

OBSTACLES TEACHERS FACE IN INTEGRATING ICT INTO ELT IN SENIOR HIGH SCHOOLS IN PALEMBANG

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Abstract: ICT proves to be beneficial to ELT. Thus, the integration is important but some obstacles are faced by teachers in the process. This is a descriptive study focusing on identifying obstacles in integrating ICT into ELT in teachers' point of view. The subjects of this study, who completed a likert-like scale questionnaire investigating the obstacles, are fifty teachers from ten senior high schools in Palembang. The questionnaire investigates two levels of obstacles: (1) teacher-level obstacles and (2) school-level obstacles. The findings show that school-level obstacles, such as lack of professional development and training, lack of technical support, lack of incentives, lack of funding and lack of time, are more dominant factors as compared to teacher-level obstacles, such as lack of teacher competence and confidence, resistance to change and negative attitude. Some suggestions are offered based on the findings of this study.

Key words: Obstacles, integration, ICT, ELT

Digital forms of communication or more popularly named as Information and Communication technology (ICT) have entered the English Language Teaching (ELT). Smith and Ragan (1999) characterizes computers as instructional media as more like people than any other machine when it comes to instruction. A computer can adjust to the needs of the learner, analyze learners' problems and give differential feedback. Results of several studies show that the use of ICT as instructional media into classroom instruction give advantages to support students collaboration and active participation (Hadjerrouit, 2011), and to expand traditional classroom boundaries, creating learning community that is less teacher dependent (Eloa, 2010). They also show that ICT can provide great information and resources for students' activity (Johnson, 2010); moreover, they allow students to link and connect ideas and show that online networks contribute significantly to students' performance (Yang, 2003). All the findings from studies researching the use of ICT in ELT as discussed before show that ICT gives advantages to ELT and thus encourages the integration of ICT into ELT.

Teachers hold major part in teaching and learning activities. In Act No. 14 year 2005 about teacher and lecturer, it is mentioned that teacher is professional educator whose main responsibility is to educate, teach, guide, train, test and evaluate students. Furthermore, in Ministry of Education Regulation No. 16 year 2007 about teacher academic qualification and competency, it is stated that there are 37 competencies required. One of them is to use ICT for the advantage of teaching and learning process. With this responsibility and required competency, the integration of ICT into ELT mainly lies in the hand of teacher. In other words, teachers are the main actors of the ICT integration.

The act of integrating ICT into classroom instruction is a complex process and may encounter a number of obstacles. Balanskat, Blamire, & Kefala (2006) argue that although educators appear to acknowledge the value of ICT in schools, difficulties continues to be encountered during the process of integration. Schoepp (2005) states that studying the obstacles in the use of ICT in teaching and learning is crucial because this knowledge can provide guidance for ways to enhance technology integration and encourage greater use of ICT.

The obstacles primarily deal with teachers as they are the forefront executors of the integration. Becta (2004) asserts that focusing on obstacles that particularly affect teachers may be helpful. Bingimlas (2009) includes lack of teacher confidence, lack of teacher qualification, resistance to change and negative attitude, lack of time, lack of effective training, lack of accessibility and lack of technical support as barriers in the process of integration. What he includes as a problems, when they are looked more closely, are either from the internal factors of the teachers themselves or from external factors but interrelated with teacher's factors. As the obstacles centred on teachers, it is important to see them from teachers' point of view.

Due to the importance of ICT integration into ELT, this article tries to identify the possible obstacles in the process of integration. Both review of existing literature and empirical findings are discussed. This paper also tries to provide recommendation on improving ICT integration into ELT.

ICT INTEGRATION INTO ELT

Recent development of technology and demand of human needs have made ICT become inseparable from our life. Nowadays, everything is accesible through ICT including teaching and learning matter. ICT has a great potential to support teaching and learning process. Siahaan (2009) identifies some of the potentials namely: expanding learning opportunities, improving efficiency, improving the quality of learning, facilitating the formation of skills, encouraging life-long learning, reducing the *digital divide*, i.e. the disparity in ICT diffusion and use between industrial and developing countries (or between rich and poor, men and women, urban and rural areas within individual countries), and encouraging active-learning interactive. Salehi and Salehi (2012, p.215) elaborates about ICT and ELT:

English Language Teaching(ELT) is an area that has changed over the years, moving from very teacher centred approaches to learner-centred ones. ELT projects have been introduced throughout different parts of the world and innovations have brought changes in materials and technology devices (language laboratories, tape recorders, video recorders, computers, etc). More recently, the use of technology as a tool to develop the different language skills has received great attention so that ELT teachers are frequently exposed to new practices. Apart from curricular changes that come officially- usually from the Ministry of Education in each country workshops and short trainings introduce new techniques and activities or promote new materials. Accordingly, ELT teachers are accustomed to frequent subject innovations, but not necessarily more resourceful or open to new ideas.

