



TEACHER'S BELIEF ABOUT DIGITAL LITERACY BASED ON THEORY OF PLANNED BEHAVIOR

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ABSTRACT

Digital literacy is a significant component of 21st-century learning the teachers need to possess. In the education context, however, the impact of the rapid development of digital technologies requires teachers as learning facilitators and motivators to employ digital literacy to prepare the students in digital environments. In spite of its importance, research observing teachers' belief about digital literacy in English Language Teaching context is limited. Hence, this study aims to investigate teachers' belief about the integration of digital literacy in English Language Teaching particularly through three aspects of teacher's belief namely teacher's behavioral belief, normative belief and control belief. Accordingly, a descriptive study on English in-service teachers is used in this research. In this matter, the participants were purposively selected based on the consideration that the participants could give sufficient information to answer the research questions. In order to examine the topic, five English in-service teachers considered as the participants were examined through interviews as the data collecting techniques. The findings indicated that the behavioral belief was related to the implementation of the concept of digital literacy in terms of developing students' 21st-century skills, normative belief dealt with the expectation in social context both administrators and parents, while control belief was about the availability of particular digital technology to be implemented in the classroom. The findings of this study expected to provide an overview of the teacher's belief which drives the integration of digital literacy in the classroom. This study provides an overview of teachers' beliefs in integrating digital literacy which help teachers to personalize their professional development to adjust the digital era into teaching-learning instructions.

Keywords: Digital Literacy, Teachers' belief, Theory of Planned Behavior.

INTRODUCTION

Broadly known, technology has rapidly developed which gives a broader effect in many areas of modern society as well as people needs. In this matter, technology integration has started to dominate in many areas such as communication, profession and particularly educational environment. Despite the unlimited opportunities provided by the information and communication technologies, the development of the digital world has both opportunities and challenges. Not to mention, the spread hoax news or information, hate speech, and intolerance are easily to be found. Thus, the challenge for educators is not

only to develop particular competence related to the subject matter but also prepare the students to have the ability to manage given information by using digital tools which is called as Digital Literacy. Hence, digital literacy is a significant component of 21st-century learning in which teachers need to possess.

Regarding to Digital Literacy, several researchers propose several definitions. Paul Gilster in 1997 introduced the terms digital literacy as the ability to access and to use information from networked computer resources. Furthermore, Eshet and Alkalai (2004) describe digital literacy as a survival skill including system of skills and strategies in the digital environment. In similar vein, the British Future lab's handbook on Digital Literacy Across the Curriculum (Hague & Payton, 2010, p. 2) defined digital literacy as the ability to access, to share, to create, to collaborate and to communicate effectively by applying digital media. Moreover, Lankshear & Knobel (2008) describes digital literacy as the awareness, attitude and ability to appropriately make use of a digital medium to construct social actions through developing new knowledge, creating media expressions, and communicating with others in a specific context.

In the education context, the impact of the rapid development of digital technologies requires teachers as a facilitators and motivators to employ digital literacy to prepare the students in the next phase of digital environments. Within the context of English Language Teaching, Koltay (2011) proposes the definition of digital literacy as the effective utilization of information and communication technology (ICT) that specifically focus on the teachers' use of digital tools in EFL teaching and learning process. As the facilitators and motivators in the teaching and learning process, the success of the integration of digital literacy in the classroom is related to teachers' decision about the matters. Ahsan & Anjum (2012) states that most human decisions and actions are formed by an individual's beliefs, values and perceptions.

Even though the notion of belief has been defined interchangeably by many scholars using many variety of terms involving attitudes, values, judgment, opinions, perceptions, conceptions, and perspectives, Pajares (1992) defines belief as a subjective judgment about true or false phenomenon based on individual understanding in which determines what people say, intend, and do. Furthermore, Borg (2001) defines belief as a proposition which consciously or unconsciously held and accepted to be true that effects the emotive commitment by individuals. He claims that belief is tend to be people guidance to particular thought and behavior. In an educational context, teachers' beliefs highly influence the classroom condition and roles that teachers may apply. Kagan (1992) states that teachers' beliefs include unconsciously held assumptions about students, classroom and the academic material to be taught. Therefore, teacher belief is a commitment held by the teacher to guide their decision about their classroom.

