

The Use of Google Forms in Teaching and Learning based on Teachers' Perspective

Geoffrey F. C. Lim, Norshamshizar Abdul Jalil, Dayang Suraya Awang Hidup, Marlissa Omar, Fathiyah Mohd Kamaruzaman, Mohamad Zuber Abd Majid

Fakulti Pendidikan, Universiti Kebangsaan Malaysia, 43600, Bangi, Selangor

Corresponding Author Email: marlissa@ukm.edu.my

To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v13-i12/20221> DOI:10.6007/IJARBSS/v13-i12/20221

Published Date: 26 December 2023

Abstract

The integration of technology into daily life has resulted in a significant transformation, enhancing accessibility and efficiency in many tasks. Google Forms is a widely utilised application that individuals commonly employ to streamline their various operations, particularly in the field of education. This article seeks to ascertain the perspectives of teachers on the use of Google Forms as a means to enhance instructional and educational activities. This study utilises a quantitative research methodology to examine the perspectives of teachers about the implementation, effectiveness, and challenges associated with the use of Google Forms in the context of teaching and learning. Based on the results obtained, it is evident that all aspects exhibit a significantly higher mean value, hence indicating a substantial degree of implementation and effectiveness in the use of Google Forms for educational purposes. Additionally, the data also suggest the presence of significant challenges associated with the use of Google Forms in the context of teaching and learning.

Keywords: Google Forms, Teaching, Facilitate, Teachers, Perspective.

Introduction

Technology plays a pivotal role in numerous facets of existence, exerting a profound influence on the human experience. Technology has undoubtedly revolutionised and streamlined various aspects of our quotidian existence, rendering tasks and activities more accessible and efficient. In line with the evolution of technology today, the global education system is changing more dynamically to produce better human capital. Generally, technology in education has existed for a long time and is usually known as a learning approach based on electronic media (e-learning). However, it is now focusing on learning approach using mobile devices (m-learning). E-learning and mlearning are two significant development in education nowadays. Both of these approaches are more flexible than traditional approaches (Abdullah & Amran, 2021; Brown, 2005). According to Basak et al (2018), m-learning enables the learning process to be carried out online directly (synchronous) and indirectly (asynchronous).

The education system in Malaysia is also affected by the global education. The national education system is developing holistically with the integration of information and communication technology (ICT) in line with the aspirations of the national education plan to produce competitive human capital. The Malaysia Education Blueprint (2013-2025) highlights the aspect of utilising ICT for learning to ensure that every student has full access to education (Cheok & Wong, 2016). Aziz and Lai (2019) stated that technology-based learning methods can improve the quality of learning and facilitating (teaching and learning) in addition to simplifying the process of information delivery. In the aspect of learning and facilitating (Teaching and learning), teachers are the facilitators who provide learning activities using various methods and strategies in addition to guiding students in achieving learning objectives. Meanwhile, students need to be actively involved in the process of gaining knowledge and mastering the learning standards (Hilliard & Kargbo, 2017). The Ministry of Education (MOE) emphasises technology-based programs, the provision of ICT facilities and infrastructure in schools throughout Malaysia. The noble efforts of the education ministry are in line with the aspirations of the 21st Century Education (PAK-21) and Industrial Revolution 4.0 (IR 4.0).

The evolution of the global education system has had a lot of impact on the new pedagogy with a variety of strategies and more effective teaching methods. Teachers as facilitators need to be smart and creative in implementing effective and interesting Teaching and learning. During the pandemic Covid-19, teachers have worked really hard to study and master the ICT skills to ensure that teaching and learning sessions can be carried out (Anamalai & Yatim, 2021; Sunita, 2020). Most of the educators showed their readiness to create a digital learning environment (Rosli et al., 2022). To meet the current demands, educators apply various platforms and digital applications to facilitate the delivery of Teaching and learning. Home-based teaching and learning (PdPR) has taught teachers a lot to prepare themselves to face the globalisation. Therefore, it can promote creativity and innovation, as well as enable teachers to think outside the box in applying different Teaching and learning methods. Teachers can also continue the integration of applications and digital platforms in the classroom with the application of blended learning (Mamat et al., 2021).

The use of Google Forms in the preparation of digital quizzes is very popular among teachers because it is user friendly and easily accessible through Google Classroom. Google Forms is an effective medium in creating learning materials and assessment in and out of the class. The integration of Google Forms in teaching and learning sessions through blended learning should be emphasised by teachers. According to Azahari and Rahimi (2022), although studies show that the usage of internet and exposure towards the learning websites among teachers are high, teachers' understanding on the implementation of blended learning in Teaching and learning is still at moderate level (Salamat & Rani, 2018; Zulkifle, 2018). This is because they found it difficult to integrate digital applications and platforms in the classroom (Mamat et al., 2021). Therefore, the teacher's opinion on the effectiveness of using application such as Google Forms in the classroom should be studied and given attention to improve the quality of education. This is because most of the previous studies related to the use of Google Forms in education are carried out by the researchers in Indonesia. However, the significance of this study is to examine the teachers' perspective in Malaysia on the use of Google Forms in the Teaching and learning session because teachers are the agents to ensure effective education system with ICT integration. This study focuses on teachers' opinions in terms of

effectiveness, readiness and constraints faced during the use of Google Forms in teaching and learning.

