

# Teachers' Beliefs and Classroom Practices on the Use of Video in English Language Teaching

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#### Abstract

In the last decade, there has been a growing interest in exploring why teachers decide to and not to use a technological tool in their teaching practices. Teachers' beliefs have appeared to be one of the influential factors, yet still little is known about what causes both consistencies and inconsistencies between teachers' beliefs and their classroom practices, especially on the use of technology. Thus, to address such a gap, this study examined teachers' beliefs about video and their use of video in English Language Teaching (ELT) along with the key factors causing the inconsistencies between teachers' pedagogical beliefs about video and their classroom practices. A qualitative research design with semistructured interviews involving English teachers at a private educational institution in Indonesia was employed. The collected data were analyzed by using individual topic codes and emerging themes. The findings revealed that teachers' beliefs about the use of video in ELT were positive but inconsistent with their use of video in practices. Four key factors underlying the inconsistencies between teachers' pedagogical beliefs about video and their use of video in classroom teaching were identified, which involved teaching philosophy, teacher's knowledge and skill, facility, and reading literature. Therefore, pedagogically, the findings implicate that teachers' beliefs and classroom practices can be bridged by addressing the four underlying factors.

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#### 1. INTRODUCTION

The swift development of technology is impacting most educational fields, not least that of English Language Teaching (ELT). ELT teachers can no longer ignore the benefits offered by technology for advancing the teaching and learning process. To a greater or lesser extent, technology is impacting or will impact teachers' thinking, beliefs, and practice. In the literature, some scholars recommend conducting research that will enrich the understanding of how teachers develop their beliefs in teaching, where their beliefs come from, and how the beliefs influence practice (Haukås, 2016). Research by various academics has identified inconsistencies between teachers' beliefs and their classroom practices (e.g., Ertmer et al., 2000; Kane et al., 2002; Mao & Crosthwaite, 2019). Teachers may express the belief that technology can be beneficial for language learning, yet their classroom practices do not always reflect such beliefs (Ertmer, 2005; Kartchava et al., 2020). In a bid to enrich these understandings, this study explores teachers' beliefs about the potential of video technology in ELT in an educational institution in Indonesia and how those beliefs are reflected in their teaching practice.

Teachers' beliefs and classroom practices have been researched for more than three decades. Whether the inconsistency between belief and practice exists is still a subject of debate and tied to contextual factors where teaching takes place (Borg, 2018). The research trend has gradually incorporated technological devices that can potentially enhance students' learning experience and outcome. The foundational assumption is that teachers' beliefs about digital pedagogies, concerning the integration of technology into classroom teaching, inform their use of technological devices in their classrooms (Prestridge, 2012; Waluyo, 2020). Thus far, among the small number of studies, the findings from empirical studies are mixed. For instances, in a study exploring EFL teachers' belief and practice on the integration of ICT (Information and Communication Technology) in the classroom, Budiman (2018) observed that there was no inconsistency between teachers' beliefs and practices, while Thurm (2018) summarized that regardless of whether teachers hold positive or negative beliefs on teaching with technology, they may be frequent or infrequent users of technology in the classroom, signifying inconsistencies between belief and practice. Therefore, researching the link between teachers' beliefs and practices can be the key to ensuring whether teachers would use technological devices in their teaching. Educational institutions such as schools and universities have been spending a huge amount of money on technological devices to enhance teaching and learning; without teachers utilizing the provided technological devices for teaching, such resources will be meaningless and have no impact on student learning, thereby offering no value (Gillespy, 2020).

The present study specifically intends to bridge the understanding of teachers' beliefs about video and how such beliefs are manifested in classroom practices. In addition, it explores the causes of inconsistencies between teachers' beliefs and classroom practices. The use of video in language teaching started in the 1980s when

the media first emerged. Since then, video technology, including materials and methodological approaches involved in video creation, has undergone enormous changes (Goldstein, 2017). In the present day, video technology has become more advanced and sophisticated, yet offering simplicity and practicality for teachers who only intend to use the contents rather than being involved in the video creation. With the ease of access to the internet, teachers can search, find, and download video materials appropriate for their teaching practices. A review study from Farrell (2016) reinforces that video is one of the most popular technological tools among ELT teachers. Nonetheless, some variables, e.g., knowledge, experience, and facility may prevent teachers from manifesting their beliefs about the use of video in their classroom practices (Kartchava et al., 2020). In relation to this, Christ et al. (2017), who surveyed international teachers' use of video, found "...that variables that affect teacher educators' video use are not always the same as variables that affect educators' uses of technology more broadly" (p.31).

## 2. LITERATURE REVIEW

#### 2.1 Teachers' Beliefs

Every teacher, including English teachers, has beliefs, particularly about their teaching contexts, such as their students, roles, responsibilities, and subject discipline. However, conceptions of teachers' beliefs are varied (Pajares, 1992). Clark (1988) articulated that the concepts of teachers' beliefs are usually inferred and reconstructed by researchers rather than articulated clearly by the subjects. Consequently, the concepts of teachers' beliefs tend to be presented by using some different terms in the published work, e.g., teachers' perspectives (Goodman, 1988), teachers' thinking (Clark, 1988), and teachers' cognition (Borg, 2003). Beliefs are defined as conceptions, personal ideologies, and values, which shape practice and affect learning (Ernest, 1989). Ways to describe the connection between tasks, actions, and events can also be considered as beliefs (Eisenhart et al., 1988). Beliefs are unobservable, yet we can know what people believe through what they say, intend, and do (Pajares, 1992).

Teachers' beliefs emerge as part of teachers' professional growth (Kagan, 1992). Therefore, understanding the forms and functions of teachers' beliefs will bring us closer to understanding how good teachers are shaped. Few would question the basic tenet that what teachers believe affects their perceptions and judgments of the teaching and learning process, which influences teachers' behavior in the classroom (Pajares, 1992). Understanding the structures of teachers' beliefs is important in the improvement of teachers' professional preparation and teaching practice (Leem & Sung, 2019). Early studies have pointed out that if a change in classroom practice is the intended outcome, addressing the change in teachers' beliefs about the use of the provided technology is crucial (e.g., Ottenbreit-Leftwich et al., 2010; Palak & Walls, 2009). In this regard, recent studies conducted among English language teachers have found several insights: 1) teachers' content-specific pedagogical beliefs can be different, which, in turn, results in the various ways of utilizing the same type of technological tools (Ding et al., 2019), 2) EFL teachers commonly share positive views on the use of digital technology, but gender, age, and teaching experience cannot alter teachers' beliefs (Hol & Aydın, 2020), and 3) despite having adequate knowledge of technology use in teaching, teachers may still be hesitant and unable to use technology in their classroom practices due to inadequate training, resources, and facilities (Nugroho & Mutiaraningrum, 2020).