In order to explore teachers' beliefs comprehensively, the beliefs are identified by the Theory of Planned Behavior (TPB) proposed by Ajzen. Based on the scheme of TPB proposed by Ajzen (1991), human behavior is shaped by three kinds of beliefs in which determine individual's intentions, namely: behavioral beliefs, normative beliefs, and control beliefs (Ajzen, 1991). According to Ajzen (1991), behavioral beliefs are kinds of beliefs shaped by associating attitudes of a particular object. In line, Underwood (2012) states that behavioral beliefs are personal which is formed through associating performance of behaviour with certain outcomes. Reflected from personal positive or negative evaluation of certain behavior, however, an individual has a different perspective about a favorable or unfavorable attitude towards behavior.

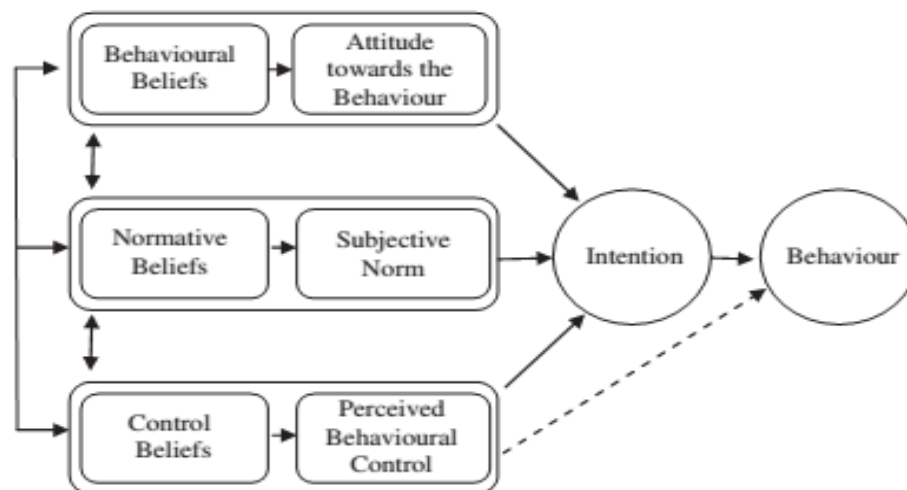


Figure 1. Theory of Planned Behavior (Ajzen, 1991)

The second notion is normative beliefs. Ajzen (1991) defines normative beliefs as a subjective norms as the perceived social pressure to perform or not to perform a specific behavior. Underwood (2012) adds that the subjective norm reflects the person's motivation to fulfil the subjective perception of social pressure. The third notion of TPB is control beliefs. Regarding to Ajzen (1991), control beliefs are set of beliefs that deal with presence or absence of requisite resources and opportunities that may retrieve from past experience or second-hand information about the experience with the behavior. According to Underwood (2012), control beliefs deal with the presence or absence of particular factors that may facilitate or prevent the adoption of a particular behavior. Ajzen adds that the degree of perceived behavioral control which is connected to control beliefs refers to the perceived ease or difficulty of performing the behavior.

As a matter of facts that teachers' beliefs reflect the personal meaning and understanding of what to do inside and outside the classroom, thus study about teachers' beliefs is important to find out the emotive commitment that drives teacher's decision. In this regard, Yushau (2006) claims that teachers' positive beliefs and intentions toward technologies integration in teaching and learning process have been a major predictor of their successful integration of these technologies in their classrooms. In this matter, several studies have explored positive result about teachers' belief and teachers' intention to use technology in the classroom (Levin, T., & Wadmany. R., 2006; Savasci & Acikalin, 2009). Although studies have explored teachers' belief related to technologies integration, research related to teachers' belief about digital literacy in English Language Teaching is limited. Based on this limitation, the study aims to provide specific insight about in-service teachers' beliefs about digital literacy in English Language Teaching. To understand these beliefs, the research question included: What are in-service teachers' behavioral, normative, and control beliefs related to their intentions to integrate digital literacy into their ELT classrooms?