In other words, ELT is a very dynamic subject and very potential in getting the benefit from ICT. Dogoriti (2010) on the benefit of ICT in ELT explains that the integration of ICT into foreign language education, e.g. English in Indonesia, has been assumed as the potential of the new technological tools to revolutionize an outmoded educational system and ICT has brought about the innovative use of web-based learning in second language learning and teaching. With a variety of hyperlinked multimedia documents and computer-mediated communication (CMC) tools, the web could support language teachers to integrate web resources into the language classroom. Moreover, the

multimedia nature of the web is essential for the delivery of authentic materials, including texts, images, sound recordings, video clips, virtual reality worlds and dynamic interactive presentations. All these characteristics could allow the student to work in numerous ways with the authentic materials found on web.

ICT is not a method of teaching but actually is a medium through which method of teaching could be delivered in more dynamic ways. Salehi and Salehi (2012) states that the integration of ICT in teaching and learning is not a method; rather it is a medium in which a variety of methods, approaches and pedagogical philosophies may be implemented. This statement shows that the effectiveness of ICT depends on how and why it is applied and integrated. Furthermore Dogoriti (2010) explains that regardless of the amount of technology and its sophistication, technology would not be used unless instructors have the skills, knowledge and attitudes necessary to infuse it into the curriculum.

Kurniawan (2013) in his study in fourteen senior high schools in Palembang concludes that ICT integration is significantly correlated in positive way with students' English achievement. Furthermore, Milarisa (2013) in her study in ten senior high schools in Kayuagung, OKI Regency finds out that there is a significant correlation among computer literacy of teachers and students; and students' achievement in three subject areas (English, Indonesian and Mathematics). Interestingly, in the findings, English teachers' computer literacy has the highest correlation coefficient with students' English achievement as compared to two other subject areas. Moreover, it is also found out that the computer literacy of both Indonesian and Mathematics teachers do not contribute significantly to students' achievement, only computer literacy of English teachers contribute to students' achievement.

As a conclusion, it can be said that the integration of ICT into ELT will be much easier as compared to other school subjects since it is a very dynamic and flexible subject. The integration itself will bring advantages to the teaching and learning process. One things need highlighting is that ICT is not a teaching method but a medium through which it is implemented.

Obstacles of Integrating ICT into Teaching and Learning Process

The use of technology devices, such as televisions, tape recorders and video recorders have been incorporated as a tool for language teaching since 1960s (Salehi and Salehi, 2012). There is evidence of many problems in terms of technical skills at the beginning, and it takes about a generation for the technical skills and the technical problems to be ignored out. However, teachers are still faced with some barriers that prevent them to employ information and communications technology (ICT) in the classroom or develop supporting materials through ICT.

Several studies have divided the obstacles into: extrinsic-intrinsic; teacher-school level; and micro-meso-macro level obstacles. Ertmer (1999) referred to extrinsic barriers as first order and cited access, time, support, resources and training; and intrinsic barriers as second-order and cited attitudes, beliefs, practices and resistance. Becta (2004) categorizes these into teacher level obstacles which relate to individuals (lack of time, lack of competence, belief, etc.) and school level obstacles which relate to institutional (training, resources, etc.). Balanskat, Blemire, & Kefala (2006) divides them into micro level barriers such as attitudes and beliefs, meso level barrier which is related to institution, and macro level barriers or system level barrier which relates to wider education system.

Kok (2007) discusses ICT in developing countries. He explains that the idea that ICT could help developing countries is intriguing to many, because of the benefits that

have apparently been realized in the West. It is noted that the literature sometimes contains a naïve taken-for-granted assumption that the success of the West was attributable to ICT, and therefore bringing the benefits of this development to poorer countries is simply a matter of delivering ICT. He, furthermore, elaborates that although ICT is now at the centre of education reform efforts, not all countries are currently able to benefit from the developments and advances that technology could offer. Significant barriers that are often referred to as “the Digital Divide”, the disparity in ICT diffusion and use between industrial and developing countries (or between rich and poor, men and women, urban and rural areas within individual countries), limits the ability of some countries to take advantage of technological developments. Thus, developing countries are faced with challenges related to access, pedagogy or assessment when using ICT to improve and reform education.