The primary focus of the present study is on teachers' beliefs about the video, which are defined as teachers' ideologies, conceptions, and values about video materials in relation to their practice in English Language Teaching. EFL teaching situations require a specific approach emphasizing language forms and obtaining command of culture-specific communicative behavioral patterns (mainly non-verbal and lifestyle ones), typical of English-speaking countries (Tarnopolsky, 2000). Besides, in EFL situations, English is used in very few internal communicative functions, in academic forums, and certain socio-political situations, such as lecturers, and teachers (Nayar, 1997). In terms of learning goals, teaching EFL aims to develop learners' English skills to be near-native competence, especially to communicate with native speakers of English (Jenkins, 2006). EFL teachers need to find an alternative way to fulfill the learners' needs because most EFL teachers are non-native speakers of English. The alternative method must be able to facilitate meaningful language learning activities. In this case, video can play various crucial roles in teaching English in foreign language contexts. Video materials can help EFL teachers make languagelearning activities more interactive and communicative through visual and audio stimulus (Tschirner, 2001).

# 2.2 The Relationships between Teachers' Beliefs and Their Practices

The intricate relationships between teachers' beliefs and their practice have attracted many researchers in the field of teacher education (Fang, 1996). Some research findings support the notion of the consistency between teachers' beliefs and their practice. The findings indicated that teachers teach based on their pedagogical beliefs. Richardson et al. (1991) examined teachers' beliefs on the six categories used in teaching reading comprehension, namely use of basals, flexibility, consideration of prior knowledge, oral/silent reading, interrupt/verbal, and vocabulary in context. They used interviews as the data generation instrument and then compared the results with the teachers' classroom practice. They found that the teachers practiced most of their beliefs in teaching reading comprehension. In the case of pre-service teachers, Stuart and Thurlow (2000) believed that their classroom practice seems to be influenced by their beliefs about the teaching and learning processes and their previous learning experiences. Additionally, Johnson (1992) studied 30 NNS English teachers' beliefs and their practice during literacy instruction. The study centered on the extent to which the NNS teachers embraced pedagogical beliefs in ESL contexts and how they reflected those beliefs in their practice. He discovered that ESL teachers' pedagogical beliefs were consistent with their practice.

However, some research also shows inconsistencies between teachers' beliefs and their practices. Much of the research is in teaching reading. For example, Kinzer (1988) found that although pre-service and in-service teachers hold the same beliefs about theoretical orientation in teaching reading and how reading skills develop, inservice teachers' practice is generally inconsistent with their beliefs compared to preservice teachers. In-service teachers interpret issues related to teaching reading in different ways. These different ways of interpreting issues make them take actions that are generally different from their beliefs. Kinzer's (1988) finding was reinforced by

Readence et al.'s (1991) study that discovered considerable variations in teachers' instructional practice, although they all held the same beliefs about teaching reading.

Nowadays, along with technological advancements, expectations placed on teachers have gone beyond traditional teaching. The use of technology in the 21st-century teaching and learning is of requirement. Although such an implicit requirement often turns into obstacles to be overcome, teachers recognize the value of technology for teaching and learning (O'Neal et al., 2017). Teachers' beliefs and use of technology in teaching can be affected by the stability, convenience, and interactivity of the technological devices, which then relate to the perceived usefulness and ease of use in teaching and learning (Leem & Sung, 2019). Teachers' beliefs of technology, in general, may be positive, yet they may still struggle to carry out instructional technology due to several factors, e.g., facility, policy, and guidance (Jones, 2017). Nevertheless, an empirical study from Fauzi et al. (2017) identified the interrelationships among teachers' beliefs about English, teaching and learning, and video use. Their findings did not disclose a discrepancy between teachers' beliefs and teaching practices vis a vis using video in English teaching.

## 2.3 The Research Gaps

The present study addresses the research gap between teachers' beliefs and their classroom practices using video in ELT. It also seeks to identify any inconsistency between teachers' beliefs and practices and the underlying factors. Teachers' beliefs guide teachers in making decisions and taking actions in the classroom (Guskey, 2002). Besides, teachers' beliefs shape teachers' classroom behavior (Pajares, 1992). However, teachers' beliefs about technology do not always mean they change their practice following their beliefs (Judson, 2006). Even when teachers are in a technologically rich environment or school, such an environment does not always change teachers' beliefs about technology and does not always encourage teachers to use technology in their practice (Palak & Walls, 2009). On the other hand, teachers in ELT commonly need to find an alternative way to fulfill the learners' needs because most EFL teachers are non-native speakers of English. The alternative way must be able to facilitate meaningful language learning activities. In this case, video can play various crucial roles in teaching English in foreign language contexts. Video materials can help EFL teachers make language-learning activities more interactive and communicative through visual and audio stimuli (Tschirner, 2001). Research about whether the video can really work as a speaking stimulus integrated into foreign language learning activities has not been explored yet. However, some researchers often mention it implicitly. For instance, Hill (1999) believed that video can afford a whole range of stimuli that provoke active oral work more effectively compared to other means when it is carefully and sympathetically handled.

However, Ertmer (2005) argued that teachers may believe that technology such as video can be usefully integrated into language teaching, particularly to promote problem-solving activities, but their teaching practice can be different from what they believe. Furthermore, Albion and Ertmer (2002) contended that although teachers believe in the benefits of the integration of technology into ELT, they might still not apply such beliefs in their practice due to their weak personal capacity to implement their beliefs. Their argument was based on Bandura (1997), who argued that beliefs in one's abilities throughout the courses of action are required to manifest the beliefs into

existence. It seems that teachers' beliefs and their practice are not always consistent. Some research has confirmed the inconsistency between teachers' beliefs about technology and their practice. Judson (2006), for instance, conducted a study to find a connection between how teachers integrate technology and their beliefs. His study involved 32 classroom teachers and used surveys and observation as the research methods. He found that the analysis did not disclose a significant connection between teachers' beliefs about technology and their practice. In other words, what the teachers believe about technology does not necessarily resonate with their technology classroom practice.

