

# IMPROVING STUDENTS' ABILITY IN CONDUCTING AUTONOMOUS LEARNING BY USING INFORMATION COMMUNICATION TECHNOLOGY

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## Abstract

Autonomous learning is one of essential abilities that must be acquired by students in developing countries like Indonesia. The independent learning may solve the problematic situation in English learning such as insufficient learning time, large classroom, inadequate learning facilities, insufficient competency of English teachers and others. This study explores the perceptions of students at university level in implementing the independent learning while they are using Information Computer Technology (ICT). A questionnaire has been distributed to 50 students in West Sumatra Province, Indonesia. This study reveals three essential aspects such as students' perception about the role of ICT in their English learning program. It also finds the types of material used most frequently by the students. This study also discovers certain supports that can be used to help students in utilizing ICT in their learning, such as teachers' guidance and required skills in implementing this learning process.

**Keywords:** English Learning, ICT, autonomous learning

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## Introduction

In Indonesian National Curriculum, English is considered as one of compulsory subjects that must be learned by students in all educational levels. This subject has three essential objectives that is to develop students' competencies in understanding general aspects of English, to improve students' awareness of language functions, and to improve students' understanding of the relationship between language, cultures and social interactions (Indonesian Ministry of Education, 2003).

The information above may reflect that the implementation of English learning process in Indonesia has not provided satisfactory result yet. The materials of English learning in Indonesian curriculum are too much and there are too many students in one class are two main problems (Gultom, 2015 and Abrar, 2016). Besides, the limited time allocated for English lessons is also considered as the next problem in English teaching in Indonesia. Yulia (2013) also mentions that Indonesian students tend to have low motivation in learning English.

Utilization of Information and Communication Technology (ICT) may be considered as an effective solution to solve above problems. Numerous amount of research has proven the benefits of ICT in improving the quality of education (Yusuf, 2012 and Warschaur, 2000). It has great affect in English learning program. Its utilization has been developing rapidly in recent years. This term refers to all forms of technological tools associated with the storage, retrieval, manipulation, transmission and receipt of information in digital form (Hidayati, 2016). Basically, ICT provides shifting process of learning paradigm from instructivism toward constructivism (Lunenburg, 1998). It offers many advantages in language learning such as giving opportunities to engage with native speakers and providing an access to authentic materials (Chapelle, 2001; Felix, 2001; Mullama, 2010). Because of its interactive and dynamic nature, ICT may fulfill the needs of the individual students by providing opportunities to direct their learning and to pursue information (Ammanni and Aparanjani, 2016). Previously, people only used technologies such as televisions, tape recorders and video. Nowadays, there are many sophisticated communication technology like emails, chats, interactive whiteboard, and others are being used in English language learning. Furhtermore, ICT functions as a veritable instrument that accelerates the transformation from conventional learning environment of teacher and book centeredness into student-centered learning environment (Chhabra, 2014 and Adalore&Itasanmi,

2016). This media foster the acquisition and easy absorption of information that gives countries especially developing ones the great chance to develop their educational systems, formulate and execute better educational policy and more importantly, open access to education especially for those in rural and remote areas.

However, autonomous learning has been slowly adapted in developing countries like Indonesia. The educational system has traditionally adopted teacher-centered pedagogy, which encourages the teacher to become a primary authority and source of knowledge (Lin, 2008). Therefore, most subjects in Indonesian schools (first, secondary and even tertiary levels) are taught in this traditional system. This condition makes students dependent in their study and face difficulty when there is less support from the teachers. Dependent students tend to be more uncomfortable in their learning and do not want to be actively involved in their learning process (Ho and Croocall, 1995).

## Method

Basically, this study aims to collect data exploring the perceptions of university students on utilization of the Information and Communication Technology (ICT) in language learning. There are three questions addressed in this study:

1. How do students perceive the role of a ICT?
2. To what types of ICT do students use?
  - a. Which materials do students find most helpful?
  - b. Which materials do students use most?
3. What kinds of support do students feel they need?

The research will be conducted by using a survey technique of investigation. Dornyei (cited in McKay, 2006:35) describes three types of information that can be gained through survey: factual information such as characteristics of learners; behavioral information, for instance regular activities of learners; and attitudinal information such as opinions, beliefs, and interests of learners. Trochim (2006) classifies surveys into two broad areas: questionnaires and interviews. In this research, questionnaires will be utilized because survey by questionnaires will work as a very efficient means to gain a good deal of information in a short time with little cost (Dornyei as cited in McKay, 2006:35). Moreover, the questionnaire is a widely used and useful instrument for collecting survey information, providing structured, often numerical data, being able to be administered without the presence of the researcher, and being comparatively straightforward to analyze (Wilson and McLean as cited in Cohen, et al, 2003). Some questions in the questionnaire were adopted from the questionnaire used in Gardner and Miller’s study (1999:120-1).

