

English Primary School Teachers' Perceptions of Green Screens in Teaching English

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ABSTRACT

This study explored the use of the green screen in teaching and learning in a primary school. Despite the rising research on green screens in education, limited studies have focused on teachers' perceptions. This study focused on understanding English teachers' perceptions of green screens in teaching English. It drew on a qualitative approach to explore how and why English teachers used green screens in their teaching, the challenges teachers faced while using the green screen, and how their use of green screens impacted their professional development. Participants included five English teachers in a primary school in Malaysia. Data were collected from classroom observations and Stimulated Recall Interviews (SRI). The findings showed that most teachers used green screens to make video content for English lessons. Additionally, the green screen was an effective tool, facilitating teaching and enhancing students' learning. However, the data suggested that using green screens presented challenges, for example, time-consuming, technical issues, cost, inadequate equipment and lack of training. The findings also demonstrated that teachers' professional development was positively and negatively impacted when employing green screens in teaching. Based on these results, it can be concluded that it is important to highlight English teachers' perceptions to examine the effectiveness of green screen technology in teaching English.

Keywords: Green screen, Perceptions, English teaching and learning, Primary teachers, Technology

1.0 INTRODUCTION

In Malaysia, 21st-century learning has drawn significant attention and influenced our national education system. Our curriculum has been improved, and technology usage has been widely introduced and inculcated in the Malaysian education system in schools (Ahmad *et al.*, 2019). As technology implementation has been given attention in current education, Trust Schools in Malaysia, including primary and secondary schools, have been integrating technology in teaching and learning sessions. Trust Schools are public schools funded by Yayasan Amir and led by LeapEd and the Ministry of Education (MOE). This cooperation was created to establish schools that embed sustainable educational practices to develop holistic students with 21st-century skills, improve teaching and learning quality, and provide Trust Schools with expertise and experienced teachers (Hamilton, 2014).

The green screen is one of the latest technologies believed to be beneficial in teaching and learning. With this technology, teachers can superimpose their students onto virtual backdrops, position them over animated digital backgrounds, or transport them to a desert oasis. Green screen technology also enables interactions that imitate the real world and create authentic learning experiences. According to Pantelidis

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(2010), green screen technology has the potential to make a difference at all levels of education as it utilises virtual graphics. Hence, teachers can bring the outside world into teaching and learning through green screen technology without leaving the classroom.

However, green screen technology is less introduced or used by teachers in schools. Saleh and Aziz (2012) reported that teachers still prefer the conventional way of teaching. Teachers prefer to use a more direct approach to teaching to save time and ensure that what must be taught gets delivered. As Bauldauf *et al.* (2011) stated, limited time for language teaching and learning has hampered the implementation of meaningful education policies. Therefore, more research should be conducted in Malaysian school settings to ensure teachers and students can utilise green screen technology in teaching and learning sessions.

In addition, through a review of the literature, many studies revealed the impact of green screen implementation on students (Hansen & Tribune, 2016; Parmar, 2013). Bocolod (2021) reported that students gave positive feedback because green screen technology contributed to their meaningful learning experiences. However, the impact of the green screen on teachers' professional development has rarely been discussed. This issue is important to discuss further so that they will acknowledge the impact of the technology on their development when employing it in teaching and learning sessions. Thus, this study explores English primary teachers' perspectives on using the green screen as a technology tool in teaching English. Specifically, this study aims to answer the following research questions:

1. Why do teachers use the green screen as a tool for teaching English?
2. What challenges do teachers face when a green screen is used to teach English?
3. How does using the green screen to teach English give impact to teachers' professional development?

2.0 LITERATURE REVIEW

2.1 English Teachers in 21st-Century Education

In the 21st century, technology has advanced incredibly and influenced every aspect of human life, such as social, business, and education. Students should be taught 21st-century skills that prepare them for success in school, life, and employment in the 21st century. Fandino (2013) pointed out that to prepare students for the 21st-century workforce, educators need to incorporate digital skills and career ability into the core subjects like English, science, and mathematics. Therefore, English teachers need to be literate in technology for them to cope with the digital era, as well as help them to accelerate optimum achievement in English learning.

Additionally, in a 21st-century educational system, technology must be integrated and purposefully used to support students' learning through innovative teaching and learning practices and develop proficiency in 21st-century skills. Rook-Ellis (2017) highlighted that broadcast projects via videoconferencing helped students build media literacy skills, creativity, communication skills and proficiency in English. Another study by Alsaleem (2014) on using WhatsApp in English dialogue journals revealed that WhatsApp positively impacts students' writing skills, speaking skills, and vocabulary. These studies showed that engaging in technology during the lesson can help students develop proficiency in 21st-century skills (Vockley, 2007) and improve their literacy skills (Picton, 2019).