At this point, the brief review of the literature has shown limited empirical evidence concerning what causes inconsistencies between teachers' beliefs about technology and their use of technology in ELT, especially on the use of video technology. The exploration in this area may be beneficial in the effort of advocating for English teachers to integrate technology into their teaching practice. This study, hence, attempts to address the following research questions:

- 1. What are English teachers' beliefs about the integration of video technology into ELT?
- 2. What are the key factors causing the inconsistency between teachers' pedagogical beliefs about video and their ELT classroom practice?

#### 3. METHODS

# 3.1 Research Design

This study employed a qualitative research design that explored teachers' beliefs and classroom practices using video in ELT. Qualitative research generally focuses on understanding and exploring human beings' experiences in a humanistic and interpretive approach (Jackson et al., 2007). In this study, the design was emphasized not only on understanding teachers' beliefs about video use in ELT but also on how their beliefs are consistently or inconsistently linked to their classroom practices. A qualitative design was chosen for it enabled researchers to delve into the participants' personal experiences (Munby, 1984). Besides, most preceding research about teachers' beliefs used a qualitative research method (e.g., Aguirre & Speer, 2000; Davis et al., 1993). When a research method is used frequently by other researchers for certain areas of studies, it is an indication that the research method has been endorsed by researchers (Creswell, 2008).

## 3.2 Participants

The participants in this study were three English teachers at a private educational institution in Indonesia. All the participants possessed undergraduate degrees in English education from the University of Bengkulu. Prior to the data collection, the participants were comprehensively informed about the research's purpose and the related details. It was agreed that the participants' real names would be kept confidential, and pseudonyms were used to identify the participants. The participants' permissions, both orally and in written forms, had been obtained for ethical considerations. During the data collection process, the participants chose the

interview language, schedules, and places. This research was conducted ethically, which involved written consent forms, verbal agreements, and transparent processes on how the data would be analyzed and used for research purposes.

The first participant was Siska, a 24-year-old woman from Curup, Bengkulu, Indonesia, who graduated from the university in 2009. She started her work at the education institution soon after her graduation. She also taught at a public vocational school for students in grades X and XII. Siska had three and a half years of teaching experience with various types of learners. At the educational institution, her responsibility involved teaching English to children at the foundation, intermediate and advanced levels.

The second participant was Ani, a 22-year-old woman from Bengkulu City, Bengkulu, Indonesia. Ani obtained her bachelor's degree in 2011 at the univeristy in the field of English education. She had been teaching English through private English classes since being a university student. Upon her graduation, she began to teach English conversation classes at the institution and taught speaking classes at an elementary school.

The last participant was Cici, a 23-year-old woman from Bengkulu City, Bengkulu, Indonesia. Cici received her undergraduate degree in July 2010. When she was still a university student, she taught private English classes. After she graduated from university, she started to teach at an educational institution. She had taught a wide variety of classes, for example, English conversation, TOEFL, Beginner, Foundation, and Elementary classes. Her students varied from children to junior and high school students to adults. She had two years of teaching experience.

## 3.3 Instrument

Semi-structured interviews were used to gather data related to teachers' beliefs about video and their use of video in practice. This type of interview enabled follow-ups of respondents' points in the interview sessions and to explore the points more deeply by using probing questions. Coombes (2001) states that the semi-structured interview is much more flexible than the structured interview. In the semi-structured interview, researchers can add additional comments and explore what they find during interview sessions using probing questions. Probing questions are a list of questions prepared by researchers, which will be used if the respondents' responses relate to those questions. Some questions may not be used, as the respondents do not say anything related to them.

The interview questions consisted of three parts: an introduction, questions about teachers' beliefs about video and their use of video in practice, and an endnote. In the introduction section, this research's objective was explained to the participants; then, questions about the participants' background information, such as their educational background and teaching experience, were given. In the next section, there were two main questions extracted from the research question and twelve probing questions extracted from some literature about teachers' beliefs, teachers' practices, and the use of technology in ELT.

Before the interview sections were conducted, two experts reviewed the questions in the field of ELT, thereby confirming the content validity of the used instrument (Fraenkel et al., 2015). Each interview question was derived from the findings and suggestions from related previous empirical studies. After performing the

expert consultations, the interview questions were arranged in a table and prepared for the interview sections. All the interview sections were conducted in English. Table 1 presents the probing questions and references.

Table 1. Probing questions.

Table 1.1 fooling questions.		
Probing questions	Factors/ topics	References
1. How is your experience of learning and	Teachers' experience	Albion & Ertmer
teaching English with the video?  2. How are you inspired to believe video is	Teachers' inspiration	(2002) Albion & Ertmer
useful in teaching ECC?	reachers hispiration	(2002)
3. Have you gained some practice or training in using video in ELT?	Teachers' practice or training	Kagan (1992)
4. Have you ever seen your colleagues or friends using video in teaching English?	Colleagues' influences	Palak & Walls (2009)
5. Have you ever read some literature about using video in ELT or teaching ECC?	Reading literature	Kagan (1992)
6. When will you decide to use video in teaching ELT?	Teachers' decision making	Dexter et al. (1999)
7. Do you have the basic knowledge and	Teachers' knowledge and	Dexter et al.
skills of using video in teaching English conversation?	skills in using technology	(1999)
8. Have you ever faced certain problems or	Teachers' problems and	
situations that make you believe video can	experience	
be the solution?		
9. What is your teaching philosophy? Please, explain,	Teachers' teaching philosophy	Judson (2006)
10. Is there any restriction in the level of	Institution's regulations in	Readence et al.
curriculum or syllabus in the institution?	curriculum and syllabus	(1991)
11. Does the classroom situation prevent you	Classroom constraints	Palak & Walls
from integrating video into ECC?		(2009)
12. How do you perceive the correlation	Teachers' perception	Palak & Walls
between video and teaching English		(2009)
conversation as a speaking stimulus?		