Literature Review

In this section, three aspects related to the research objective will be discussed.

Teachers and Digital Technology

The teachers' role is not only aimed at teaching or imparting knowledge but more than that. The teachers' role as facilitators should prepare themselves with various skills including from aspects ICT. Teachers need to be creative in thinking of strategies and easy methods of delivering knowledge to students (Rashed & Hanipah, 2022). This is because of the students of the Z-generation are actually competent and literate in ICT. This is proven by the results of a UNESCO study (2020) which explains that 9 out of 10 children own a smartphone and it is an important tool in online learning (Saifudin & Hamzah, 2021). Therefore, teachers need to go hand in hand in ensuring that students can learn through the modernisation of education and develop the potential of independent learning (Che Hassan & Zulkifli, 2022; Rashed & Hanipah, 2022) with a mobile learning approach (m-learning).

Today's pedagogy is more advanced and continues to grow along with globalisation of education. Since the Covid-19 pandemic, teachers in Malaysia have improved their skills ICT to preserve online learning through PdPR sessions. Many past studies have proven the creativity and innovative skills of teachers in maximising student achievement in online learning. Research findings from Amran and Yahya (2020) proved that online learning is indeed more interesting than offline and helps students in achieving learning objectives more clearly and easily. Jamian et al (2020) proved that teachers can assess students' performance in Mathematics subjects and attract their interest in learning through Quizizz. Meanwhile, Segaran and Hashim (2022) proved that the digital quizzes are effective on students based on the results of a study integrating various types of digital quizzes in grammar learning of English.

However, the country has entered the endemic phase, teachers need to continue applying digital technology and materials in teaching and learning sessions in the classroom with blended learning methods. Blended learning focuses on student-centered learning and the teachers play the role of facilitator. Based on previous study, it has been proven that learning outcomes and student motivation can be improved by applying the blended learning in the teaching and learning session (Kholifah et al., 2020). Jamian et al (2020) explains that the combination of conventional teaching and learning with online digital applications is in line with 21st century learning (PAK-21) because it encourages students' active involvement in learning.

Undoubtedly, there are also issues related to lack of exposure in using ICT and importance of ICT in education among teachers. Teachers are not given enough exposure to improve their skills ICT from the ministry. Zaharuddin and Khalid (2019) stated that the use of modern digital tools and interactive platforms that have different functions is a new challenge for teachers (Saifudin & Hamzah, 2021). The results of the study by Rusdiana et al (2020) mentioned that the preparation and provision of Teaching and learning materials to students is less effective due to minimal ICT skills. Teachers need to have a high level of self-efficacy in mastering basic

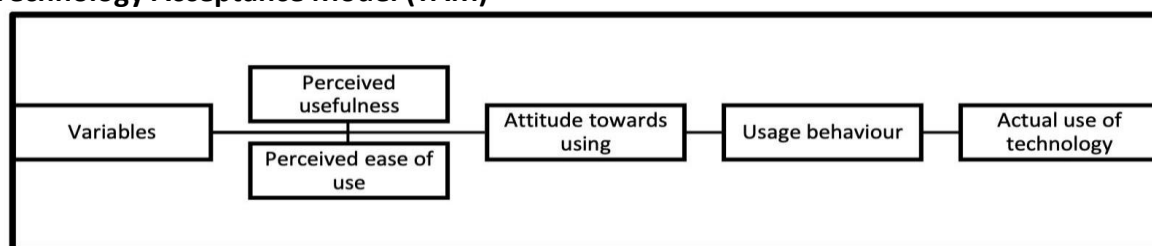
ICT skills and be confident in implementing digital learning materials during Teaching and learning (Rashid & Haron, 2021; Rashed & Hanipah, 2022). There are some teachers who think that traditional learning and assessment are more effective than using ICT because they are less favour to integrate ICT in teaching and learning (Jusoh & Othman, 2019).

Technology Acceptance Model (TAM)

Acceptance of technology in education is often linked to the concept of a model TAM. TAM by Davis et al (1989) has presented a concept that consists of two main variables, namely the perceived usefulness and perceived ease of use. A study by Su and Li (2021) argues that adapting TAM consists of four constructs: perceived usefulness, perceived ease of use, self-efficacy and external factors that influence user intentions towards technology acceptance. Meanwhile, Baharuddin and Hashim (2020) explained that TAM has three main factors that influence user motivation: perceptions of usefulness, perceptions of ease of use and behaviour towards the use of technology.

This study took into account the two most important concepts emphasised in TAM namely perceived usefulness and perceived ease of use. This study defined the perceived usefulness as primary school teachers' perception on the benefits and importance of using Google Forms in teaching and learning. Next, this study examined the perception of ease of use from the primary school teachers' point of view regarding the pleasure and comfort that they feel when using Google Forms in the teaching and learning session. When teachers have a positive response to the ease in using Google Forms, they are more willing to continue using the Google Forms in Teaching and learning. According to Maksum et al (2017), these two aspects are important especially the perceived usefulness which is believed to be significant in technology implementation. These two aspects are adapted in the construction of questionnaire items in this study.

