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# EFL INSTRUCTORS' BELIEFS ABOUT THE IMPLEMENTATION OF SMARTBOARD IN LANGUAGE TEACHING PRACTICES

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#### Abstract

Recently, the use of ICT in today's English language teaching is quite massive. However, EFL instructors' beliefs about the use of smart boards in language teaching practices are scarcely explored. This study aimed to investigate EFL instructors' beliefs about the implementation of the smart board as ICT-based learning media. Three EFL instructors across English learning centers were voluntarily involved in this study. Observation and semi-structured interviews were employed as the data collection technique. The data were described and interpreted based on the research questions. The results of this study showed that EFL instructors had positive responses towards the implementation of the smartboard. They stated that the smartboard made the explanation clearer and it was not difficult to be operated. Besides, students enjoyed using the smartboard during the lesson. Finally, the EFL instructors agreed that the smartboard could be implemented in classrooms with high control or supervision by the teachers.

Keywords: ICT based learning media, smart board, and EFL instructors' beliefs

#### Introduction

English learning media have developed quickly during the late 20<sup>th</sup> century. It begins with the notion of media that can assist the process of transferring knowledge and information. With the spirit of supporting the effectiveness of transferring knowledge, many experts propose various types of learning media. In the past, English teachers used traditional media, such as textbooks, blackboards, newspapers, brochures, OHP, etc. Nowadays, English teachers use more developed learning media, such as the internet, computer, social media, e-learning, e-books, etc. New media which are very popular in the 21<sup>st</sup> century are basically in digital formats. It happens because the education system has followed the rapid development of information, communication, and technology (ICT). The incorporation of information technology into language classrooms boosts autonomous learning, maximizes targeted outcomes, motivates learners and helps

learners to improve their performance in the EFL classrooms (Ardi, 2017; Azmi; 2017). Besides, the education system is also affected by the development of the industrial revolution. According to Nielsen (2014), there are four phases of the industrial revolution, namely (1) mechanical production by water and steam power (late 18<sup>th</sup> century), (2) mass production and electrical energy (early 20<sup>th</sup> century), (3) computer, electronics, and automation (the early 1970s), and (4) cyber-physical system (now). Education comes up with the development of industrial revolution phases and today's learning media follows the industrial revolution 4.0 which emphasizes the use of internet and information technology.

The rapid development of information and communication technology brings a new experience in education. ICT provides learning media that can match to the recent world changes. Galloway (2007) differentiates between information technology (IT) and information & communication technology (ICT). The former refers to the tools and skills for a job while the latter refers to what people do with them. Computers, cables, internet, wireless connections, handled devices, digital cameras, and even mobile phones belong to IT. Then, word-processing, emailing, video-conferencing, and searching on the internet refer to ICT. In line with the previous ideas about ICT, Rank et.al (2011) stated that ICT which stands for information and communication technology has been adopted in schools and colleges in place of IT to wider the use of technology, not merely only for processing information but also for education matter. Moreover, Chan et.al (2011) mentioned that computer-based presentational media which allow users to navigate and to select contents are grouped as interactive media. Thus, ICT based learning media can also be assumed to be interactive media. ICT is perceived as an important tool in improving performance, collaboration, learning experience, and learning outcomes (Albugami & Ahmed, 2015).

Essentially, learning media are used to help teachers deliver learning materials to students easily. A medium (plural, media) is a means of communication and a source of information. It is derived from the Latin word meaning "between" and this refers to anything that carries information between a course and a receiver. Examples of learning media include video, televisions, diagrams, printed materials, computer programs, and instructors (Heinich 2002). Therefore, in English language learning, media are expected to reduce the gap between students' understanding and learning materials given by teachers. Many teaching media can be used by teachers. When using learning media, the teacher needs to choose the most appropriate media by considering the context of the learning materials. Harmer (2007) argued that some teaching aids can be used by English language teachers. They are pictures or images, overhead projector (OHP), board, bit & pieces, language laboratory, computer, and homegrown materials production. Those media will help teachers delivering knowledge to the students effectively.