Therefore, in line with 21st-century education, teachers should apply green screen technology in their teaching as this innovative technology can add a new and exciting dimension to the lessons.

2.2 Use of Green Screen Technology in Teaching English

Green screen technology in education is a modern application of existing technologies for creating and delivering captivating video content for teaching and learning sessions (Hughes *et al.*, 2017). This technology provides a seamless experience for people and has been extensively acknowledged as a valuable technological advancement that can create and deliver the content of the lessons effectively. Additionally, the backdrop of green screen content is not restricted to electronic slides. However, it can also incorporate still images or motion graphics, enhancing students' reading and writing skills (Peregoy & Boyle, 2012).

Furthermore, green screen technology can also virtually transport teachers and students worldwide (Valle & McConkey, 2013). For example, the technology allowed teachers to illustrate visual concepts like visiting a supermarket or virtually experiencing the winter season. In other words, the technology enables the teacher to appear on the video screen synchrony with the delivered content. Therefore, this feature can bring a learning environment to life, create an ambience of a magnificent classroom, and bring teaching and learning to the next level, as it is more interactive and fun (Ahmad *et al.*, 2019).

2.3 Challenges in Using Green Screen Technology

Notably, Coghlan (2004) indicated that lack of access to technology resources is a significant challenge for schools and individuals who cannot afford or do not have access to technology tools. For low and limited-budget schools, the early startup costs and hardware and equipment cost are a big concern (Lai & Kritsonis, 2006). As a result, teachers and students are frustrated because they cannot utilise green screen technology tools that have the power to support learning.

Another factor for teachers' challenges using technology is a lack of time and technical support (Rahman, 2015). For example, in research done in the United Arab Emirates on teachers' perspectives of technology in language instruction, Ismail and Almekhlafi (2010) found that teaching languages are challenging because of teachers' lack of time to prepare and use technology. Similarly, Kereluik *et al.* (2011) reported that integrating technology into their classrooms needed significantly more time and effort than conventional classes that do not incorporate technology. Therefore, teachers must learn how to successfully utilise the technology to maximise its benefits in an educational context.

2.4 Impact of Green Screen Technology on Teaching English

2.4.1 Benefits of Green Screen

Undoubtly, students can learn effectively when green screen technology is applied in the classroom, as it helps them increase their literacy skills. In their study, Peregoy and Boyle (2012) indicated that technology tools enhance students' reading and writing skills because they are user-friendly and enable students to learn faster and more effectively. Several researchers also acknowledge the positive effect of using green screen technology as a pedagogical tool for promoting effective learning for students (Lynch & Maclean, 2003; Diyyab, 2014).

Besides, this technology integration enables teachers to teach the lesson effectively. In their research, Hughes *et al.* (2017) highlighted that green-screen technology aid students in comprehending the lesson better, and they support the employment of green-screen technology in place of traditional lectures. Besides, teachers no longer need to film and download their footage to a computer and use a programme to remove the green before superimposing the background. Hence, the green screen helps reduce teachers' workload and save time (Vignesh *et al.*, 2020).

2.4.2 Drawbacks of Green Screen

Even so, applying this technology in English lessons can lead to a lack of communication between teachers and students. Students have few chances to speak during the lessons. Therefore, Shyamlee and Phil (2012) suggested that technology should be an assisting tool, not a dominator, to encourage students to practice the target language. Another drawback is that students' abstract thinking would be limited, and logical thinking would fade away as they focused on the visuals and imagination provided on the screen. Other than that, green screen technology can also distract students from learning. According to Huber *et al.* (2017), extreme video elements can divert students' attention away from the important content. Hence, teachers must be aware of the learning objectives served by the videos to achieve the lesson's objectives.

2.5 Cognitive Theory of Multimedia Learning

In this study, the Cognitive Theory of Multimedia Learning (CTML) is used to understand how English teachers used green screens to assist students in learning in class. Richard Mayer developed CTML to aid students in deeper learning. According to Mayer (2001), teaching and learning become more effective when both words and graphics are presented rather than words or graphics alone. In other words, the theory implies that when textual information is delivered in an auditory mode alongside visuals, pupils acquire more information and learn better.

Furthermore, CTML provides empirical principles to advance instructional design for meaningful learning (Mayer, 2001). This theory proposes seven principles to help teachers to create a multimedia design for their teaching. The Multimedia Theory of Learning can be broken down into a series of seven principles as defined by Clark and Mayer (2003, p.39).