#### 3.4 Data Analysis

The data analysis followed the procedures suggested by Stake (2006), which consisted of two stages: within-case analysis (Stage 1) and cross-case analysis (Stage 2). In the first stage, the coding scheme was focused on identifying the details of each participant's beliefs and classroom practices on the use of video in ELT. The details could include personal experiences, perceptions, technological skills, and knowledge. The purpose of Stage 1 was to create an individual profile of each participant's information based on the answers given during the interviews. After that, cross-case analysis was conducted by comparing the three participants' profiles; at this stage, the focus was to identify the similarities and dissimilarities across the participants' responses. The interview results were grouped into two tables. Each of the tables had one topic code. The first table contains the interview results from participants whose beliefs about the video were inconsistent with their teaching practice, while the other table provides the interview results from participants whose beliefs about the video were consistent with their teaching practice. This procedure referred to Coombes (2001), who suggested using individual topic codes in analyzing data that use openended answers such as interviews. Then, the data about the interview questions, participants' answers in the interview sessions, and factors or topics of the interview

questions were added to the two tables. Afterward, a thorough analysis of the results was conducted to find the general sense of the data, group them, and then list the emerging themes. This was based on Creswell (2008), who advised that to analyze qualitative data, researchers need to explore the general sense of the data, code the data, and then list the themes that emerge.

#### 4. RESULTS

# 4.1 English Teachers' Beliefs about the Use of Video in ELT

The three teachers had the same perceptions of the use of video in ELT. They agreed that video is useful in enhancing students' speaking skills and can increase students' motivation to learn English. They believed that video could provide any language input for students and contribute to output processing such as pronunciation and sequences of words and draw students' attention to the language form rather than meaning and provide situated learning. Specifically, Siska believed that video visual elements would allow students to imitate people's language in the video. Cici was certain that video would attract students' attention and encourage them to speak up. Ani contended that video would offer a wide range of interactivity in learning for students. The interactivity in the video could potentially attract students' interests in learning, enable students to learn from audio and visual forms, increase students' confidence in speaking, and provide more language models for pronunciation. For teachers, Ani believed that video would help her deliver her teaching materials vividly. Below are some of the excerpts from the interview. D refers to data that are displayed in this section.

- D1 "I think it can increase students' motivation in learning English, especially speaking skills. Besides that, it can make the speaking class more interesting." (Siska)
- D2 "Video could be an effective media as speaking stimulus, which can encourage (students)." (Cici)
- D3 "Video is a good media in a conversation class, a good combination to stimulate the students in speaking." (Ani)

The three of them believed that the purpose of integrating video into ELT should enable students to present and retrieve information (factual and inferred), evaluate and respond appropriately, reformulate for a different purpose, discuss, and interact efficiently at different levels of formality. In the implementation process, they contended that there should be some language changes as a tool, i.e., lexis, grammar, intra and inter-sentential relations, and discourse structure to the language's message, i.e., its informational content and its practical use in the video. Furthermore, the unit of texts in the video should be either transaction or interaction with short texts (not necessarily complete) or interaction and complete texts with a duration of three to eight minutes used in the classroom.

Two of the three, Siska and Ani, had the experience of learning English by using video when they were students at the university. The type of video used was conversation videos. Furthermore, the ways their lecturers utilized the video materials in their classrooms were basically similar. They asked the students to watch the video,

and then they assigned the students to tell the content of the video to other students, as seen in the following interview excerpts.

- D4 Q: "Have you ever used video or any technological tools when being a learner?" (Question)
  - I: "Yes, I have, when I was a university student. At the time, my lecturer asked us to watch the video that showed a conversation. Then she asked us to retell the content of the conversation by using our own words. We were also asked to answer some questions about the video. In my opinion, it is so interesting. Although firstly it is not easy to follow because we watched and listened to the native (speakers), but it motivates me to learn English by watching English films." (Siska)

D5 displays the interview with Ani.

- D5 Q: "Do you have any experience of learning by using video materials?"
  - A: "Yes, I have. When I was studying at university in Speaking 3 Class."
  - Q: "Could you tell me the details? Including how you used it and how your lecturers used it?"
  - A: "Ok, first, as usual, do an introduction, then let the students know the topic of the day, for example, talk about greeting; the teacher tells all about greeting. The students also can read from their textbook, then make a simple conversation, make some groups, let the students talk (with their peers), then give them some integrating video. Finally, ask the students to give feedback from the video."
  - Q: "Is that what you experienced when learning by using video materials?"
  - A: "Yes."

On the other hand, Cici did not have any experience of learning English by using video materials. However, she had the experience of witnessing her seniors teaching by using video materials in the classroom.

D6 "I do not have experience with that, but I have seen my senior teaching English by using the video. I have just ever taught English by using a tape recorder." (Siska)

Nonetheless, Siska and Ani never saw their colleagues or friends using video materials in teaching English, but Cici had seen her senior in teaching using video materials in the classroom. The responses reflected that Siska and Ani did not have any colleague's influences.

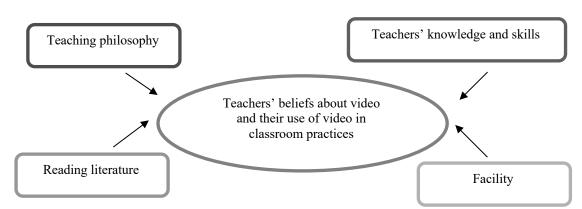
Moreover, the three teachers had different teaching philosophies. Ani's teaching philosophy was that the combination of textbooks and teaching media would make a language class more interesting. Her teaching philosophy was consistent with her use of video in practice. Siska's teaching philosophy was that a language class should not contain much silence. Since students were studying a language, they needed to practice, both verbally and literally. Meanwhile, Cici's teaching philosophy was that teaching was very important. Therefore, she would love teaching as much as she loves her God, implying her identity as a religious person.

However, the interview results revealed that only Ani possessed adequate knowledge and skills using video in ELT. The other two teachers did not have such knowledge and skills. The three teachers knew about the use of video in ELT, and they were familiar with online videos such as YouTube, Vimeo, and BBC programs. They also thought that homemade videos/language training videos (conversation videos between two or more people) and online videos (e.g., short films, movies, news, and BBC programs) could be used in teaching English.

Ani had read literature about using video materials in language teaching, yet, Siska and Cici never read such literature. Among the three, it was only Ani who had used video in teaching English. Ani said that she used short films, cartoons, and video clips displayed on the LCD projector in the classroom. All these responses demonstrated that Ani initiated herself to find and provide the equipment to use video materials in her English teaching. Moreover, the ways Ani used the video materials in her classes were the same way as her lecturers taught her when she was learning English using video materials at the university level.