According to Howell (2012), digital pedagogy is how to teach using digital technologies. It means that teachers utilize technology for helping them carrying

out the materials to students. Furthermore, in the 21<sup>st</sup> century, using ICT for English learning media is more and more popular. Schools, colleges, universities, and English language centers have revitalization on their learning media. They change from the traditional ones to modern learning media. Galloway (2007) mentioned the kind of activities pupils might do in ICT lessons. Those are (1) creating and revising text, (2) creating and revising graphics, (3) combining text and graphics, (4) collecting and analyzing data, (4) performing calculations, (5) modeling situations and answering "what if" question, and (6) Controlling real and virtual machines.

The function of ICT based learning media is still the same as traditional learning media. Yet, ICT based learning media can adjust to the development of technology. Hismanoglu (2012) stated that ICT presents a powerful learning environment for learners in the classroom. ICT plays a role in renewing educational practices effectively. However, not every region has high attention in the development of the education system. McGrath & Hu (2012) stated that the insufficiency of financial investment in education makes the progress of implementing ICT learning media slower. Thus, it makes the learning process left-behind and developed lately. In line with the idea, it is highly suggested that education stakeholders should give more attention to their education system, especially for the ICT learning media facilities. Although ICT based learning media has helped teachers to deliver materials, teachers need to provide instruction that adheres the effective learning naturally or based on contextual learning (Murray, 2008).

Smartboard is one kind of ICT based learning media. Some people also call the smart board as an interactive whiteboard or digital board. Its form is like any other conventional whiteboard, but it is designed electronically. Smartboards can also be categorized as multimedia because of their various functions. According to Herman (2017), the word multimedia is derived from multi and media. Multi means many or various while media mean tools for delivering information or messages through texts, pictures, sounds, and video. Another expert said that multimedia instruction refers to learning activities providing words and pictures rather than words alone (Mayer, 2009). Browsing files on your computer, annotating powerpoint/word documents, handwriting recognition, dragging and dropping images are some functions of the smartboard. Smartboard comes up with technology that serves good accessibility in displaying learning materials. A smartboard or interactive whiteboard can accommodate all teaching styles and can be used to support wholeclass, small-group and personalized teaching (Betcher & Lee, 2009). Some studies reveal that the smartboard is innovative and powerful enough to support language acquisition in foreign language teaching practices (Jelyani et.al, 2014). Supporting the interaction-conversation in the classroom, contributing to the presentation of new cultural-linguistic elements, and promoting the oral skills are the examples of the way how smart board contributes to the language teaching (Al-Saleem, 2013).

Moreover, Manny-Ikan et. al (2011) found that smartboard can support students to develop their thinking and learning skills which are appropriate for the 21<sup>st</sup> century such as information skills (literacy), critical thinking, creativity, communication-cooperation skills, skills to use technological tools and autonomous learning. Conversely, Moss et. al. (2007) claimed that there was no impact of using smartboard for classroom teaching covering three subjects, namely English, Math, and Science, over 30 schools in London. Thus, the positive impact of the smartboard on the classroom depends much on the way the teachers use it. It will enhance the teaching and learning process when the smart board is implemented wisely and vice versa (Betcher & Lee, 2009).

On the other hand, dealing with teaching practices in English learning centers, EFL instructors may have some conceptions about the situation of language learning in which the smart board is applied there. Therefore then, their beliefs will reflect on the deep opinions about the use of the smartboard for teaching English. According to Pehkonen & Pietila (2003), a belief is a kind of knowledge that is subjective and experience-based. Then, Raymond (1997) defines the term belief as a personal judgment that is formed experiences. In line with those definitions, Gilakjani (2012) proposes that a belief is any premise that starts with the idea of "I believe that". Regarding some definitions of belief from some experts aforementioned, it can be concluded that belief is something important in a person's life used to guide him/her to do every single activity. Moreover, beliefs are formed from the real experiences that happen in a person's life. Further, teachers' beliefs are beliefs that owned and trusted by teachers or instructors. According to Clark & Peterson (1986), teachers' beliefs show a large number of knowledge and teachers understand their world by shaping a complicated system of personal and professional knowledge. Beliefs involve both subjective and objective aspects and act as the background to teachers' classroom actions (Richards & Lockhart, 1994). Therefore, the way the teachers teach in the class is based on their teaching and educational experiences in the past.