Technology Acceptance Model (TAM)



The Implementation of Google Forms

Google is software that includes various services such as a virtual learning platform (Google Classroom), Google Drive as online storage, video conferencing through Google Meet as well as Google Forms and office suite as management software (Shaharuddin & Khalid, 2014). Google Forms is an online application that can be accessed for free to facilitate the collection of data and information. The data obtained will be analysed automatically by Google. In addition, there are simple but interesting features in the construction of quizzes and survey forms (Nguyen et al., 2018) including various types of questions, adding pictures and videos, making copies of questions, adding descriptions to questions and more.

Google Forms can be applied in teaching and learning sessions because it has user-friendly features (Arief, 2017). Google Forms can be accessed through computers and even

smartphones. Link of Google Forms generated by the teacher can be shared with students through various platforms such as WhatsApp and Google Classroom. According to Abdullah (2020), the use of such digital platforms makes it easier to give assignments and evaluate students' work quickly and effectively. Google Forms facilitate teachers in the construction of quizzes and daily tasks by just using a smartphone and at any time. A research conducted by Iqbal et al. (2018) stated the ease of using the Google Forms in providing trainings for effective and conducive digital learning. Other than that, Sari et al (2020) stated that using Google Forms can improve students' understanding of a given topic through the integration of existing interactive features in Google Forms. The results of the study also discussed the interactive features such as pictures and videos can support the construction of questions. Next, Shaharuddin and Khalid (2014) emphasised the impact of Google Forms in increasing students' interest and motivation in accomplishing assignments and assessments (Azis & Shalihah, 2020). Google Forms can also be used as a game that can challenge students' minds through construction Escape Room (Vergne et al., 2020). This can help students to improve their critical thinking skills and problem solving skills in the game.

Google Forms is effective as an assessment tool as well as saving time in the process of checking assignments (Sari et al., 2020). In fact, a study conducted by Fauzi (2014) has proven that the effectiveness and importance of using Google Forms in Indonesian language teaching. The study has described the benefits of Google Forms in classroom assessment. The evaluation process or formative assessment is an important aspect in supporting the success of Teaching and learning sessions (Jamian et al., 2020). The score obtained by the students in the digital assessment can be checked by the students immediately after sending the assignment. Giving feedback and scores immediately can increase students' motivation in learning because they can identify their strengths and weaknesses (Nguyen et al., 2018; Jamian et al., 2020; Jusoh & Othman, 2019). The summary of the score can be accessed in the form of a Spreadsheet to make it easier for teachers to interpret data and evaluate the level of students' mastery.

Research Objective

The research objectives of this study are

1. To identify the teachers' readiness towards the use of Google Forms in PdPc
2. To identify the effectiveness of using Google Forms in PdPc among teachers
3. To identify the constraints of using Google Forms in PdPc among teachers.

Methodology

This study uses a quantitative method. The research design implemented in this study is a survey research design. This research design is used to identify teacher's perspective on the use of Google Forms from the aspect of readiness, effectiveness and constraints. According to Creswell (2008), survey is important for research aimed at obtaining opinions from a sample or the entire population.

Respondents

A total of 42 respondents were selected for this survey. All respondents are the teachers in one of the primary schools (SJK) in Kuching, Sarawak. This school category is urban and all classrooms are equipped with smartboards and internet facilities. Therefore, the facilities and digital equipment in the classroom are ready. School teachers who have access to ICT facilities

are suitable to be selected as the respondents for related ICT studies to get their honest opinion (Lau & Rosli, 2020).

Instruments

This quantitative study uses an online survey form to collect data. Google Forms is certainly the best choice in making this survey. The link of the Google Forms to answer this questionnaire was shared with respondents. Using Google Forms as a survey form simplifies (Nguyen et al., 2018) and speeds up the process of obtaining data in addition to saving printing costs (Ching & Yasin, 2022). This questionnaire uses a 4-Likert scale points namely Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). The use of this 4-point scale is to prevent respondents from not giving opinions or too neutral (Mohamad Yunos & Mahat, 2021). Meanwhile, the mean score classification for the questionnaire items in this study is based on the study of Damanhuri et al. (2016) which is based on the scale interpretation tabulated by Chua (2006).

Table 1

Mean Interpretation (Chua, 2006)

The Researcher's Scale	Mean of Interpretation Level
< 2.0	Low
2.0 – 3.0	Medium
> 3.0	High

This questionnaire includes 4 sections to survey the use of the Google Forms among teachers from the point of readiness, effectiveness and constraints. The questionnaire items were developed based on two main concepts of TAM, namely the perceived ease of use and perceived usefulness. The first part of the questionnaire is the teachers' profile. Teachers' profiles were collected to identify gender, teaching subject and teaching experience. Meanwhile, the second part has 6 items about usage of Google Forms in Teaching and learning. Next, the third part consists of 5 items regarding the effectiveness of Google Forms in Teaching and learning. Finally, the fourth part is the aspect of constraints in using Google Forms in Teaching and learning which consists of 4 items. For statistical purposes, data analysis uses the calculation of frequency, percentage and mean in the interpretation of data distribution obtained from the questionnaire (Jamian et al., 2020).