Bingimlas (2009) divides the obstacles into two categories: (1) teacher-level obstacles and, (2) school-level obstacles which is in line with Becta’s (2004) categorization. He further explains that teacher-level obstacles include: lack of confidence, lack of competence and resistance to change and negative attitudes; and school-level obstacles include: Lack of time, lack of effective training and lack of technical supports.

This paper suggests that the obstacles teachers face in integration of ICT into ELT in senior high schools in Palembang are in line with Bingimlas’ (2009) categorization.

DATA COLLECTION AND ANALYSIS

This study tries to investigate the obstacles teachers face in integrating ICT into ELT. This study deals with obstacles from teachers’ point of view. A questionnaire was distributed to senior high school English teachers in Palembang.

As the subjects, fifty English teachers from ten state senior high schools in Palembang were chosen to complete the questionnaire. The schools were chosen on the basis that they have at least three English teachers. The subjects’ distribution based on gender, age and years of teaching is as follows:

Table 1
Teachers’ Distribution based on Gender, Age and Years of Teaching

No	Category		Number of teachers
1	Gender	Female	38
		Male	12
2	Age	20 – 30	1
		31 – 40	12
		41 – 50	30
		50+	7
3	Years of teaching	1 – 10	9
		11 – 20	24
		21 – 30	16
		30+	1

The questionnaire used is part of teachers’ perception on the integration of ICT into ELT questionnaire developed by Kurniawan (2013) in his study relating to teachers’ ICT qualification, integration and English achievement. There are ten aspects in the

questionnaire stretching from extent of ICT integration to perceived students' benefit. In this study, only one aspect is used that is obstacles to integration. The items are in accordance with Bingimlas (2009) categorization of the obstacles. The items' response is likert-like scale ranging from not-at-all, small extent, moderate extent, large extent, to very large extent. The items' responses are scored from one to four.

The mean from each item's response will be calculated and ordered from highest to lowest. The reordering of the item represents the level of problem: the higher the mean the more crucial the problem.

FINDINGS

The response from the teachers' show that Top five obstacles are: (1) Lack of professional development on how to integrate technology, (2) Lack of technical support, (3) Lack of funding, (4) Lack of incentive to use technologies, and (5) Lack of time during a class period. Based on Bingimlas (2009) categorization, the top five problems reported by the teachers are all school-level obstacles: lack of time, lack of effective training, lack of accessibility and lack of technical support. The top five problems will be discussed more in depth, while other reported problem will also be discussed but not as detailed.

The most serious obstacles reported is lack of professional development on how to integrate technology. This finding is not uncommonly referred to in the literature. Pelgrum (2001) found out that there were not enough professional development and training opportunities for teachers in the use of ICT in a classroom environment. Beggs (2000) found out that one of the top three barriers to teachers' use of ICT in teaching was the lack of training and development. The problem of training and professional development, according to Becta (2004) is a complex one because it is important to consider several components to ensure the effectiveness of the training. These are time for training; pedagogical training, skills training and ICT use training. In fact, Gomes (2005) found out that lack of training and professional development on ICT integration was an obstacle in using new technology in classroom practice. This obstacle of lack of professional development will logically lead to other problem related to teacher-level obstacles: lack of competence. From the findings we can see that although teacher reported they do not know how to incorporate ICT as the eleventh problem, but it is still seen to various extents as obstacles by most of the subjects.

Table 2
Teachers' Response to the questionnaire

Please indicate the extent to which you believe the following are OBSTACLES to integrating technology into your ELT instruction:		Very large extent (%)	large extent (%)	Moderate extent (%)	Small extent (%)	Not at all (%)	Mean (1-5)
1	Lack of professional development on how to integrate technology	8	24	38	20	10	3
2	Lack of technical support	6	26	36	22	10	2,96
3	Lack of incentives to use technology	10	18	40	18	14	2,92
4	Lack of funding	10	16	44	16	14	2,92
5	I don't have time to teach students the basic computer skills needed for more	10	16	40	20	14	2,88

	complex tasks						
6	I have difficulty managing the classroom when students are working on computers	12	4	52	22	10	2,86
7	I don't know how skilled my students are at using technology	14	2	52	20	12	2,86
8	Lack of time during a class period	6	18	46	16	14	2,86
9	I don't know how to evaluate or assess students when they work online	12	10	44	18	16	2,84
10	Lack of access to technology	8	12	46	18	16	2,78
11	I don't think technology is reliable	12	12	28	32	16	2,72
12	I don't know how to incorporate technology and still teach content standards	8	12	28	42	10	2,66
13	I don't know how to use technology	8	12	24	40	16	2,56
14	I don't think I have time to integrate technology because of the amount of time required to prepare students for high stakes testing	8	10	26	42	14	2,56
15	I don't understand how to integrate technology into my ELT instruction	6	10	28	44	12	2,54
16	I don't think I have enough time to prepare for using technology	6	10	30	38	16	2,52
17	I have difficulty controlling what information students access online	6	12	18	48	16	2,44
18	I don't think technology fits my beliefs about student learning	6	8	22	46	18	2,38
19	I don't understand copyright issues	6	8	18	50	18	2,34
20	I don't believe technology integration is useful	4	8	28	36	24	2,32
21	I think Internet text is too difficult for students to read	4	8	18	42	28	2,18