The participants of this study include 50 students who are currently studying at university level in West Sumatra Province in Indonesia. 18 male students and 32 female students volunteered to participate; 32% or 16 of are in the second year, 24% or 12 are in the third year and 44% or 22 are in the fourth year. Concerning the length of their English studying time per week, 21% of them have 1-2 hours, 4% have 3-4 hours and those who have more than 5 hours reach the figure of 42%.

## Results and Discussion

### 1. Respondents’ beliefs and attitudes about the role of ICT in language learning

Table 1 represents the students’ perception of the ICT utilization in the language learning. Students’ beliefs about the roles of the ICT show positive responds. Based on the students surveyed, there are four significant figures that show interesting phenomena. Firstly, 92% agree the ICT can be used as an appropriate resource to improve their motivation in learning English. Then, 84% believe that the work in this language facility can potentially be used to increase their ability to learn independently. Then, the same figure, 84%, also occurs when the students claim the ICT can create a chance for establishing English club among students. However, there is still a measure of uncertainty regarding certain aspects of the ICTs: 38% of respondents are unsure whether this language facility can accommodate different needs and competence levels of students. and 30% have doubts as to its ability to help develop confidence.

*Table 1: Respondents’ perception of the ICT role in the language learning (N=50)*

No	Questions	Strongly agree	Agree	Not sure	Not agree
1	ICT can improve your motivation to learn English	18 36%	28 56%	4 8%	
2	Studying English by using ICT is more	10	29	11	

	effective than studying in the classroom	20%	58%	22%	
3	The work in ICT helps students learn independently	<b>11</b> 22%	<b>31</b> 62%	8 16%	
4	ICT can accommodate different needs and competence levels of students	9 18%	22 44%	<b>19</b> <b>38%</b>	
5	ICT can provide variety of language learning	7 14%	34 68%	8 16%	1 2%

The findings show four implications of ICT roles. Firstly, with regard to motivation, in the situation where English is used as a foreign language, especially in West Sumatra Province, building students' motivation becomes an essential issue because students cannot rely only on their classroom activities. They need other learning media, as provided by ICTs, for developing their language competencies.

With regard to the promotion of independent learning, there are many publications which focus on the utilization of ICT and independent learning at the institutional and regional levels e.g., Yunus, Lubis and Lin, 2009; Yusuf, Maina and Dare, 2013 and others. In this study, 42 surveyed students believe that they will be able to study independently through this language facility. This figure shows the awareness of students of one of the fundamental aspects of to implement independent learning in the ICT. Souto and Turner (2000:388) mention several reasons that may impede students becoming independent learners, including unfamiliarity, lack of preparation or training, over-dependence on the teacher and lack of useful materials. This indicates that the independent learning can be achieved with support from other aspects of learning process applied in the ICT such as adaptation to work independently, preparation and training, counseling assistance, and stimulating learning resources.

## 2. Respondents' reasons for studying at ICTs

The students' responses on the eight potential reasons for using the ICT. Approximately 50% or more of students study in this language media because of the opportunities to interact with other friends, to usevarious English resources, to watch English programs, to gain authentic learning materials and the fact that it is conducive to learning. The fact that only eight students like to set their own learning goals is hardly surprising, as discussed previously, but somewhat more surprising is that fact that only four students claim that the institution suggests they should use the ICT. This explanation can be seen in the following table below:

Table 2: Respondents' reasons for choosing the ICT as the place for studying English (N=50)

No	Reasons for studying by using ICT	Total Respondents	Percentage %
1	I like studying on my own rather than in a group	14	28
2	Various English resources are available at ICT	<b>28</b>	<b>56</b>
3	ICT makes learning situation more more conducive	24	25
4	I can watch English programs at ICT	<b>25</b>	<b>50</b>
5	I like to set my own learning goals	8	16
6	The ICT helps me to know implementation of English	<b>4</b>	<b>8</b>

The English classroom in Indonesia basically supports the collective learning process. The ICT, fortunately, has been designed to accommodate this situation by providing wider opportunity for learners to interact each other through English conversation groups such as English interactive games. Some facilities in the ICT that can be used for promoting English conversation groups are learners' discussion room, social media, BBM, Whatsapp, Line and several interactive games.