Table 2

Section and number of items in the questionnaire

Section	Number of Items
A. Profile of respondents: (i) Gender (ii) Teaching Subject (iii) Teaching Experience	3
B. Use of Google Forms in teaching and learning	6
C. Effectiveness of Using Google Forms in teaching and learning	5
D. Challenges of Using Google Forms in teaching and learning	4

The questionnaire comprises four sections, with the first section (Part A) aimed to collect data on the respondents' profiles. This section will inquire about demographic information such as gender, teaching subject, and years of teaching experience. The next section (Part B) of this questionnaire pertains to the first construct, which focuses on the use of Google Forms in teaching and learning. A total of six items will be made pertaining to this construct. The next section (Part C) related to the effectiveness of using Google Forms in teaching and learning. In this section, a total of five items will be given. The final section (Part D) of the questionnaire pertains to the challenges that teachers encountered while utilising Google Forms as a tool for teaching and learning. This section will consist of four items.

Findings and Discussion

The present study examines and discusses concerning the data in this section from four perspectives: analysis of respondents' demographic information, readiness of instructors, effectiveness, and challenges related with the use of Google Forms in the teaching and learning.

Analysis of Profile of Respondents

The respondents in this study include all teachers from the school except administrators. Based on descriptive analysis, the number of female teachers is more than the number of male teachers. Only 7 of the 33 respondents (21.2%) were male teachers while the remaining 26 respondents (78.8%) were female teachers. The total number of respondents is 33. For the analysis related to teaching experience, it was found that the teaching experience of 11-20 years is the highest in number which is 48.5%. Meanwhile, 2 respondents (6.1%) are new teachers in the profession because they have only served for less than 5 years. 6 respondents (18.2%) have 5-10 years of teaching experience and 9 respondents (27.3%) have more than 20 years of teaching experience. The respondents of this survey include teachers who teach various subjects. The Chinese Language subject has the most respondents of 10 people (30.3%). Meanwhile, the subject with the least number of respondents is Science which only involves 4 people (12.1%). Next, 8 respondents (24.2%) teach Malay Language and 6 respondents (18.2%) are English teachers. There are 5 respondents (15.2%) teaching Mathematics.

Table 3

Analysis of Respondent Profile

Item	Category	Frequency (n=33)	Percentage
Gender	Male	7	21.2
	Female	26	78.8
Teaching Experience	Less than 5 years	2	6.1
	5-10 years	6	18.2
	11-20 years	16	48.5
	More than 20 years	9	27.3
Teaching Subject	Malay	8	24.2
	English	6	18.2
	Chinese	10	30.3
	Mathematics	5	15.2
	Science	4	12.1

Teachers' Readiness Towards the Use of Google Forms in Teaching and learning

Based on table 3, it was found that respondents have a high level of readiness with average mean score 3.12. However, the tendency of the respondents' opinion is more to agree and strongly agree with the use Google Forms in Teaching and learning. Item 2 has the highest mean level of 3.24 where respondents use Google Forms to give exercises. The data shows that 48.48% of respondents agree while another 36.36% strongly agree with item 4 where they used Google Forms to test their students. In addition, a mean of 3.18 was achieved for item 3 where Google Forms facilitates the implementation of teaching and learning. The effectiveness of teaching and learning can be evaluated based on the level of students' understanding through the level of achievement of learning outcomes at the end of the teaching and learning session (Jamian et al., 2020).

Next, the lowest mean level (M=3.00) is item 1 and item 5. However, the average respondents agreed (42.42%) and strongly agreed (33.33%) to use Google Forms in the collection of group work production. For item 1, a total of 78.79% like to use Google Forms in the Teaching and learning session and only 21.21% of respondents stated otherwise. It is believed that there is a possibility of respondents who are not fond of the use Google Forms have more potential to use other digital platforms in teaching and learning or they are more focused on traditional teaching and learning methods. A total of 26 respondents (42.42% agree and 36.36% strongly agree) think that using Google Forms does not require high technological skills and only 8 people (26.7%) think otherwise. The high percentage of item 6 proved Google Forms is easy to use in the teaching and learning session. Table 4 shows analysis of teachers' readiness towards using Google Form in teaching and learning.