The next three obstacles can be seen as related to facilities provided by schools or higher authority such as local government. Without technical support and overall resources, teachers cannot be expected to overcome the obstacles preventing them from using and integrating ICT. Pelgrum (2001) found out that in the view of primary and secondary school teachers, one of the top obstacles to ICT use in education is lack of technical support. Lack of funding translates mainly to lack of infrastructure or resources. This is a complex obstacle that discourages teachers from integrating ICT into ELT. One of the most important and expensive resources for ICT integration is broadband internet connection. Even in Europe it is reported that one third of European schools still do not have broadband connection. The condition is even worse if it is compared to Indonesia or Palembang in particular. The same obstacles related to infrastructure and resources are also found by Pelgrum (2001). He concluded that insufficient numbers of computers, insufficient peripherals, insufficient numbers of copy of software and insufficient simultaneous internet access. Lack of incentives to use technology is actually related to external motivation for teachers to do the integration. Surprisingly, this is among top five obstacles face by the teachers. This might indicate that appreciations given from schools or

government to what they have done toward the integration of ICT into ELT has not been enough. As a result it stands as one of major obstacles in the process of integration.

Lack of time is other major obstacles in integration process. The teachers reported that they don't have time to teach students the basic computer skills needed for more complex task. They also reported that, in a lesser degree, they don't have enough time during a class period. This finding is inline in several studies indicating that many teachers have competence and confidence in using computer in the classroom but they still make little use of technology because they do not have enough time. Becta (2004) finds out that the problem of lack of time exists for teachers in many aspects of their work. A study shows that the lack of time is an important factor affecting the application of new technologies (Al-Awani, 2005).

Teacher-level obstacles i.e. lack of teacher confidence, lack of teacher competence and resistance to change and negative attitudes, do not seem to be major obstacles in the integration process. The findings shows that most teachers reported that they have the competence, feel confident and do not have negative attitudes toward ICT integration into ELT.

The perfect condition of teachers for ICT integration was that teachers have ample knowledge, they are confident and eager to do the integration, they are fully supported by facilities and infrastructure and they are not loaded with too heavy teaching schedule that they have more time. The absence of all or parts of those would not support the possibility of the creation of excellent integration which in the end would influence expected results. It was in line with the finding of Urnal and Ozturk's (2012) study that the absence of ICT equipment in classrooms and ICT-based teaching resources, or facilities, teachers' negative attitude toward the integration, and teachers' low knowledge on ICT are the main barriers of the integration and they also added the biggest problem of the integration was the absence of ICT equipment in classrooms and ICT-based teaching resources, or facilities. It was logical to think that although teachers possessed the positive attitude and ample knowledge, it seemed impossible for the integration to happen without the facilities. Unfortunately, Kurniawan (2013) finds out that technology and technology support provided by the schools and the government which was very low. It could be illustrated that when facilities were provided and teachers had positive attitude toward the integration but not ample knowledge, the process would not be optimum since teachers would not be confident enough in doing so. Moreover, when teachers had negative attitude but were supported by good facilities and had ample knowledge, it could result in not serious integration process. It could be concluded that the most dominant ICT integration into ELT faced by teachers in senior high school in Palembang was caused by very minimal facilities and resources provided by the school or the government.

CONCLUSIONS AND SUGGESTIONS

The integration of ICT into ELT is much easier as compared to other school subjects since it is a very dynamic and flexible subject. In the process of the integration, some obstacles are faced by teachers. It is categorized into two levels: (1) teacher-level obstacles and (2) school-level obstacles. In the study, it is shown that school-level obstacles are more dominant factors as compared to teacher-level obstacles in ten senior high schools in Palembang.

It is suggested that to help to overcome major obstacles in integrating ICT into ELT, schools and higher authority provide professional development and training, ample technical support and more appreciation for active teachers in the integration process.

Financial support for ICT infrastructure and resources should be prime consideration when writing the budgeting plan in school or local government. Furthermore, it is also suggested for teachers to always improve their competence in ICT and keep their confidence in doing the integration process.

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