METHOD

This study was carried out using descriptive study research design to portray teachers' behavioral, normative and control beliefs in integrating digital literacy in the context of ELT classroom. The purpose of descriptive study is to describe the particular phenomenon as it is by comprising the results of the recording and its interpretation to

explain how a person, a group, or things behave at a specific time (Jackson, 2009). In doing so, this study centered on one primary data source, namely semi-structured interview to gain information about teachers' behavioral, normative, and control belief in integrating digital literacy in the classroom.

A. Participants

The participants were in-service teachers major in English Language Teaching. In total, there were five in-service teachers with different school being observed. The participants completed the interview, of whom 2 (40%) were females, and 3 (60%) were males. They were currently teaching in Vocational High School. The participants had more than 5 years of teaching experience. By means of the implementation on digital media in English Language Teaching, all of the participants indicated that they were comfortable (88%) or relatively comfortable (10%) using computers and very comfortable (88%) and or relatively comfortable (12%) using the internet. In this matter, all of the participants reported that they regularly utilize digital tools as part of the learning instruction in their classroom.

B. Data Sources

This study focused on one primary data source, namely semi-structured interview. The results of the interview were transcribed for coding based on particular categories of teachers' belief in the framework of Theory of Planned Behavior. Examples of the included items in the notion of behavioral beliefs are (1) What do you think are the advantages and the disadvantages of integrating digital literacy in your ELT classroom?. Meanwhile focusing on normative belief, the question is (2) Who has most influence your decision to integrate digital literacy in the ELT classroom?. The question related to control belief is (3) What factors that affect your decision to integrate digital literacy in your ELT classroom?

C. Data Collection

The variable to collect the data is compiled through the adaptation of the previous studies written by Ayesha & Barbara (2017). The interview used in this study was an elaborated version of the open-ended survey proposed by Ayesha & Barbara. The interview questions focused on the teachers' belief in the framework of the theory of Planned Behavior. The instruments covered teachers' view on the role of the integration of digital literacy in the classroom and the internal and external conditions related to the implementation of the integration. The participants were interviewed, orally and individually. The data collection of the teachers was carried out in advance of semi-structured interview.

The data are collected by doing a semi-structured individual interview to get more profound understanding about teacher's behavioral beliefs, normative beliefs, and control beliefs. The semi-structured interview questions were developed to get particular insight about the influence of teachers' belief into the integration of digital literacy in the classroom. The interview lasted around 20 minutes for each. The interview questions focused on the Theory of Planned Behavior variables adapted from the open-ended survey on the previous studies written by Sadaf & Johnson (2017).

D. Data Analysis

A qualitative content analysis (Miles and Huberman, 1994) was conducted to identify and describe categories and subcategories of the content. Content analysis is used to investigate the thematic content as a basis of inference (Dean & Rodgers, 2002). First, the researcher transcribed the interview. The similar responses were grouped, then the data were code based on particular categories. Next, the researcher did open coding by re-reading and re-analyzed the categories to determine the

relationships between the codes and to get wider findings relevant to each particular belief. The last phase was examining and grouping each statement according to the research questions.

FINDINGS AND DISCUSSION

A. Findings

The purpose of this study was to investigate English in-service teacher's behavioral, normative, and control belief about digital literacy in the ELT classroom. Using TPB framework proposed by Ajzen (1991), behavioral belief depict beliefs related to particular consequences and outcomes; while normative beliefs portray particular expectation held by someone while control beliefs represent factors and opportunities to perform particular conditions. In this study, the data gotten from the semi-structured interview show particular explorations of teachers' belief utilizing behavioral, normative and control beliefs about the integration of digital literacy in the classrooms.