Table 4

Analysis of Teachers' Readiness towards using Google Form in Teaching and learning

Item	Agreement Scale				Mean Level
	SD (1)	D (2)	A (3)	SA (4)	
1. I like to use Google Forms in Teaching and learning.	2 6.06%	5 15.15%	17 51.52%	9 27.27%	3.00
2. I use Google Forms to give exercises.	0 0%	3 9.09%	19 57.58%	11 33.33%	3.24
3. I feel Google Forms facilitate the implementation of Teaching and learning.	0 0%	5 15.15%	17 51.52%	11 33.33%	3.18
4. I use Google Forms to test my students.	1 3.03%	4 12.12%	16 48.48%	12 36.36%	3.18
5. I use Google Forms to collect group work production.	3 9.09%	5 15.15%	14 42.42%	11 33.33%	3.00
6. I don't need to master ICT skills to use Google Forms.	2 6.06%	5 15.15%	14 42.42%	12 36.36%	3.09

This part of study shows that most of the teachers have high level of readiness towards using Google Forms in teaching and learning. The respondents used Google Forms for giving exercises and having some tests. They also agreed that Google Forms helps in the process of teaching and learning. When giving group works or group discussion, Google Forms were used to collect students' work. This study also showed that Google Forms is easy to use and does not require high ICT skills to apply it, which implies that Google Forms has user-friendly features (Arief, 2017).

Teachers' Perspective: Level of Effectiveness in Using Google Forms

The results of the study found that the average mean score was 3.13 for the level of effectiveness in using Google Forms in Teaching and learning. Item 4 has the highest mean level because most respondents (90.91%) agreed on the construction of interactive quiz using Google Forms. A total of 19 respondents (57.58%) agreed and another 8 respondents (24.24%) strongly agreed with item 1 where they believed that their students could identify their weaknesses and strengths with the scores in Google Forms. This is in line with the findings of research where identifying weaknesses and strengths help students to improve their learning (Nguyen et al., 2018; Jamian et al., 2020; Jusoh & Othman, 2019). This item shared the lowest mean score with item 5 (M=3.03). This is likely due to the fact that a few respondents (24.24%) were not able to assess the students' confidence based on the students' behaviour when answering the questions in Google Forms. However, 42.42% agreed while 33.33% strongly agreed with item 5.

In addition, a total of 18 respondents (54.55%) stated that they agreed with the item 2 and 11 people (33.33%) stated that they strongly agreed with the statement. The assessment is carried out through Google Forms enabling respondents to monitor students' performance in the process of making an assessment of their overall level of achievement. In addition, it helps in the process of reflection and further increases self-efficacy in improving the quality of teaching and learning (Rashed & Hanipah, 2022). A total of 28 respondents (84.85%) agreed that using Google Forms can speed up the process of giving feedback. This allows students to identify mistakes made more effectively and reduce the potential to repeat the same mistakes. This shows that most of the teachers agreed that an interactive quiz can attract students' interest and increase students' motivation in Teaching and learning (Azis & Shalihah, 2020). The ease of integrating videos, pictures as well as hyperlinks is a supporting element in the construction of interactive quizzes. Table 5 shows analysis of the effectiveness level in using Google Forms in teaching and learning from teachers' perspective.

Table 5

Analysis of the Effectiveness Level in using Google Forms in teaching and learning

Item	Agreement Scale				Mean Level
	SD (1)	D (2)	A (3)	SA (4)	
1. Students can identify their strength and weakness through the scores in Google Forms.	1 3.03%	5 15.15%	19 57.58%	8 24.24%	3.03
2. I can monitor students' performance through Google Forms.	1 3.03%	3 9.09%	18 54.55%	11 33.33%	3.18
3. I can give quick feedback to my students through Google Forms.	2 6.06%	3 9.09%	17 51.52%	11 33.33%	3.12
4. I can construct interactive quizzes with video and pictures through Google Forms.	0 0%	3 9.09%	18 54.55%	12 36.36%	3.27
5. My students are more confident to give answers and opinions through Google Forms.	2 6.06%	6 18.18%	14 42.42%	11 33.33%	3.03

This part of study examined the level of effectiveness in using Google Forms in teaching and learning. Most of the respondents agreed that Google Forms is effective as they can give feedback immediately after evaluating the students' work. Based on the feedback and scores given, students can identify their strength and weakness easily and improve. Furthermore,

respondents also agreed that they can monitor and keep track on students' performance. The interactive features of Google Forms allowed students to be more confident to give answers and opinions. This is in line with study conducted by Sari et al. (2020) where the interactive features of Google Forms help students to improve their understanding.

Teachers' Perspective: Level of Constraint in Using Google Forms

Table 5 shows the highest mean is item 1 (M=3.18) and the lowest mean is item 4 (M=3.06). A total of 30 respondents (90.91%) agreed that time constraints are the most important issue in the use of Google Forms during the teaching and learning session at school. There is no denying that the teachers' responsibility as well as the burden on which the teachers are having in the school is indeed heavy where the teachers' real duties are interrupted by the involvement of other side jobs. Therefore, teachers should manage their time wisely, especially in prioritising the preparation of quality learning materials. The school is also playing an important role in ensuring that teachers are not burdened with school programs and other side tasks in order to build teachers' motivation in teaching and learning management (Antin & Dzulkifli, 2018) thus ensuring the quality of Teaching and learning.

