (2008), stated that when students are able to self-regulate their learning, they are: Have an understanding of their own approach to learning and how best to maximise their learning in the most efficient ways; They are motivated to take responsibility for their learning; and They are able to work with others to enhance the depth and breadth of their learning [6].

The independence of learners are need higher order thinking, who can be done by adult age level, like senior high school or students of college. Field and Duffy (2014) describe The University Of New South Wales Learning Center (2013) define about Independence in learning as following way:

Being independent at university means that you are responsible for managing your studies, your time and yourself. In high school, you might be used to teachers reminding you when work is due, telling you what and when to study, and checking your progress. University learning requires you to learn and complete assignment independently, plan your workload, meet deadlines and organise your time. This level of self-management can be a challenge. Some students thrive, find it difficult to adjust at first [7].

It is also believe that to be independent, the learners should provide some tools. The application of the technology will surely be life enhamcing. Effective usage of technology will hugely increase the learners capacity to access learning without depending on anyone. It should be known about how important is the technology in order to explore and exemplify the effective practice in the use of it in one's independent learning activities.

D. The Use ICT for Independent Learning

The integration of ICT into the idea of teaching and learning always places pedagogy over technology, although the students become center in learning process, the teacher should always keep the learning at the center of all activities, pedagogy-technology should be the central focus.

Furthermore, ICT plays a major role on how the students should learn, the mode of curricula delivery has now shifted from teacher-centered to student-centered. ICT's especially computers and internet technologies, enable new ways of teaching and learning rather than simply allow teachers and students to do what they have done before in a better way.

Berge and Baron cited in Amin (1998), conducted a research about an effective use of ICT for education and learning. The research found that, learning approaches using contemporary ICTs provide many opportunities for constructivist learning through their provision and support for resource based-based, student centered settings and by enabling learning to be related to context and to practice [8].

A similar research was done by Kennewell, Parkinson and Tanner (2003), to find out that enthusiasts for the use of ICT in education have long claimed that the technology has the potential to change the nature of teaching and learning in schools, and to change it for the better [9].

In applying ICT in learning process, we need to discuss some products of it. The current technologies for enhancing teaching learning, includes : computer assisted language learning, digital resources and materials, web-based tools and software, content/course management systems, autonomous learning, distance and self-access learning, multiple literacies, student-generated contend, and project-based learning.

Methodology In Using ICT to Increase Learners Independence

A. Research Design

The research used survey method, and used questionnaire in order to collect the data. The questionnaire consist of 2 sections in order to gather more information that forceful the learning process by using ICT.

B. Location

The research was done in State University of Jakarta (UNJ), that located in Jl. Rawamangun Muka, East Jakarta.

C. Population and Sample

The population of the research are students college in State University of Jakarta (UNJ). The population is quite big, therefore the random sampling is used as the respondents of the research. And the researcher took fourty respondent to answer the quistionnaire.

D. Instrument

The quistionnaire was divided into 2 parts:

- 1) Part 1 : Learners' background

In this part, the instrument asked the respondent about the gender, age, how long they use ICT in learning.

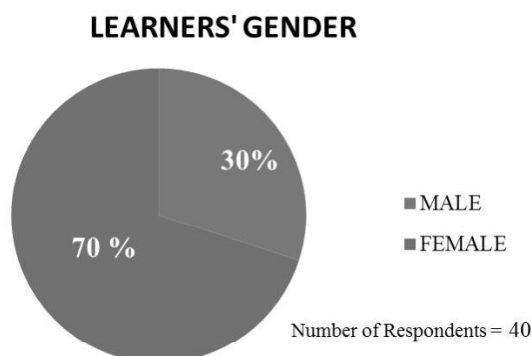
- 2) Part 2: Learners' perspectif in using ICT and their independence

In this part, the respondent answered the question regarding their opinion and experience using ICT in learning. It is consist of 10 yes/no questions.

E. Data Analysis

The data was analyzed in descriptive explanation and also using statistics graphic to explain each of the part. As Creswell (2009) stated in his book, that Qualitative studies do not employ any explicit theory, in which inquirers attempt to build the essence of experience from participants, then the inquirer constructs a rich, detailed description of a central phenomenon [10].