1. Behavioral Beliefs

Behavioral beliefs illustrate particular beliefs that represent attitudes which lead to desirable outcomes (Underwood, 2012). The results of the interviews illustrated particular behavioral beliefs held by the English teachers to integrate digital literacy in the classroom, namely developing students' 21st Century skills, managing active and fun learning, developing students' awareness, and preparing for the future world. The results of the semi-structured interview showed that the most common answers obtained from the interview about the integration of digital literacy in the classroom was developing students' 21st Century skills, namely: communication, creativity, problem-solving, and critical thinking.

Table 1. Teachers' Behavioral Beliefs about Digital Literacy

Theme/ Categories	Intention to integrate Digital Literacy
Developing 21 st - Century Skills	Potentials to make various activities to develop students' communication skills safely.
	Increase students awareness about particular issues happened in the world.
	Increase students' ability to solve problems contextually.
	Improve students' critical thinking in managing unlimited information.
	Potentials to develop students' creativity using digital media for learning.
Managing Fun Activities	Potential to create various materials and activities.
	Increase students' motivation to involve in variety of learning activities.
Developing students' Awareness	Development of students' awareness to filter and to share correct information.
Preparing for the future world	Contribution to survive in modern society nowadays.
	Preparation for students' future career.

1.1. Developing 21st Century Skills

Teachers motivated to integrate digital literacy in English language teaching due to the potentials of expand numerous activities to develop students' skills to communicate inside and outside the classroom safely, to increase students creativity about current issues happened in the world, to emerge students' ability to solving particular problems contextually and to manage unlimited information by improving students' critical thinking. In this matter, one of the teachers stated that "In this new generation, where everything goes online, students need to know what and how to communicate correctly and appropriately especially when it uses foreign Language such as English...". Teachers explained that being literate in this generation where the boundaries between online and offline were gone; students were demanded to not merely able to use digital media, but to perform meaningful attitudes toward others.

Furthermore, teachers believed that digital tools gave huge opportunity to develop students' opportunity and creativity. The new era of digital transformation required people to perform, create and compete, in which giving students a various way to learn by using online platforms such as web, mobile applications, and online learning. A teacher said that "In my classroom when I teach procedure text, for example, I usually ask them (students) to make short video in a group then upload it to Youtube. Thus, they are motivated to perform as creative as they can because they want to compete each other...". Most of the teachers being interviewed said that they integrate digital literacy because it provided efforts to develop students' critical thinking.

1.2. Managing active and fun learning

Taken from the interview data, it showed that teachers motivated to integrate digital literacy because it provided the means to create various materials and activities. One of the teachers said, "The students are new generations that easily get bored with such kind of traditional method and book-based learning, nowadays students are so critical because they have already exposed to any kinds of technologies to learn English...". In this case, teachers believed that the use of digital tools or media could increase students' engagement to be involved in variety of learning activities. One teacher mentioned that "The benefits of integrating digital literacy in teaching and learning process is that students get interested and excited to do all the task given. Indeed, they tend to be more curious than ever to try new things." Similarly, a teacher also added that "As a Vocational High School teacher, integrating digital literacy improves students' sense of excitement that all of the students take parts actively in learning activities".

1.3. Developing students' awareness

Interview data revealed that developing students' awareness of correct information was one of the important reasons to integrate digital literacy in the classroom. Teachers believed that developing students' awareness through integrating digital literacy was important because students were exposed by full information. One teacher commented, "Besides providing convenience to access information, the development of technology has a negative impact such as the exposure of hate speech and hoax. Thus, developing students' critical thinking through digital literacy was needed...". One of the teachers mentioned that "The availability of unlimited sources and the easiness to retrieve information make the ability to filter and perform digital media is crucial".