Regarding the availability of various learning resources, the ICT has accommodated this demand by providing numerous types of learning resources such as English movies, TV programs, newspapers, online magazines, online books, online dictionaries, certain activities, grammar worksheets, and others. This is similar to the type of ICT learning resources proposed by Harmer (2005:340). Among these learning resources, students clearly enjoy watching audio visual learning resources such as English TV programs. The usefulness of TV programs for English learning purposes has been investigated by Hill (1991:3): they can provide both paralinguistic clues and contextual visual character of the target language country, which informs about features such as architecture, customs, climates, and others that can improve students' knowledge and understanding of the target language.

### 3. Respondents' beliefs about the materials

#### 3.1 Types of learning sources

There are three classifications of learning resources available in the ICT: materials, activities and additional resources. The above table shows that English TV programs and movies as well as online dictionaries are usually used (94% of the respondents) and are also claimed as the most useful learning materials (96%). Meanwhile, the speaking activities are the most popular learning activities that are used by 48 students (96%); these activities are also seen as the most useful learning activities in the ICT. Besides speaking activities, 94% believe in the usefulness of vocabulary activities. For the supplementary learning resources, the 90% tend to use English tests while they are visiting the ICT. Regarding the usefulness of resources, both the English tests and the English games gain 94% responses. Unfortunately, the Web-based materials become unpopular resources for learning English language as 24% of the respondents claim that they have never used this type of materials, even though 90% find them quite useful.

*Table3: Respondents' beliefs about utilization and usefulness of learning resources in the ICTs (N=50)*

<i>Types of Learning</i>		<i>Utilization</i>			<i>Usefulness</i>		
		<i>frequently</i>	<i>Sometimes</i>	<i>never</i>	<i>Very useful</i>	<i>useful</i>	<i>Not useful</i>
Material	English movies, TV programs	23 46%	24 48%	3 6%	22 44%	26 52%	2 4%
	Online Newspapers, magazines	11 22%	31 62%	8 16%	17 34%	30 60%	3 6%
	e-books	22 44%	19 38%	9 18%	17 34%	29 58%	4 8%
	Online Dictionaries	22 44%	25 50%	3 6%	30 60%	18 36%	2 4%
	Online Coursebooks	13 26%	25 50%	12 24%	16 32%	28 56%	6 12%
Activities	Interactive Speaking Activities	23 44%	25 52%	2 4%	25 50%	23 48%	2 2%
	Listening Activities	21 42%	26 52%	3 6%	23 46%	24 48%	3 6%
	Writing Activities	16 32%	28 56%	6 12%	25 50%	18 36%	7 14%
	Vocabulary Activities	20 40%	24 48%	6 12%	26 52%	21 42%	3 6%
	Reading Activities	23 46%	24 48%	3 6%	23 46%	25 50%	2 4%
Additional	English Games	22 44%	22 44%	6 12%	21 42%	26 52%	3 6%
	English learning software	17 34%	22 44%	11 22%	19 38%	24 48%	7 14%
	English tests	22 44%	23 46%	5 10%	26 52%	21 42%	3 6%
	Web-based materials	17 34%	21 42%	12 24%	15 30%	30 60%	5 10%
	Others						

The utilization of English movies and TV programs known as the audio visual learning resource is very essential. The table describes that 94% participants usually use this learning resource. Almost all respondents believe the TV programs are very useful for their learning process. I think this information supports the discussion of table 2 about one of students' reasons to study English at the ICT is because they can watch English TV channels.

Besides English TV programs, the same percentage can also be found in the utilization of dictionaries. The utilization of dictionaries in English learning process may be influenced by two factors, e.g., learning method and lack of reading skill. Firstly, I have observed that the English learning process in Indonesia is usually conducted in old fashioned approach. The focus of language learning is still put on the capability of students to comprehend and understand certain terminologies found in selected texts. Sometimes, L1 is

frequently used to describe the meaning of certain words. Therefore, students tend to use dictionaries to translate English words into Bahasa Indonesia during their learning process. Furthermore, the strict English teaching curriculum at university level has decreased learners' opportunity to apply the 'context clues' which can be used to guess the meaning of certain words in the texts. Secondly, the position of English as a Foreign Language (EFL) in Indonesia has brought less opportunity for students to gain and use English words in their daily interaction with others.

In the speaking activities, 94% of respondents have used this learning resource and the usefulness of these activities are claimed by 96% of respondents. These high figures can be identified as the advantageous impact of English group chat establishment such as Whatsapp group, Line, Facebook group and Edmodo.

Since 2006, this educational institution has issued a requirement for students to have minimum TOEFL score of 400 before graduating. Then, currently this passing score has been increased into 450. This regulation has increased students' willingness to use various collection of the English tests by using the ICT. The students may discuss useful strategies in conducting the English tests with their teachers and they can use the simulation of online-practice tests to predict their score.