## 4.2 The Key Factors

The interview results disclosed four factors that appeared to be the key factors causing the inconsistency between teachers' pedagogical beliefs about video and classroom practices. The first factor was teaching philosophy. Siska's and Cici's teaching philosophies did not point out technology integration roles in their teaching contexts, and this is different from Ani's teaching philosophy. The second factor was teachers' knowledge and skills in using video technology. Siska and Cici did not possess adequate knowledge and skills in using video materials in teaching ELT, but Ani had. The third factor was reading literature. Siska and Cici never read any literature about using video materials in language teaching, yet, Ani had read some articles related to the use of video in English teaching. The last factor was the facility. The educational institution where the participants worked did not provide the facility that enabled the use of video materials for teaching. Therefore, this became the reason for Siska and Cici to not use any video materials in their classroom teaching practices. However, despite the lack of facility, Ani could still manage to use video materials in teaching her English conversation classes. She could find alternatives, although the institution did not provide such facilities.



**Figure 1.** Illustration of the four key factors.

## 5. DISCUSSION

The primary goals of this study were to explore teachers' beliefs about video and their use of video in English Language Teaching, and uncover the key factors causing the inconsistency between teachers' pedagogical beliefs about video and their teaching practice. The findings of the first research question disclosed that the three teachers

held positive views about the use of video technology in English teaching, which sustained the findings from the previous studies (e.g., Ding et al., 2019; Farrell, 2016; Hol & Aydın, 2020; O'Neal et al., 2017). Nevertheless, having positive beliefs about video did not necessarily reflect the teachers' classroom practices. The findings from the second research question confirmed such a case, in which only one of the three teachers had used video technology in her classroom teaching. In this instance, an inconsistency between teachers' beliefs and classroom practices existed, and this followed the findings from Judson (2006) and Jones (2017). Four key underlying factors were identified, as elaborated below.

## 5.1 Teaching Philosophy

Teaching philosophy constitutes a complex composite of views on how students and teachers should conduct the learning process to achieve the desired outcomes (Sawers et al., 2016). The present study observed that teachers' teaching philosophy was what drove one of the teachers to utilize video technology in her classroom practices. Ani's teaching philosophy pointed out directly the correlation between textbooks and teaching media (i.e., technology) to attract students' interest in learning. Ani implicitly believed that the teaching and learning process would likely go well and become more successful by the time students found the language class interesting. However, in Siska and Cici's cases, they did not have such a drive since their teaching philosophies did not point out the roles and benefits of technology integration for their teaching contexts. Consequently, their beliefs about video can be used as a speaking stimulus in teaching English conversation class remain as beliefs merely without further classroom teaching actions.

Teaching philosophy as a cause of the consistency between teachers' beliefs and practices on the use of video technology has not been explored much. Alexander et al. (2012) elaborated that teaching philosophy can be a potential tool that mediates between teacher and technology. Teaching philosophy grows together with teachers' experiences, knowledge, and skills, which means that it can be influenced by certain conditions that make teachers grasp the classroom practice with video technology. Karamifar et al.'s (2019) study involving EFL teachers discovered that most EFL teachers perceived the existing relationship between technology and excellence in classroom teaching. Nonetheless, they did not include technology in their ideal classroom practices, which was seemingly caused by their insufficient use of technology. Teachers' positive remarks for integrating technology in ELT should not be interpreted in a way that they must have frequently used technology in their teaching practices (Kazemi & Narafshan, 2014). Specifically, the present study shall go on to suggest that teachers' teaching philosophy should not be disregarded when the goal is to make teachers use video technology in their classroom teaching.

## 5.2 Teachers' Knowledge and Skills in Using Video Technology

Teachers' decisions on using technology in their classroom practice are based on their knowledge and expertise in using such technology (Dexter et al., 1999). Teachers are very unlikely to integrate any technology into their classrooms only because of the attractive features offered by the technology. Also, in Palak and Walls' (2009) study about teacher beliefs and technology, they found that the only teacher

who had integrated technology into her classroom practice had pedagogical content knowledge and technical ability in using technology. In the present study, inadequate knowledge and skills in using video technology are the next factors causing the inconsistency between teachers' pedagogical beliefs about video and their classroom practice. Although Siska and Cici know the use of video in ELT and have been familiar with online videos such as YouTube, Vimeo, and BBC programs, it does not mean that they possess the knowledge and skills to use video as a speaking stimulus in teaching English conversation class as they said in the interview sessions.

On the other hand, Ani had the knowledge and skills in using video technology in teaching English conversation classes. Her adequate knowledge and skills in using video technology led her to use technology in her teaching practice. She also experienced learning by using video technology when she was at the university in speaking class. In her teaching practice, she used video materials in the same ways as her lecturers had taught her when she was a university student. Palak and Walls (2009) explained that the lack of technology models can cause teachers not to use technology in their classroom practice. Nevertheless, in Ani's case, she considered the ways her lecturers taught her by using video technology as the model for using video technology in teaching English conversation class.

Naturally, one would think that teachers' knowledge and skills in video technology is one of the critical factors preventing teachers from using the technology in their practices. The findings of the present study have confirmed such thought. A recent study from Ding et al. (2019) examined teachers' beliefs and practices on technology usage and identified both alignment and misalignment between teachers' content-specific beliefs and use of technology in the classroom. Enhanced by an early study by Ertmer et al. (2012), it was advised that misalignments could occur due to limited technology access; however, at the same, there were still those who could manage to use technology despite the limited condition. Thus, in the present study, it is suggested that teachers' knowledge and skills in using technology can potentially be a key factor causing teachers to use video technology in their practices although they had limited facilities. For some teachers, overcoming technology use barriers in the classroom is considered a bigger indicator of success, which encourages them even more to use technology (Ruggiero & Mong, 2015).

#### **5.3** Reading the Literature

Reading the literature has been one of the ways to develop disciplinary literacy, which can stimulate ideas and inspirations for future improvements in teachers' works (Park, 2013). Nevertheless, discussions about how reading the literature can encourage teachers' practices on the use of technology in the classroom are still rare. In this research, reading the literature was noted to be one of the key factors that caused two of the three teachers did not use video technology in their teaching despite their positive beliefs. Siska and Cici never read any literature about using video materials in language teaching, making them to lack ideas to transform their beliefs about video into practice. They did not receive any idea of using video technology in language teaching from their actual practice and others' practice, particularly those from the literature. Conversely, Ani had read some literature about using video materials in language teaching, which helped her put her beliefs about video into practice. This finding suggests that to transform their beliefs into practice, teachers need ideas.