1.4. Preparing for the future world

Teachers believed that integrating digital literacy helped the students to prepare their ability to perform in the future world career. The rapid development of technology affecting many areas of life is inevitable. A teacher said that "Technology nowadays becomes the main part of people life, it is used for working, communicating, and shopping and many more things. Therefore, as a teacher, I need to make the students aware and prepare these conditions by giving some exposures in technology to make them more creative, active and innovative. Indeed, the future career will always be different from what we have today. Therefore, students with digital literacy skills and competency will be a success and survive in the future." A teacher remarked, "In the new curriculum, digital literacy has already become one of competency students need to comprehend to survive in modern society nowadays."

2. Normative Beliefs

Normative beliefs reflect a social influence to approve or disapprove particular attitudes (Underwood, 2012). Interview data revealed that the most impact on teachers' intentions to integrate digital literacy was administrators, parents, and the students' expectations.

Table 2. Teachers' Normative Beliefs about Digital Literacy

Theme/ Categories	Social Intervention to integrate Digital Literacy
Administrators	Demand from the school administrators to develop new learning experience that supported 21 st Century Learning.
Parents	Expectation from the parents to develop self-awareness and critical thinking of the students to face the digital era.
Students	Expectation of the digital students to use digital media in learning.

2.1. Expectations of Administrators

Supported by all interview participants, they believed that school administrators played an important role in integrating digital literacy in the classroom. A teacher stated, "The administrator in my district is highly supporting the technology integration in the classroom. Indeed, every year there is a workshop on technology integration in this school". In this case, teachers stated that the reasons they integrate digital literacy in the classroom because the school administrator demanded a new learning experience that supported a new face of 21st Century learning. One of the teacher also claimed that for Vocational High School, the integration of Digital Literacy was crucial due to the development of 4.0 Industry.

2.2. Expectation of Parents

The interview data showed that parents were one of the reasons to integrate digital literacy in the classroom. One of the teachers said, "Parents manage to give students mobile phone. Indeed they are more supportive of utilizing the digital tools to learn English using those handle handed...". Parents highly supported the application of the mobile phone the children

used to learn rather than only for entertainment and games. Similarly, one said “Parents always supports the idea of developing students’ critical thinking through digital literacy integration, since it makes the children safer online and ready for a future career”. Collected the data from the interview, most of the teachers claimed that digital literacy became one of competency the students needed to comprehend in order to face uncontrollable information, thus the parents expected the teachers to introduce digital literacy to the students.

2.3. The expectation of the Students

Reported by the participants, the intentions to integrate digital literacy in the classroom was the motivation to meet the expectation of digital native students. All of the teachers believed that the integration of digital literacy was relevant to the current interest from their era. The teacher said “Students nowadays are digital native who highly exposed to the variety of technology. Thus they expected to have modern and life learning experiences.” Additionally, teachers believed that the ability to perform modern tools made the students naturally involved in any activities related to the implementation and integration of technology. A teacher said that “As a teacher nowadays, we can teach students the same way as I will ever be taught. They are a modern society, and they demand the modern way of learning experience.” By means of English Teaching and Learning context, the use of various digital media was expected to motivate students to be actively engaged in teaching and learning process.

3. Control Beliefs

Control beliefs relate to particular factors that may facilitate or prevent the adoption of particular behavior. The interview data showed teachers’ belief in integrating digital literacy was highly influenced by factors such as the availability of technology and teachers sufficient knowledge about technology integration for learning.

Table 3. Teachers’ Control Beliefs about Digital Literacy

Theme/ Categories	Factors in integrating Digital Literacy
Technology	Availability of the technology becomes crucial factors for the teacher to integrate digital literacy in the ELT learning process.
Knowledge	Ability to make use technology integration in teaching learning process.
	Having sufficient knowledge and experience to deal with technology integration for teaching and learning process.