English games can be activities students do for their own sake, for the immediate fun, curiosity or competitive ambition aroused by the Game and it may be useful to increase learners' motivation and at the same time to interact with other students in the ICT (Baudains and Baudains, 1991:2). There are many types of English games available in such as word puzzles, English vocabulary practices, and scrabble as well as other interactive games. The web is the medium of choice for both new and experienced users on the Net. It is so useful because it has essential characteristics: visually attractive, easy to use, easy to understand. And the most important thing is it manages to combine many other Internet-based forms of communication into a single manageable package (Dudenev, 2000:3). However, its utilization in the ICT is still low as 24% of respondents have never used of it. It may be due to two factors. Firstly, students have lack of skills in utilizing internet and web-based materials. The other reason is the insufficient information about websites that provides better quality of language learning materials.

## 4. Supports provided in using ICT

### 4.1 Physical supports

Besides observing the support from learning materials, this study also tries to observe students' perception about others physical supports in the ICT. The table also shows that 86% participants think that materials in the ICT should be synchronized with the curriculum of English taught in the classroom. Besides these data, the table also indicates that 20 respondents (40%) are still not sure about the accessibility of learning materials available in the ICT. Students' perceptions on these physical supports can be seen in the following table 6 below.

Table 6: Respondents' beliefs on the physical supports

No	Questions	Strongly agree	Agree	Not sure	Not agree	Strongly disagree
1	The materials in the ICT can be easily accessed	7 14%	21 42%	<b>20</b> <b>40%</b>	2 4%	
2	I can choose to study materials that fit my interests and needs	5 10%	24 48%	18 36%	3 6%	
3	Students need special training before using facilities in the ICT	14 28%	19 38%	15 30%	2 4%	
4	Classroom learning process can improve students' awareness to study at the ICT	5 10%	34 68%	11 22%		
5	The materials in the ICT should be synchronized with curriculum of English	<b>17</b> <b>34%</b>	<b>26</b> <b>52%</b>	5 10%	2 4%	

### 4.2 Learning supports: training

The introduction of skills to be applied in the ICT can be conducted through two ways. The first way is by utilizing classroom activities that lead students' curiosity to use the ICT and the second way is by providing certain trainings.



**Table 7: respondents' beliefs on the training**

No	Questions	Strongly agree	Agree	Not sure	Not agree	Strongly disagree
1	Students should be armed with sufficient supports before, during and after visiting the ICT	<b>20</b> <b>40%</b>	<b>23</b> <b>46%</b>	7 14%		
2	Classroom learning process can improve students' awareness to study at the ICT	<b>5</b> <b>10%</b>	<b>34</b> <b>68%</b>	11 22%		
3	Students need special training before using facilities in the ICT	14 28%	19 38%	<b>15</b> <b>30%</b>	<b>2</b> <b>4%</b>	

It can be seen that 86% agree with the importance of supports before, during and after visiting the ICT. About two thirds of respondents support the utilization of classroom learning process in improving students' awareness to study at the ICT. Unfortunately, 17 respondents (34%) need to be well informed about the benefit of attending the initial training.

#### 4.3 teachers/counselors' supports

**Table 8: Types of supports provided by teachers/counselors**

No	Learners' supports	always	sometimes	never
1	Teachers help me to select the materials in using ICT	12 24%	28 48%	10 20%
2	I can directly ask for help from teachers/counselors whenever I have difficulty in using ICT	14 28%	27 54%	9 18%
3	I see teachers/counselors to get the feedback of my activities in using ICT	<b>6</b> <b>12%</b>	27 54%	<b>17</b> <b>34%</b>
4	Periodically, I discuss my progress of learning in the ICT with teachers/counselors	<b>14</b> <b>28%</b>	<b>28</b> <b>56%</b>	8 16%

Among these four supports from counselors - suggestion for choosing learning materials, helping in learning process, providing feedback of students' activities in the ICT, discussing the progress of students' learning - the range of participants' responses can be identified from 50% to 84%. The highest percentage can be found when respondents claimed that they discussed their learning progress with the teachers/counselors. However, only 6% always see the counselors to get the feedback of their activities in the ICT and 34% have never met the counselors to get the feedback.

## Conclusion

The utilization of ICT in English language learning process at higher educational level has provided great advantages. This study has revealed that students have sufficient knowledge and skill in utilizing ICT. Students believe that the ICT is very useful to support their learning activities, especially in developing their motivation, fostering autonomous learning process, providing variety of learning, improving their self confidence and getting authentic learning materials. This media are rich with the types of learning strategy and tools for learning process. The materials that are mostly used are English movies and TV program as well as online stuffs such as ebook, online dictionary and online magazines or newspaper. By using this ICT, students are able to conduct interactive speaking activities which are useful for their learning experience.

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