Teachers usually acquire most of their ideas from their actual practice and then from the practice of fellow teachers. In such a sense, literature constitutes one of the sources for teachers to obtain ideas for their teaching practices.

## 5.4 Facility

The facility issue always becomes an obstacle for teachers to implement their beliefs in their practice since much effort is needed to make it available. This may be what happened to Siska and Cici. Although the classroom situations and institutions allowed them to integrate any video material to support their teaching practice, they could not cope with the facility issues. They had also faced some problems or situations that made them thought video could be the solution; nonetheless, they chose not to search for an alternative that could enable them to use video materials in their English conversation classes. Moreover, the lack of facilities has always been pointed out to be one of the crucial factors (e.g., Fauzi et al., 2017; Jones, 2017; Ruggiero & Mong, 2015) as teachers would have to be creative using the available technological tools or afford the technological tools by themselves. Yet, these four key factors might have to be linked to one to another. It began with Siska's and Cici's teaching philosophies that were not concerned about the roles and benefits of using technology in their teaching contexts. As a result, they did not possess the drive or passion for using technology in their practices. Then, they did not have adequate knowledge and skills of using video technology in teaching English conversation. They had never read any literature about using video in language teaching, which made them lack ideas. Therefore, they eventually gave up when they found that the educational institution did not provide any video materials for teaching. Ani's case can also be described in the same way, which eventually disclosed why she could initiate the effort to find other alternatives for using video materials in her teaching practices.

# 6. CONCLUSION

To sum up, this study has identified teachers' beliefs about video and their use of video in English Language Teaching. At least two lessons can be learned from this study. First, teachers may believe that video has the potential to be used as a speaking stimulus in teaching English conversation classes. However, it does not mean that they will use video in their teaching practices (Ertmer, 2005; Judson, 2006). Second, teachers may use video in their teaching practice for their beliefs if they can fulfill three requirements. Firstly, their teaching philosophies must value technology integration benefits in their teaching contexts (Judson, 2006). Secondly, they have basic knowledge and skills in using video (Dexter et al., 1999; Palak & Wall, 2009). Thirdly, they must read literature related to using video materials in ELT. Although the institution where they work does not provide any facility that can support the use of video materials in teaching, they can still find alternatives to use video in their teaching practice. This is what happened to Ani, one of the participants in this study whose beliefs about the video were consistent with her teaching practice.

The findings of this study have several pedagogical implications in aligning teachers' beliefs about the use of video in ELT and their classroom practices. The first implication is that proper supports in line with teachers' beliefs are needed if teachers'

use of video technology in the classroom is the intended outcome. The proper supports may include providing access to literature related to technology usage in the classroom for teachers, which can potentially influence teachers' teaching philosophies and direct them to the use of the technological tools in their classroom teaching practices. It is argued that addressing teachers' beliefs are essential to facilitate technology integration in the classroom among teachers (Kim et al., 2013). Secondly, teachers' beliefs about the benefits of using video in ELT should no longer be a problem because, along with the previous studies, the present study has confirmed that English teachers generally share positive views. Therefore, policymakers and stakeholders should focus on creating a school environment that can enhance teachers' knowledge and skills in the use of technology for teaching and supplying more technological tools to address the lack of facilities. Lastly, technology has gradually been a vital part of the success of student learning. Particular attention should be given to the four key factors underlying the inconsistency between teachers' beliefs and classroom practices, including teaching philosophy, technological knowledge, skill, reading literature, and facility. The failure to address these factors may result in a situation where teachers do not use the provided technological tools in the classroom.

As much as this study intends to offer, there are several limitations to be recognized. This study employed a qualitative research design involving a small number of participants. Although the research design had facilitated the achievement of the research objectives, it did not make use of numerical data and inferential statistics. Due to the small scope, the findings may also be limited and should not be generalized to all contexts; however, similar findings may be attained if they share some similarities, such as teaching environment and educational background. For future research, this study recommends the use of action research methodology to gain deeper understandings of how the four key factors influence the teachers to move from not using technology (i.e., video) to using it in their teaching contexts. The research time may be longer than this study since the participants need to be treated with the four key factors, yet, the findings can be meaningful for developing research in this area.

#### REFERENCES

- Aguirre, J., & Speer, N. M. (2000). Examining the relationship between beliefs and goals in teacher practice. *Journal of Mathematical Behavior*, 18(3), 327-356. https://doi.org/10.1016/S0732-3123(99)00034-6
- Albion, P. R., & Ertmer, P. A. (2002). Beyond foundations: The role of vision and belief in teachers' preparation for integration of technology. *TechTrends*, 46(5), 34-38. <a href="https://doi.org/10.1007/BF02818306">https://doi.org/10.1007/BF02818306</a>
- Alexander, P., Chabot, K., Cox, M., DeVoss, D.N., Gerber, B., Perryman-Clark, S., Platt, J., Sackey, D. J. and Wendt, M. (2012). Teaching with technology: Remediating the teaching philosophy statement. *Computers and Composition*, 29(1), 23-38. https://doi.org/10.1016/j.compcom.2011.12.002
- Bandura, A. (1997). Self-efficacy: The exercise of control. Freeman.
- Borg, S. (2003). Teacher cognition in language teaching: A review of research on what language teachers think, know, believe, and do. *Language Teaching*, *36*(2), 81-109. https://doi.org/10.1017/S0261444803001903