- Multimedia Principle: Words and Graphics are Better Than Words Alone
- Contiguity Principle: Align Words to Corresponding Graphics
- Modality Principle: Present Words as Audio Narration, Rather Than On-Screen Text
- Redundancy Principle: Explain Visuals with Words in Audio or Text, Not Both
- Coherence Principle: Adding interesting Material Can Hurt Learning
- Personalisation Principle: Use Conventional Style and Virtual Coaches
- Segmenting and Pretraining Principle: Managing Complexity by Breaking a Lesson into Parts

Thus, teachers should follow Richard Mayer's principles to ensure the multimedia design is practical and can promote meaningful learning.

3.0 METHODOLOGY

A qualitative approach was used in this study to gain insights into English primary school teachers' perceptions when teaching English using green screen technology. Eight primary English teachers teaching year One until year Six in one of the Trust Schools in Johor were approached to participate in this study. However, only five teachers agreed, as teacher participation was voluntary.

The data were collected in two stages. In the first stage, classroom observation was conducted when the teachers used green screens in their teaching. During the observation, the sessions were recorded using a mobile phone. With consent from the teachers, these videos were recorded and focused solely on teachers, creating content to teach English using green screen technology. This technique was employed to capture any specific instances of green screen technology used by the teachers. In the second stage, the English teachers participated in a Stimulated Recall Interview (SRI) that enables the investigation of cognitive processes by asking participants to recall their concurrent thoughts through a visual recall (Dempsey, 2010). During the SRI sessions, the teachers were asked to watch parts of a video of themselves teaching English using the green screen. Then, they were requested to recall and reflect on their behaviour or thoughts concerning their actions in the recorded video. Also, semi-structured questions were asked throughout the interview sessions to explore teachers' perceptions of the green screen. Other than that, with the teachers' permission, the interviews were audio recorded to capture the interview discussion and collect all relevant data for this research by using a voice recording on a mobile phone.

For classroom observation, the recorded videos were analysed and focused on how teachers used the green screen in their teaching. Meanwhile, data were transcribed for SRI interviews, and the transcripts were analysed using thematic analysis. According to Braun and Clarke (2006), thematic analysis is the method to identify, analyse and report patterns (theme) in data. The data were coded into themes focused on green screen technology roles, challenges, and impact in teaching English. The data were presented descriptively to address the study's research questions.

Nevertheless, prior to the data collection, the participants were asked for their consent regarding their participation in this research by signing a consent form. The researchers also enlightened and provided clear statements that this research data would be treated as confidential in that their identity would not be closed to others. Therefore, all information from the participants, like names, schools, and other details that would disclose their identities, were removed and changed.

4.0 RESULTS AND DISCUSSION

4.1 Why Do Teachers Use the Green Screen to Teach English?

4.1.1 To Increase Student Engagement

All the teachers in this study stated that the purpose of using green screen technology in teaching English was to increase student engagement. This finding is consistent with Samat *et al.* (2019) findings that were implementing green screens benefits teachers in facilitating students in learning English and promoting student engagement. An example of this is provided in the following extract.

So, to gain interest from my kids at school, I believe Green Screen can be one of the interactive ways to make the kids interested in learning English. (Teacher B)

4.1.2 To Facilitate Teaching

Findings also demonstrated that three English teachers implemented the green screen as a tool to assist them in delivering effective lessons. The teachers described that using animations, graphics and videos greatly impacted their teaching. The sample comment is as follows:

Green screen technology is helpful in my teaching because it helps me to deliver the lesson effectively. For example, I want to teach four seasons. I can integrate graphics and sound in my video so that it can help students comprehend the lesson better. (Teacher E)

4.1.3 To Enhance Student Language Ability

Four teachers also highlighted that green screen technology could help students improve their language ability. In the interview session, teacher B explained that:

The green screen incorporates reading and writing. We also have drama and music, so the kids learn about one skill and more at once. (Teacher B)

This finding aligned with Hughes *et al.* (2017), in which most students agreed that green screen technology was an effective teaching tool to increase student engagement, enhance student language ability and facilitate teaching.

4.2 What are the Challenges Faced by Teachers when the Green Screen is Used to Teach English?

4.2.1 Time-consuming

The findings showed that four teachers agreed that the biggest challenge they faced when employing green screen technology in teaching English was time-consuming. The sample comment is as follows:

For me, the biggest challenge is time-consuming. Sometimes I need to re-record the video, and the editing part also takes much time. (Teacher E)

A similar finding of teachers' time-consuming concerns was highlighted in a study by Alfalah (2018). They stated that the integration of green screen technology in their classes required more time and effort than typical teaching without technology, as they had to spend more time using technology in preparing the lessons.