FINDING & DISCUSSION



The findings are reported in a sequence of the part of the questionnaire that have been distributed. The first part is about the learners background that have been investigated.

Figure 1.
Learners' Background: Gender

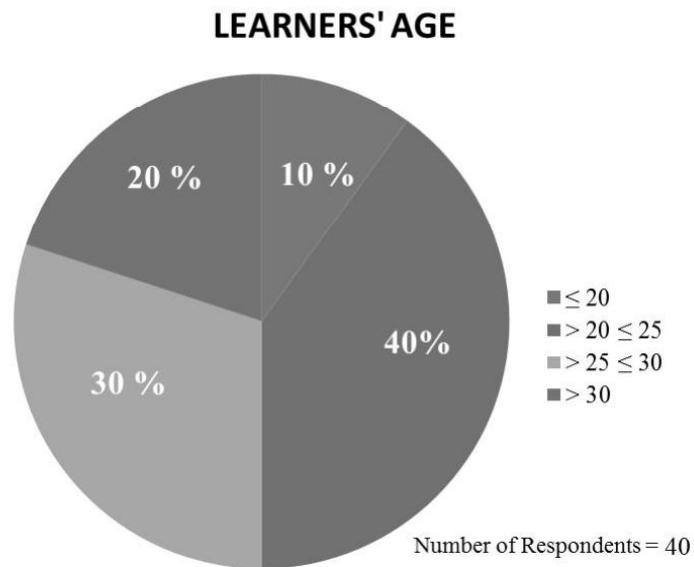


Figure 2. Learners' Background: Age

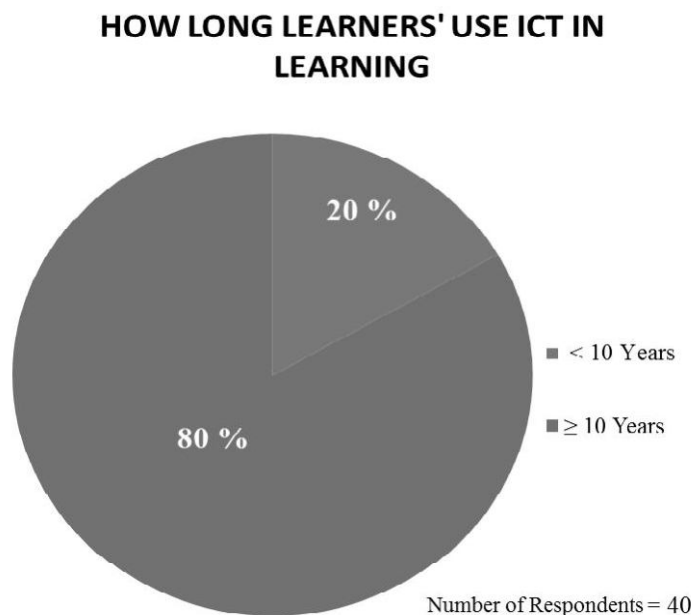


Figure 3. Learners' Background: How Long Using ICT in Learning

From Figure 1-3, it can be seen that most of the respondents of this research are females who represent 70% and males are 30% of the sample. As for the ages of the respondents, 10% are less than 20 years old, 40% are more than 20 years old and less than or equal to 25 years old, 30% are more than 25 years old and less than or equal to 30 years old, and 20% are more than 30 years old. Then, there are 80% respondents who have been using ICT in learning for more than 10 years, and 20% of respondents are less than 10 years.

The second part reveals the learners' perspective on using ICT linked to their independence. The data gathered in the table below:

Table 1. Learners perspective in using ICT linked to their independence

NO	SOME POINTS OUT	YES	NO
1	Used to using ICT in learning	100%	0%
2	Using ICT is more interesting than face to face meeting with teacher	40%	60%
3	Use ICT make learners think widely	70%	30%
4	Using ICT make learners easier in accessing the learning material	60%	40%
5	Learners are interesting in using ICT	80%	20%
6	ICT can accelerate the learning process	40%	60%
7	Using ICT can motivated the learners to find the complete information	60%	40%
8	ICT can changed learners from pasive to active	70%	30%
9	Learners get more knowledge in learning using ICT	100%	0%
10	Use of ICT help them to develop their potention and ability	70%	30%