- Borg, S. (2018). Teachers' beliefs and classroom practices. In P. Garret & J. M. Cots (Eds.), *The Routledge handbook of language awareness* (pp. 75-91). Routledge.
- Budiman, A. (2018). EFL teacher's belief and practice on integrating information and communication technology (ICT) in the classroom. *Asian EFL Journal*, 20(4), 7-22.
- Christ, T., Arya, P., & Chiu, M. M. (2017). Video use in teacher education: An international survey of practices. *Teaching and Teacher Education*, 63(4), 22-35. https://doi.org/10.1016/j.tate.2016.12.005
- Clark, C. M. (1988). Asking the right questions about teacher preparation: Contributions of research on teacher thinking. *Educational Researcher*, 17(2), 5-12. https://doi.org/10.3102/0013189X017002005
- Coombes, H. (2001). Research using IT. Palgrave.
- Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research.* Pearson.
- Davis, M. M., Konopak, B. C., & Keadence, J. E. (1993). An investigation of two chapter I teachers' beliefs about reading and instructional practices. *Reading Research and Instruction*, 33(2), 105-118. https://doi.org/10.1080/19388079309558148
- Dexter, S. L., Anderson, R. E., & Becker, H. J. (1999). Teachers' views of computers as catalysts for changes in their teaching practice. *Journal of Research on Computing* in Education, 3(3), 221-239. https://doi.org/10.1080/08886504.1999.10782252
- Ding, A. C. E., Ottenbreit-Leftwich, A., Lu, Y. H., & Glazewski, K. (2019). EFL teachers' pedagogical beliefs and practices with regard to using technology. *Journal of Digital Learning in Teacher Education*, 35(1), 20-39. https://doi.org/10.1080/21532974.2018.1537816
- Eisenhart, M. A., Shrum, J. L., Harding, J. R., & Cuthbert, A. M. (1988). Teacher beliefs: Definitions, findings, and directions. *Educational Policy*, 2(1), 51-70. https://doi.org/10.1177/0895904888002001004
- Ernest, P. (1989). The knowledge, beliefs and attitudes of the Mathematics teacher: A model. *Journal of Education for Teaching: International Research and Pedagogy*, 15(1), 13-33. https://doi.org/10.1080/0260747890150102
- Ertmer, P. A. (2005). Teacher pedagogical beliefs: The final frontier in our quest for technology integration? *Educational Technology Research and Development*, 4(53), 25-39. <a href="https://doi.org/10.1007/BF02504683">https://doi.org/10.1007/BF02504683</a>
- Ertmer, P., Ottenbreit-Leftwich, A. T., Sadik, O., Sendurur, E., & Sendurur, P. (2012). Teachers' beliefs and technology integration practices: A critical relationship. *Computers* & *Education*, 59(2), 423–435. <a href="https://doi.org/10.1016/j.compedu.2012.02.001">https://doi.org/10.1016/j.compedu.2012.02.001</a>
- Ertmer, P., Ross, E., & Gopalakrishnan, S. (2000). Technology-using teachers: How powerful visions and student-centered beliefs fuel exemplary practice. In D. A. Willis, J. Price, & J. Willis (Eds.), *Society for Information Technology & Teacher Education International Conference* (pp. 1519-1524). Association for the Advancement of Computing in Education (AACE).
- Fang, Z. (1996). A review of research on teacher beliefs and practices. *Educational Research*, 38(1), 47-65. <a href="https://doi.org/10.1080/0013188960380104">https://doi.org/10.1080/0013188960380104</a>
- Farrell, T. S. (2016). Anniversary article: The practices of encouraging TESOL teachers to engage in reflective practice: An appraisal of recent research

- contributions. *Language Teaching Research*, *20*(2), 223-247. https://doi.org/10.1177/1362168815617335
- Fauzi, A., Damayanti, D., & Ilahi, T. (2017). A teacher's beliefs on the integration of video technology in teaching speaking: A case study. *International Journal of Pedagogy and Teacher Education*, *I*(1), 46-54. <a href="https://doi.org/10.20961/ijpte.v1i1.4914">https://doi.org/10.20961/ijpte.v1i1.4914</a>
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2015). *How to design and evaluate research in education* (9<sup>th</sup> ed.). McGraw-Hill Education.
- Gillespy, G. R. (2020). Teacher self-perceptions of skills and beliefs using technology in classroom practice [Unpublished doctoral dissertation]. Boise State University.
- Goldstein, B. (2017). A history of video in ELT. In K. Donaghy & D. Xerri (Eds.), *The image in English language teaching* (pp. 23-31). Gutenberg Press.
- Goodman, J. (1988). Constructing a practical philosophy of teaching: A study of preservice teachers' professional perspectives. *Teaching & Teacher Education*, 4(2), 121-137. https://doi.org/10.1016/0742-051X(88)90013-3
- Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teaching: Theory and Practice*, 8(4), 381-391. https://doi.org/10.1080/135406002100000512
- Haukås, Å. (2016). Teachers' beliefs about multilingualism and a multilingual pedagogical approach. *International Journal of Multilingualism*, 13(1), 1-18. https://doi.org/10.1080/14790718.2015.1041960
- Hill, B. (1999). *Video in language learning*. The Centre for Information on Language Teaching and Research.
- Hol, D., & Aydın, I. (2020). Is technology in our classrooms? EFL teachers' beliefs and engagement with technology in the classroom. *Journal of Educational Issues*, 6(2), 38-58. https://doi.org/10.5296/jei.v6i2.17326
- Jackson, R. L., Drummond, D. K., & Camara, S. (2007). What is qualitative research? *Qualitative Research Reports in Communication*, 8(1), 21-28. <a href="https://doi.org/10.1080/17459430701617879">https://doi.org/10.1080/17459430701617879</a>
- Jenkins, J. (2006). Points of view and blind spots: ELF and SLA. *International Journal of Applied Linguistics*, 2(16), 137-162. <a href="https://doi.org/10.1111/j.1473-4192.2006.00111.x">https://doi.org/10.1111/j.1473-4192.2006.00111.x</a>
- Johnson, K. E. (1992). The relationship between teachers' beliefs and practices during literacy instruction for non-native speakers of English. *Journal of Reading Behavior*, 24(1), 83-107. https://doi.org/10.1080/10862969209547763
- Jones, S. J. (2017). Technology in the Montessori classroom: Teachers' beliefs and technology use. *Journal of Montessori Research*, 3(1), 16-29. <a href="https://doi.org/10.17161/jomr.v3i1.6458">https://doi.org/10.17161/jomr.v3i1.6458</a>
- Judson, E. (2006). How teachers integrate technology and their beliefs about learning: Is there a connection? *Journal of Technology and Teacher Education*, 14(3), 581-597.
- Kagan, D. M. (1992). Implication of research on teacher belief. *Educational Psychologist*, 27(1), 65-90. <a href="https://doi.org/10.1207/s15326985ep2701\_6">https://doi.org/10.1207/s15326985ep2701\_6</a>
- Kane, R., Sandretto, S. & Heath, C. (2002). Telling half the story: A critical review of research on the teaching beliefs and practices of university academics. *Review of Educational Research*, 2(72), 177-228. https://doi.org/10.3102/00346543072002177