3.1. Availability of Technology

This study managed to have five in-service teachers from a different school. Therefore, they had a different point of view related to the external factors of integrating digital literacy in the classroom. A teacher in which the school had complete facility said “I can manage to have an active and meaningful learning experience as the facility in this school is good. We have language laboratory and internet for the students...” Meanwhile, another teacher said, “I want to use many sources of online web learning, but the availability of technology in this school is not compatible. Therefore, it is hard

for me to manage all technology integration I want to use in the classroom". One teacher added, "In integrating technology in the classroom, it would be easier to have faster network connectivity for all users, reliable access to content providers, and recent updated software and hardware. It would be pointless if the teacher dares to integrate technology, but there is no compatible access to technology at school".

3.2. Teacher Sufficient Knowledge about Technology

The interview data revealed the importance of internal factors, namely teachers' professional development to make use technology integration in teaching and learning activity. A teacher said, "In any classroom conditions, knowledge and experience become important factors in achieving the teaching-learning objective. Likewise in integrating technology in teaching-learning process, teachers need to have sufficient knowledge and experience to deal with the activity." All of the teachers also believed that to success the integration in teaching and learning process, teachers should be provided with regular professional development on how integrating particular technology into teaching; what kind of technology can be used to teach English and how to re-developed materials using full online information.

B. Discussion

Since the decision about students, classroom and materials to be taught are influenced by the teacher's beliefs (Kagan, 1992). Thus, teachers' belief about digital literacy may influence the commitment and the decision about integrating digital literacy in the classroom. In this matter, the purpose of this study was to investigate English in-service teachers' behavioral, normative and control belief about digital literacy. The results of the study were teachers' behavioral beliefs described teachers' emotive commitment to integrating digital literacy based on the advantages of integrating digital literacy in the classroom for students. In this matter, the benefits for the students were developing students' 21st Century skills, managing active and fun learning, developing students' awareness, and preparing for the future world. Most of the teachers believed that digital literacy was an important notion in today's need and future career.

Furthermore, by means of normative beliefs in which related to external expectation, teachers' intention in integrating digital literacy was highly influenced by school administrators, parents, and the students' expectations. This finding is supported by previous studies (Atsoglu & Jimoyianis, 2012), which revealed that teachers' beliefs were affected by personal support from the school administrators. This finding indicated that teachers were potentially integrating digital literacy into the teaching and learning process when they got support from their school administrators. By means of teachers' control beliefs, the availability to access technology was mentioned as one of the most important aspects in integrating digital literacy in the classrooms. This is in line with the previous study which showed that the availability to access particular technology become crucial impact on successful implementation from the intentions into practice (Sadaf, et al., 2016). Furthermore, teachers' sufficient knowledge on utilizing technology is a key role to gain confidence and experience to successfully integrating technology as developing learning experience. In addition, to develop teachers' professional development on technology integration, teachers need to have a regular workshop on the recent technology for teaching English.

CONCLUSION

By means of the importance of teachers' belief to the decision into classroom practice, several studies have revealed the positive effect of teachers' belief. However, teachers'

belief about digital literacy is limited, particularly in the context of English Language Teaching. This study provided a comprehensive description of teachers' belief by using the theory of planned behavior, namely: behavioral beliefs, normative beliefs and control beliefs about integrating digital literacy in the context of English classroom. In this regard, teachers explained the tendency to integrating digital literacy to meet digital native students' need and digital native's expectation. In this matter, teachers facilitate the students to develop 21st Century skills, namely the ability to communicate appropriately, thinking creatively, solving a problem wisely and developing critical thinking. Furthermore, teachers' motivation to integrate digital literacy is to prepare students to face a better future career.

However, teachers' normative and control beliefs revealed feasibility problems that may occur because of external and internal factors. These showed how institutions have a significant influence on the probability to make use of digital tools in the classrooms. The external factors such as the availability to access digital devices, internet networking, handle-handed or mobile phone are the most crucial problems faced by the teachers in integrating digital literacy in the classroom. Yet, the most important thing is the teachers' knowledge to make use any resources and media to successfully achieve teaching-learning objectives. Thus, this study helped teachers to reveal the professional development needed to support teachers in integrating digital literacy in English language teaching.

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