The purpose of this study, therefore, is to investigate EFL instructors' beliefs about the implementation of smartboard for English language teaching practices. The result of this study is expected to give a contribution to any English learning centers, schools, colleges, universities in terms of the consideration for using the smart board as one of their learning media. Two research questions addressed in this study, namely:

- 1. What are the EFL instructors' beliefs about using the smartboard for the teaching and learning process?
- 2. What are the EFL instructors' beliefs about students' responses in learning English by using the smartboard?

#### Method

Since this study aimed to explore the EFL instructors' beliefs about using the smartboard for teaching English, the qualitative research design was chosen to be employed as the procedure in conducting this study. This involved three EFL instructors from several English learning centers from three provinces, namely Special Region of Yogyakarta, Central Java, and East Java. The participants were selected by their willingness and their experience in using the smart board for teaching English. The data were collected through observation and interview. The format of the interview was semi-structured with open-ended questions, as the researchers wanted to get a wealth of valuable data. Furthermore, the interview was conducted one-on-one, recorded and transcribed verbatim to facilitate subsequent data analysis. In terms of the instrument, the researchers used an observation checklist and interview guidelines. To ensure the validity of the interview protocol, the researcher used IPR (Interview Protocol Refinement) Framework proposed by Jones, Torres & Arminio in Montoya (2016). The IPR Framework covers four phases, namely (1) ensuring interview questions align with research questions, (2) constructing an inquiry-based conversation, (3) receiving feedback on interview protocols, and (4) piloting the interview protocol.

## **Findings and Discussion**

Based on the classroom observations and interviews on three EFL instructors, the researchers gained some information related to their beliefs about the implementation of smartboard for teaching English. In general, most of the EFL instructors had a positive response towards the application of the smartboard. However, they suggested to not only rely on technology (smartboard) but also rely on real and interactive activities for engaging their students. The followings are the results of the data based on the research questions aforementioned.

# EFL instructors' beliefs about using the smartboard for the teaching and learning process

Since the smart board is new to be used in the English learning centers, most of the EFL instructors already used it for around 2 months until one year. The observation results showed that most of the EFL instructors were already skillful in operating the smartboard. It seemed that they did not have any problems in operating it. In this case, they already did something good dealing with the smart board since teachers' lack of knowledge on operating the smartboard becomes one of the challenges in promoting smart boards for classroom teaching media (Momani et. al, 2016). It happened because they got some training when the smart board was firstly installed in the classrooms. In terms of the first impression of using the smartboard, most of the EFL instructors were excited. They said:

My feeling was very excited because that was my first time to use that kind of ICT. But at the same time, I also confused. There was no training for me to use

that media. I just tried to touch everything to explore how to use this smartboard by myself. In short, my feeling was excited to use this media.

Interviewee 1

Well, actually I'm really impressed to use smartboard because it's sophisticated media. And I have never used that media before I taught English in this institution.

*Interviewee 2* 

I was very excited about using that media for the first time. It helped me a lot. It made every step of teaching was easier.

*Interviewee 3* 

It seems that most of the EFL instructors were good at operating the smartboard. However, they found difficulties for the first time when they were using it. They said:

I didn't operate it well. But now it can be said that I'm at the intermediate level in the operating smartboard.

Interviewee 1

Yes, I can operate it well now. But first, I'm still a bit confused to use this media.

Interviewee 2

Well, I can operate it well now. But you know, at first, I'm still a bit nervous about using it because it has so many features.

*Interviewee 3* 

Moreover, the problems that they found in using the smartboard were various. However, all of them were related to technical problems, such as bad internet connection, bad computer performance, and unfamiliarity with the media. Teachers' inability to fix technical problems and lack of preparation made before the class also became the problems that may discourage teachers to use smartboards (Korkmaz & Cakil, 2013). The instructors admitted:

Ya. Using a smartboard is not difficult, we just need to have more practice to use that media. But I get a problem dealing with how to connect the smart board to the laptop. In addition, the laptop provided in my office is MacBook. I'm not familiar with this laptop, so it's rather difficult to operate that smartboard. Later, I tried to practice using the smartboard before the students come to the classroom. Then, now I can operate it.

Interviewee 1

Actually, I don't find big problems using this media. I only get a problem at the first time when I started to use this media. Ya, you know. Most of the new English instructors here are not familiar with the smartboard for the first time.