- Karamifar, B., Germain-Rutherford, A., Heiser, S., Emke, M., Hopkins, J., Ernest, P., Stickler, U. and Hampel, R. (2019). Language teachers and their trajectories across technology-enhanced language teaching: Needs and beliefs of ESL/EFL teachers. *TESL Canada Journal*, *36*(3), 55-81. <a href="https://doi.org/10.18806/tesl.v36i3.1321">https://doi.org/10.18806/tesl.v36i3.1321</a>
- Kartchava, E., Gatbonton, E., Ammar, A., & Trofimovich, P. (2020). Oral corrective feedback: Pre-service English as a second language teachers' beliefs and practices. *Language Teaching Research*, 24(2), 220-249. <a href="https://doi.org/10.1177/1362168818787546">https://doi.org/10.1177/1362168818787546</a>
- Kazemi, A., & Narafshan, M. H. (2014). Technology and English language teaching (ELT). *Advances in Language and Literary Studies*, *5*(6), 60-67.
- Kim, C., Kim, M. K., Lee, C., Spector, J. M., & DeMeester, K. (2013). Teacher beliefs and technology integration. *Teaching and Teacher Education*, 29(1), 76-85. https://doi.org/10.1016/j.tate.2012.08.005
- Kinzer, C. K. (1988). Instructional frameworks and instructional choices: Comparisons between pre-service and in-service teachers. *Journal of Reading Behavior*, 10(4), 357-377. https://doi.org/10.1080/10862968809547651
- Leem, J., & Sung, E. (2019). Teachers' beliefs and technology acceptance concerning smart mobile devices for SMART education in South Korea. *British Journal of Educational Technology*, 50(2), 601-613. <a href="https://doi.org/10.1111/bjet.12612">https://doi.org/10.1111/bjet.12612</a>
- Mao, S. S., & Crosthwaite, P. (2019). Investigating written corrective feedback: (Mis)alignment of teachers' beliefs and practice. *Journal of Second Language Writing*, 45(8), 46-60. https://doi.org/10.1016/j.jslw.2019.05.004
- Munby, H. (1984). A qualitative approach to the study of a teacher's beliefs. *Journal of Research in Science Teaching*, 21(1), 27-38. https://doi.org/10.1002/tea.3660210104
- Nayar, B. P. (1997). ESL/EFL Dichotomy today: Language politics or pragmatics? *TESOL Quarterly*, *1*(31), 9-37. <a href="https://doi.org/10.2307/3587973">https://doi.org/10.2307/3587973</a>
- Nugroho, A., & Mutiaraningrum, I. (2020). EFL teachers' beliefs and practices about digital learning of English. *EduLite: Journal of English Education, Literature and Culture*, 5(2), 304-321. <a href="http://dx.doi.org/10.30659/e.5.2.304-321">http://dx.doi.org/10.30659/e.5.2.304-321</a>
- O'Neal, L. J., Gibson, P., & Cotten, S. R. (2017). Elementary school teachers' beliefs about the role of technology in 21st-century teaching and learning. *Computers in the Schools*, 34(3), 192-206. https://doi.org/10.1080/07380569.2017.1347443
- Ottenbreit-Leftwich, A. T., Glazewski, K. D., Newby, T. J., & Ertmer, P. A. (2010). Teacher value beliefs associated with using technology: Addressing professional and student needs. *Computers & Education*, *55*(3), 1321-1335. <a href="https://doi.org/10.1016/j.compedu.2010.06.002">https://doi.org/10.1016/j.compedu.2010.06.002</a>
- Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research*, 62(3), 307-332. <a href="https://doi.org/10.3102/00346543062003307">https://doi.org/10.3102/00346543062003307</a>
- Palak, D. & Walls, R. T. (2009). Teachers' beliefs and technology practices: A mixed-methods approach. *Journal of Research on Technology in Education*, 41(4), 417–441. https://doi.org/10.1080/15391523.2009.10782537
- Park, J. Y. (2013). All the ways of reading literature: Preservice English teachers' perspectives on disciplinary literacy. *English Education*, 45(4), 361-384.

- Prestridge, S. (2012). The beliefs behind the teacher that influences their ICT practices.

  \*\*Computers\*\* & Education, 58(1), 449-458.

  https://doi.org/10.1016/j.compedu.2011.08.028
- Readence, J. E., Konopak, B. C. & Wilson, E. K. (1991). An examination of content teachers' beliefs and instructional choices and their actual planning and practices [Paper presentation]. Annual Meeting of National Reading Conference, California, U.S.
- Richardson, V., Anders, P., Tidwell, D., & Lloyd, C. (1991). The relationship between teachers' beliefs and practices in reading comprehension instruction. *American Educational Research Journal*, 28(3), 559-586. https://doi.org/10.3102/00028312028003559
- Ruggiero, D., & Mong, C. J. (2015). The teacher technology integration experience: Practice and reflection in the classroom. *Journal of Information Technology Education*, 14(-), 161-178.
- Sawers, K. M., Wicks, D., Mvududu, N., Seeley, L., & Copeland, R. (2016). What Drives Student Engagement: Is it Learning Space, Instructor Behavior or Teaching Philosophy? *Journal of Learning Spaces*, 5(2), 26-38.
- Stake, R. E. (2006). Multiple case study analysis. The Guilford Press.
- Stuart, C. & Thurlow, D. (2000). Making it their own: Preservice teachers' experiences, beliefs, and classroom practices. *Journal of Teacher Education*, 51(2), 113-121. https://doi.org/10.1177/002248710005100205
- Tarnopolsky, O. (2000). EFL Teaching and EFL Teachers in the Global Expansion of English. *Working Papers in Educational Linguistics*, 16(2), 25-42.
- Thurm, D. (2018). Teacher beliefs and practice when teaching with technology: A latent profile analysis. In L. Ball, P. Drijvers, S. Ladel, H. Siller, M. Tabach, & C. Vale (Eds.), *Uses of technology in primary and secondary mathematics education* (pp. 409-419). Springer.
- Tschirner, E. (2001). Language acquisition in the classroom: The role of digital video. *Computer Assisted Language Learning*, 14(3-4), 305-319. <a href="https://doi.org/10.1076/call.14.3.305.5796">https://doi.org/10.1076/call.14.3.305.5796</a>
- Waluyo, B. (2020). Learning outcomes of a general English course implementing multiple e-learning technologies and active learning concepts. *Journal of Asia TEFL*, 17(1), 160-181. https://doi.org/10.18823/asiatefl.2020.17.1.10.160