For item 3, a total of 4 respondents (12.12%) disagreed while 29 respondents (87.88%) expressed agreement with the statement. This is because not all teachers are less efficient in using Google Forms. Most teachers have explored the basic skills of developing online quizzes and assessments with high self-efficacy (Anamalai & Yatim, 2021) through Google Forms. In addition, as many as 87.88% agreed with item 2. The study conducted by Zulkifle (2018) also mentioned that exposure to blended learning among teachers is still low. However, Mamat et al. (2021) suggested that blended learning should be applied by combining traditional learning with digital elements in teaching and learning. Next, item 4 has a mean value of 3.06 with 81.82% respondents agreed that students have the potential to cheat when answering questions through Google Forms. Teachers can activate locked mode in the Google Forms' settings when constructing an online quiz. Table 6 shows the analysis of the constraint level of using Google Form in teaching and learning from teachers' perspective.

Table 6

Analysis of the Constraint Level of using Google Form in Teaching and learning

Item	Agreement Scale				Mean Level
	SD (1)	D (2)	A (3)	SA (4)	
1. Time constraints in the preparation of exercises and interactive quizzes especially at school.	2 6.06%	1 3.03%	19 57.58%	11 33.33%	3.18
2. Lack of exposure in using Google Forms through blended learning.	2 6.06%	2 6.06%	20 60.61%	9 27.27%	3.09
3. Lack of skills in developing tests or exercises using Google Forms.	1 3.03%	3 9.09%	19 57.58%	10 30.30%	3.15
4. I found that students have the potential to cheat when answering questions in the Google Forms.	1 3.03%	5 15.15%	18 54.55%	9 27.27%	3.06

This part of study examined the constraints level amongst the respondents in using Google Forms in Teaching and learning. Majority of the respondents faced different constraints while implementing Google Forms in Teaching and learning. Amongst the constraints are time constraints in constructing the questions while working in the school. Next, lack of exposure and ICT skills in developing questions or quizzes using Google Forms are also parts of the constraints. The non-stop updates of Google Forms' new features are actually new challenges of teachers (Zaharuddin & Khalid, 2019). Some respondents agreed that their students have the potential to cheat when answer questions in the Google Forms.

Conclusion

The findings of this survey reflect the positive opinion of teachers towards using Google Forms in Teaching and learning especially after the Covid-19 pandemic. The discussion of the findings of this study focuses on two concepts of TAM, namely the concept of ease of use and the concept of effectiveness. From the aspect of ease of use, Google Forms proved to be able to save cost and time in preparing tests and quizzes. Besides, Google Forms can help teachers to manage teaching and learning sessions easily in line with the m-learning and e-learning approach. Next, this high ease of use can contribute to teachers' willingness to use Google Forms in Teaching and learning. This study also proved that the effectiveness of using Google Forms in Teaching and learning where it is seen to be fully utilised in the Teaching and learning

session. However, the constraints faced by teachers also need to be emphasised. All the issues need to be considered as a new challenge to improve the quality of Teaching and learning in line with the aspirations of Industrial Revolution 4.0.

In conclusion, teachers have a relatively high willingness to change educational system especially in integration of ICT in the classroom, if digital facilities are well equipped in the classroom at school. Based on the results of this study, majority of the teachers admitted that they like to use Google Forms in Teaching and learning. The teachers involved in this study know the importance of using Google Forms in delivering information and performing assessments based on 21st century learning (PAK-21). Therefore, the findings of this study successfully examined the perspective of teachers from the aspect of readiness, effectiveness and constraints faced in line with the objectives of the study. This study is significant in helping educators as well as those directly or indirectly involved in education to find out to what extent that teachers are effective and prepared to use Google Forms in teaching and facilitating. Future studies can focus on certain subjects such as English language to examine the use of Google Forms in different language skills. Interviews can be conducted to collect teachers' perspective in the respective subjects. It is also recommended that the use of Google Forms in teaching and learning can be studied from students' perspective. Students' preference on questions types and language skills in Google Forms can be focused in future studies.

References

- Abdullah, N. A., & Amran, M. S. (2021). Perspektif Guru Terhadap Penglibatan Murid Dalam Pengajaran Dan Pembelajaran Secara Atas Talian Semasa Pandemik Covid-19 Di Malaysia [Teacher Perspective Of Student Involment In Online Teaching And Learning During The Covid-19 Pandemic In Malaysia]. *International Journal of Advanced Research in Islamic Studies and Education*, 1(4), 32-39.
- Abdullah, N. (2020). Persepsi pelajar terhadap penggunaan Google Classroom sebagai media e-pembelajaran dalam Kursus Penyelidikan Pendidikan- Kertas Projek. *Jurnal Penyelidikan Pendidikan*, 21, 69-82.
- Saifudin, N. H. A., & Hamzah, M. I. (2021). Cabaran pengajaran dan pembelajaran di rumah (PdPR) dalam talian dengan murid sekolah rendah. *Jurnal Dunia Pendidikan*, 3(3), 250-264.
- Amran, M. B., & Yahya, M. Z. B. (2020). Faktor dan persepsi yang mempegaruhi penggunaan teknologi dalam pendidikan dikalangan pensyarah kolej komuniti. *International Journal of Technology Management and Information System*, 2(1), 72-80.
- Anamalai, T. R., & Yatim, M. H. M. (2021). A preliminary observation of teacher challenges in implementing home-based teaching and learning. *Journal of ICT in Education*, 8(4), 55-63.
- Antin, A., & Kiflee, D. N. B. A. (2018). Pengaruh beban tugas dan motivasi terhadap keefisienan kerja guru sekolah menengah di Sabah. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 3(2), 77-84.
- Arief, R. (2017). Aplikasi presensi siswa online menggunakan google forms, sheet, sites, awesome table dan gmail. In *Seminar Nasional Sains dan Teknologi Terapan V*.
- Azahari, N. S., & Rahimi, N. M. (2022). Amalan Pembelajaran Teradun Sebagai Satu Pendekatan Pembelajaran Norma Baharu. *Jurnal Dunia Pendidikan*, 4(1), 186-196.