*Interviewee 2* 

I ever got some problems with using it. Sometimes, there was a bad internet connection so I could not find any learning materials and show them to my students. Besides, sometimes the laptop provided in my office did not work well. There were some errors in computer systems.

Interviewee 3

The result of the observation also showed that the teaching and learning process looked more efficient since the instructors could write texts, shows pictures/videos, remove some words, modifying pictures easily. When using a smart board, teachers are easy to navigate the presentation of the material. They may focus more on monitoring their students and talking to them. This enhances the conversation activities (Al-Saleem, 2013). Moreover, the students' vocabulary mastery is reinforced since the teachers can be easily underlining, highlighting or citing texts (Jelyani et. al, 2014). In short, it can be said that the smartboard helps them to maximize the delivery of the materials. The instructors said:

Yes, I believe that. Even if all English instructors can use the smartboard, it will give a good impact on the teaching and learning process. Because we can give a clearer explanation using a smartboard. For example, when we want to describe something, we can just take some clear and best pictures from the website, crop it, modify it, and explain it to the students. It makes the explanation clearer, it can increase students' motivation, and it's really practical. It's easy to use, we can erase the writing easily and our hand will not be dirty because we don't use board marker. Of course, it's sophisticated media. But everything will always have disadvantages. You know, when we deal with technology, sometimes there will be technical problems and it takes a long time to fix it. I mean it is wasting our time. Then, if the instructor is not familiar with the smartboard yet. Thus, it may distract the students, when the instructor cannot operate the smartboard.

Interviewee 1

Ya, I think so. Because this media can help the instructors to describe/explain materials clearer to the students. Besides, students also enjoy using this media. They may write texts freely using various colors of pen and drag any kind of pictures from the website then describe it. This media is like a conventional whiteboard or blackboard but the smartboard can have more interactive functions. For example, we can use it as an LCD projector, write/draw everything freely, crop/drag pictures, coloring/modifying pictures, adding some text, removing the text easily and it doesn't make our hand dirty like when we use conventional board marker or chalks. However, when we deal with technology, it is always possible to have a technical problem like when the smartboard doesn't work properly. It takes time to repair that media. And instructors need to use any other media to run the lesson.

Interviewee 2

Ya, I agree that the smartboard gives a good impact on the teaching and learning process because it provides some features that make us easy in delivering learning materials. I and my students can write texts freely with various colors and can erase them easily. We can also present pictures, videos, edit or modify them based on what we want. This is interesting. With technology, we feel enthusiastic to engage with the teaching and learning process. In terms of disadvantages, I found some technical problems such as bad internet connection and the smart board screen is not responsive enough. But it is normal because it can be repaired soon.

*Interviewee 3* 

# EFL instructors' beliefs about students' responses in learning English by using the smartboard

During the observation, students showed some responses to the learning process which utilized the smartboard. The students were motivated and engaged with the lesson although they were not amazed by the smartboard. In line with this, some findings of previous research proved that smart boards can increase student engagement (Allen 2010; Beel, 1998). It happened because some of them already knew the smartboard. They admitted:

The students are engaged with the class. They pay attention to me and look comfortable with the use of the smartboard. Some of my students are impressed with that because they that it's sophisticated media and then they are motivated to learn. Meanwhile, other students are already familiar with the smartboard.

Interviewee 1

Ya, the students follow my class and pay attention to my explanation. For new students they may feel surprised with the smart board but for older students, I mean students who have been learning here for a long time, they just feel that it's common learning media. Not surprised anymore. Like what I've explained before, only new students are surprised with a smartboard. But actually, all students pay attention to my lesson and enjoy using the smartboard.

Interviewee 2

Well, I can say that most of my students are engaged with the lesson when I am using a smartboard. Talking about their impressions, I think only some of my students are surprised by the smartboard because they never use it before. But some other students who have been studying here for a longer time, let say almost one year, are not surprised. It is because they are already familiar with it.

*Interviewee 3* 

Lastly, based on the result of the interview, most of the EFL instructors thought positively about the massive implementation of smartboards for schools. They believe that it will give a good impact just like what happens in their English learning centers. They said:

Yes. It can be. But for big classrooms like in schools, it may be risky. The students get open access to the classrooms every time and they may use/play the smartboard appropriately. I think it can be applied for small classrooms like in the English course/learning center because the students only use that smartboard when there are a class and a teacher. Maybe, the smartboard can be used in controlled classrooms like in the computer laboratory.