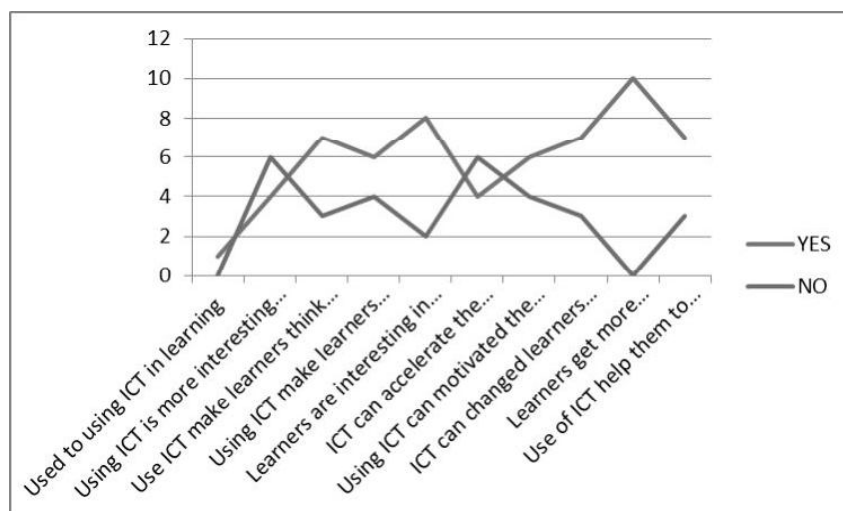


Figure 4. Learners' Perspective in using ICT linked to their independence

The results shows that 100% respondent are used to using ICT in learning, no longer learners now are not using ICT tools in learning. Even, many of teachers are giving assignment in printed document or sending by email. It makes from some years ago the ability in computer usage has been taught in school and include in Curriculum.

The second point, the respondent are reject that the using ICT is more interesting than face to face meeting with the teacher. 60% reject it, and only 40% think that ICT is more interesting. They are believe that the learning process are still need the combination of teacher portion and learners portion.

Then, almost the respondent believe that ICT make learners think widely (70%), then, ICT make learners easier in accessing the learning material (60%). Both of them are according to ICT can provide many learning material from many sources. Then, learners are interesting in using ICT (80%), it is caused that there are some interesting things in using ICT tools and also we can search many interactive learning material that can made us more enjoyable the learning process.

But, the respondent who are believe that ICT can accelerate the learning process only about 40%, more of them are believe that acceleraerion of learning process still need the teacher holder. Then, continue that the respondent believe that using ICT can motivated the learners to find the complete imformation (60%). The respondent also accept the points that ICT can changed learners from passive to active learners (70%), this is because they have more knowledge in their hand, so they can give more information to say to their peer or teacher. The most higher result is that the respondent believe that they get more knowledge in using ICT (100%), and then the last is almost the respondent think that the use of ICT help them to develop their potention and ability (70%).

CONCLUSION

The finding of this research of this research shows that most of the learners used to using ICT in learning (100%), it gain their independencies in learning. They are almost addict to learning by using ICT. The another point is, almost them agree that by learning using ICT they will get more knowledege (100%), it is because they can get knowledge not only from learning process in classroom activity with their teacher. They can browse any information from the internet and explore the material deeper.

Even though, there are some aspects of learning independence by using ICT are reject by the learners. Such as, the concept of using ICT is more interesting than the face to face meeting with the teacher (40%). It means that learner independence as core of students-centered learning, can not be applicated all time in the learning process. Teachers are still keep the handle of the learning process. Learners are need the teacher guideline and also get the pouring knowledge from the teacher, especially in the beginning of the learning process.

The another rejection is about ICT can accelerate the learning process (40%). It is appear that, although the ICT can bridges the learners to gain information more widely, but the learners still feel confused to use it. They are do not know where they can get an information the learning material they needed. Here are the task of the teacher to give they information about the sources of learning material that can learners find out.

But, although there are some misunderstanding about the ICT usage in some learners, ICT give them many benefits to reach. The learners are really helpful in learning independently despite of their learning process in the classroom with teacher. The limit of time face to face

with the teacher, demand them to do learning independently outside the classroom and ICT can help them.

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