- Azis, T. N., & Shalihah, N. M. (2020). Pengembangan Evaluasi Pembelajaran Berbasis Google Form. *Tawazun: Jurnal Pendidikan Islam*, 13(1), 54-65.
- Baharuddin, N. Q., & Hashim, H. (2020). Using digital reading in ESL Malaysian primary classrooms: the strengths and the shortcomings from the learners' perspectives. *Journal of Educational and Learning Studies*, 3(1), 7-13.
- Basak, K. S., Wotto, M., & Belanger, P. (2018). E-learning, M-learning and D-learning: Conceptual definition and comparative analysis. *E-learning and Digital Media*, 15(4), 191-216.
- Brown, T. H. (2005). Towards a model for m-learning in Africa. In *International Journal on E-learning* (Vol. 4, No. 3, pp. 299-315). Association for the Advancement of Computing in Education (AACE).
- Hassan, N. F. A. C., & Zulkifli, H. (2022). Perspektif Guru Pendidikan Islam (GPI) Terhadap Pengaplikasian Google Classroom (GC) Dalam Pembelajaran Dan Pemudahcaraan (Pdpc)[Islamic Education Teacher's Perspective On The Application Of Google Classroom In Learning And Facilitation]. *International Journal of Advanced Research in Islamic Studies and Education*, 2(2), 1-15.
- Ching, T., & Yasin, R. M. (2022). Penerapan Kaedah Didik Hibur Dalam Pembelajaran Bahasa Inggeris di Sekolah Luar Bandar. *Jurnal Dunia Pendidikan*, 4(1), 459-474.
- Chua, Y. P. (2006). *Kaedah dan statistik: Kaedah penyelidikan (Edisi kedua)*. McGraw-Hill.
- Creswell, J. W. (2008). *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research*. 3rd ed. Upper Saddle River, NJ: Pearson/Merrill Prentice Hall.
- Damanhuri, M. I. M., Ehambron, D., & Yusuf, M. (2016). Tahap Kesedaran dan Amalan Pendidikan Alam Sekitar dalam Kalangan Pelajar Tingkatan 4 Aliran Sains di Daerah Hulu Selangor: Awareness Level and Environmental Education Practice among Form 4 Science Stream Students in Hulu Selangor District. *Geografi*, 4(2), 28-35.
- Hilliard, A., & Kargbo, H. F. (2017). Educationally Game-Based Learning Encourages Learners to Be Actively Engaged in Their Own Learning. *International Journal of education and Practice*, 5(4), 45-60.
- Cheok, M. L., & Wong, S. L. (2016). Frog virtual learning environment for Malaysian schools: Exploring teachers' experience. *ICT in education in global context: The best practices in K-12 schools*, 201-209.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), 982-1003.
- Fauzi, M. R. (2014). *Penggunaan Google Form Sebagai Alat Evolusi Pembelajaran Mata Pelajaran Bahasa Indonesia: Studi Deskriptif Analitis Pada Kelas VIII Di Sekolah Menengah Pertama Negeri 1 Lembang*. Tesis Universitas Pendidikan Indonesia.
- Iqbal, M., Simarmata, J., Feriyansyah, F., Tambunan, A. R. S., Sihite, O., Gandamana, A., Eza, G. N., Kurniawan, F., Asiah, A., Rozi, F., Faisal, F., Manurung, I. F. U., Ihwani, M., Nathan, P. L. A., Sitanggang, N., Simbolon, N., Simanjuntak, E. B. & Limbong, T. (2018). Using Google form for student worksheets as learning media. *International Journal of Engineering and Technology (IJET)*, 7(3.4 Special Issue 4), 321-324.
- Jamian, R., Abidin, Z. N., & Arsad, R. (2020). Analisis Deskriptif bagi Penggunaan Aplikasi Quizizz ke atas Guru dalam Penilaian Prestasi Murid bagi Subjek Matematik. *Mathematical Sciences And Informatics Journal*, 1(2), 87-97.