### Interviewee 1

I think so. Schools may implement the smartboard to their classrooms like our classrooms here. But remember, it should be in good control because the smart board is expensive enough. Students at schools may use this media inappropriately when there is no teacher supervision.

## Interviewee 2

I think it is good to use smartboard in schools. It can be an alternative way to increase students' curiosity and motivation to learn English. I believe that technology will always help the teaching process as long as we can use it appropriately.

### *Interviewee 3*

Furthermore, the results of the observation and interviews are summarized in Table 1.

Table 1. The Summary of Interviewee's Responses

Aspect of beliefs	Interviewee 1	Interviewee 2	Interviewee 3	
The experiences in using the smartboard	A smartboard is easy to use. We just need to have training or more practices so we will familiar with it.	Impressed to use the smartboard for the first time. Feel confused at first, but later it is easy to use.	It is exciting to use this media for the first time. It helps me a lot in delivering learning materials.	
The impact of smartboard on the teaching and learning process	It gives a good impact on the teaching and learning process. It helps the English instructors to give a clearer explanation.	It helps the English instructors to deliver materials easily. It makes our explanation clearer.	It makes my students more engaged with the lesson. Besides, the features provided by the smartboard makes my teaching process more effective and efficient.	
Students' responses	New students are impressed while older students are already familiar with a smartboard.	New students are surprised and older students feel common with the smartboard.	Only new students who are impressed with the smartboard. However, in general, they respond it positively.	

The massive	A Smartboard may	A Smartboard can be	Smartboards can be
application of	be applied for small	applied in schools.	innovative in
smartboard	and controlled	But it's needed	providing better
	classrooms.	highly supervision	learning facilities in
		to operate the	schools.
		smartboard since it	
		is expensive media.	

Based on Table 1, it can be concluded that the EFL instructors gave positive responses to the implementation of the smartboard. They agreed that the smartboard could make the teaching and learning process more effective. This finding was also supported by other research that investigated the implementation of a smartboard or interactive whiteboard for teaching English. The research results showed that teachers and students had overall positive perceptions of interactive whiteboards (Corbo, 2014; Oz, 2014). They felt comfortable and believed that it was a very innovative and powerful support for language acquisition. The school culture also embraced technology integration for the success of the teaching and learning process. Another researcher, Martin (2015) mentioned that teaching vocabulary using interactive whiteboards was effective enough. The ability of interactive whiteboard in demonstrating interesting and various texts or pictures encouraged students' motivation to learn vocabulary. Using new technological learning media needed effort because teachers were necessary to be common with its new features. Thus, Turel & Johnson (2012) stated the result of his research that training for teachers in using interactive whiteboards needed to be improved. Good teachers who are experts in using interactive whiteboards will make the learning process more effective.

### Conclusion

This study aimed to reveal EFL instructors' beliefs about the implementation of smartboard as the ICT based learning media at several English learning centers. According to the research findings and discussion, it can be concluded that generally, EFL instructors have positive responses towards the implementation of the smartboard. Some literature studies also assert that commonly teachers have positive attitudes towards the smartboard (Kennewell & Morgan, 2003). They stated that the smartboard made the explanation clearer and it was not difficult to be operated. They just needed to have training or practices to use that media. Besides, students enjoyed using the smartboard during the lesson and some of the new students were impressed with a smartboard. Finally, the instructors agreed that the smartboard could be applied to other classrooms with high control or supervision by the teachers there. In terms of pedagogical implications, the findings indicate that the smartboard was beneficial for both students and teachers. Smartboards can enhance students' motivation and engagement during the learning process since they experience an interactive classroom environment. Thus, smart boards can encourage participation, interaction and the improvement of student learning (Jelyani et. al, 2014). Meanwhile, smart boards allow EFL instructors to

have better accessibility and flexibility in presenting materials to their students. In this case, smart boards facilitate the instructors to integrate multimedia resources such as written texts, video clips, soundtracks, and diagrams into their class (Levy, 2002).

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