4.2.2 Technical Issue

It is also evident that the technical issue can present significant challenges to adopting educational technology. For example, teacher B highlighted that:

Sometimes we may run into technical issues, and sometimes we have to retake the videos. (Teacher B)

This result supports Yunus *et al.* (2013), who found that teachers had to spend extra time on technical problems, thus discouraging them from integrating technology into their teaching.

4.2.3 Inadequate Equipment

The findings also revealed that one of the challenges that they encountered when using green screen technology in their teaching was inadequate equipment. During the interview, teacher A stated that:

I should be the one that prepares all the technological tools. So sometimes, it is pretty challenging for me. Not all schools are providing sufficient technological tools in order for us to set up a green screen area. So I think it is one of the biggest challenges that teachers face if they plan to implement this green screen. (Teacher A)

This finding is consistent with previous studies by Ismail *et al.* (2010) and Kelleghan (2020). They found that the biggest barrier acknowledged by teachers was that the green screen activity required equipment that some schools may not have access to. Because of the issues, such as time-consuming, technical issues and inadequate equipment, implementing green screen technology in the teaching and learning sessions is challenging for English teachers.

4.3 How Does the Use of the Green Screen to Teach English Give Impact to Teachers' Professional Development?

4.3.1 Positive Impacts on Teachers' Professional Development

Teachers A, B, C, and E stated that using green screen technology in teaching and learning sessions can develop their digital skills. These can be seen in the following extracts.

So overall, it was a pleasant experience for me to use Green Screen technology in my lesson as I could improve my digital skills and boost my confidence to talk and perform on camera. (Teacher B)

Meanwhile, one teacher in this study perceived that she was motivated to learn new things related to technology through green screen technology in teaching English. For instance:

The impact of the green screen on my professional development is that I become more eager to learn new things or learn the editing skills so that I, because I want to make sure that the video I prepared is engaging enough and able to attract my students. (Teacher D)

4.3.2 Negative Impacts on Teachers' Professional Development

In this study, two teachers mentioned that green screen technology negatively impacted their professional development. Teachers B and E expressed that using the green screen technology was stressful for them. The finding is in line with research by Pittman and Gaines (2015), which found that teachers are prone to stress when they lack resources and time.

Although it was very stressful, I had to complete the videos within the time range with limited resources. (Teacher B)

Another negative impact is that teacher C reported being demotivated to use green screen technology. This can be seen in the extract below.

So, the negative impact will be, I think, motivation. It is fun. But it is also tiring for me to edit, for me to record. So yes, it does affect my motivation. (Teacher C)

This finding is consistent with previous research by Cook *et al.* (2009) and Chapman (2011). The studies demonstrated that time-consuming and insufficient preparation time could demotivate teachers from implementing technology in their lessons.

5.0 IMPLICATION AND RECOMMENDATION

5.1 Contribution of this Study

This study contributes to understanding green screen technology in primary education teaching and learning. The primary school English teachers used numerous pedagogical strategies to implement green screen technology in the classroom. Firstly, teachers in the study used green screen technology to illustrate the content of English lessons. This is because this technology enables teachers to incorporate text, audio, and graphics when recording videos, which would assist teachers in effectively delivering the lessons. Secondly, teachers in this study also considered students' interests when using green screen technology. For example, teachers appeared in their videos to sustain students' interest in the lessons. Lastly, teachers in this study were concerned about the appropriateness of the green screen technology they used. The teachers noted that the overuse of technology could be ineffective. Hence, some teachers in this research suggested that it was vital for teachers to plan and prepare a storyboard so that students keep their focus on learning rather than just to be entertained.

5.2 Recommendation

The findings of this research provided meaningful insights into using green screen technology to teach English in teaching and learning in primary education. However, numerous questions have been raised that demand additional exploration and improvement for future research.

Future research might involve a larger sample size and not solely focus on a study conducted in one school. This is because larger samples would represent the majority of teachers better and allow for more valid data to be created. Next, other areas worthy of research include students as the participants. It would be fruitful to investigate teachers' and students' perceptions of using green screen technology in the classroom. Lastly, future researchers could explore the use of green screen technology to teach English using an experimental research design. This is because experimental research allows researchers to evaluate the impact of green screen technology on teachers' instructions as well as the academic performance of students.

6.0 CONCLUSION

In conclusion, this study aimed to explore English teachers' perceptions of green screens in teaching English in a primary school. The findings found that English teachers used green screen technology in their teaching as it can facilitate teaching, increase students' engagement, and enhance students' learning. However, at the same time, the teachers also faced challenges in implementing green screens, such as time-consuming, technical issues and inadequate equipment. As a result, the implementation may lead to drawbacks of the method and hinder teachers' professional development. Hence, teachers should be able to overcome the challenges through experience and proper planning and training.

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