- Janggal, A., & Suhaimi, T. (2018). Pengaruh Kesiapan Guru Terhadap Pengurusan Bilik Darjah Abad Ke-21. *Malaysian Journal of Social Sciences and Humanities*, 3(4): 6-22.
- Jusoh, M., & Othman, N. (2019). Isu dan Permasalahan Pentaksiran Alternatif Dalam Sistem Penilaian di Malaysia. *e-Prosiding Persidangan Antarabangsa Sains Sosial dan Kemanusiaan [PASAK4]*, pp. 337-350.
- Kholifah, N., Sudira, P., Rachmadtullah, R., Nurtanto, M., & Suyitno, S. (2020). The effectiveness of using blended learning models against vocational education student learning motivation. *International Journal of Advanced Trends Computer Science English*, 9(5), pp. 7964– 7968.
- Lau, J., & Rosli, R. (2020). Pengetahuan Teknologi Maklumat dan Komunikasi Guru Matematik Sekolah Rendah. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 5(11), 71- 84.
- Maksum, U., Baridwan, Z., & Subekti, I. (2017). Determinant of Acceptance of SIMDA (Information System of District Management) Implementation of the Government of Batu City. *Journal of Accounting and Business Education*, 1(2), pp.298.
- Mamat, S., Ladin, C. A., Kamaruddin, A. Y., Omar, I. M., & Ismail, N. A. (2021). Covid-19: Cabaran dan Inisiatif dalam Mendepani Pelaksanaan Pengajaran dan Pembelajaran Teradun. *Sains Insani*, 6(2).
- Yunos, M. N., & Mahat, A. (2021). COVID-19: Faktor-faktor Yang Mempengaruhi Kesihatan Mental di Kalangan Pelajar Universiti. *Jurnal Dunia Pendidikan*, 3(3), 265-272.
- Nguyen, H., Stehr, E. M., Eisenreich, H., & An, T. (2018). Using Google Forms to Inform Teaching Practices, *Proceedings of the Interdisciplinary STEM Teaching and Learning Conference*, 2(10) 74-79.
- Aziz, N., & Lai, W.S. (2019). Impak Pendidikan Berasaskan Teknologi Terhadap Peningkatan Prestasi Pelajar Di Ukm. *Jurnal Personalia Pelajar*. 69-75.
- Rashed, Z. N., & Hanipah, M. N. R. (2022). Challenges and Best Practices of Teaching and Learning among Islamic Education Teachers during the COVID-19 Pandemic in Malaysia. *International Journal of Pedagogy and Teacher Education*. 5(2), 105-112.
- Rashid, K. K. A., & Haron, S. C. (2021). Challenges on Malaysian Teachers's Self Efficacy in Online Teaching During COVID-19. *International Journal of Academic Research in Business and Social Sciences*, 11(9), 649–658.
- Rosli, M. F., Ahmad, A. R., & Nasir, M. K. (2022). Hubungan antara Kompetensi Guru dengan Motivasi Murid Untuk Belajar dalam Norma Baharu. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 7(3), e001373.
- Rusdiana, A., Sulhan, M., Arifin, I. Z., & Kamaludin, U. A. (2020). Penerapan model POE2WE berbasis blended learning google classroom pada pembelajaran masa WFH pandemic Covid-19.
- Salamat, S., & Rani, M. S. (2018). Tahap Pengetahuan Pensyarah Dalam Penggunaan Borang Pemantau Keberkesanan Pembelajaran Teradun. *1st International Multidisciplinary Academic Conference 2018 (IMAC'18)*.
- Sari, A. B. P., Iswahyuni, D., Rejeki, S., & Sutanto, S. (2020). Google Forms as an EFL assessment tool: Positive features and limitations. *Journal of English Education and Applied Linguistics*, 9(2), 231-250.
- Segaran, V. C., & Hashim, H. (2022). 'More Online Quizzes, Please!' The Effectiveness of Online Quiz Tools in Enhancing the Learning of Grammar among ESL Learners. *International Journal of Academic Research in Business and Social Sciences*, 12(1), 1756–1770.

- Sunita, M. L. (2020). Education in the Era of COVID-19: Innovative Solutions to Real Challenges. *The Educational Review, USA*, 4(11), 193–198.
- Su, Y., & Li, M. (2021). Applying Technology Acceptance Model in Online Entrepreneurship Education for New Entrepreneurs. *Front. Psychol.*, 12:713239.
- Shaharuddin, S., & Khalid, F. (2014). Pengajaran dan Pembelajaran Menggunakan Perisian Google —Satu Analisis Kajian Lepas. In F. Khalid (Ed.), *Pengajaran Sumber dan Teknologi Maklumat: Impaknya ke atas Penyelidikan dalam Pendidikan*, 1, 25-32.
- United Nations Educational, Scientific and Cultural Organization (UNESCO). (2020). Global Education Monitoring (GEM) Report 2020.
- Vergne, M., Smith, J., & Bowen, R. (2020). Escape the (Remote) Classroom: An Online Escape Room for Remote Learning. *Journal of Chemical Education*. 97.
- Zaharuddin, S., & Khalid, F. (2019). Penerimaan Pelajar Tingkatan 1 terhadap Penggunaan Aplikasi Web 2.0 untuk Pembelajaran. Graduate Research in Education Seminar 2019.
- Zulkifle, N. N. (2018). Pendekatan Penerimaan Pembelajaran Teradun Dalam Kalangan Guru Pra Perkhidmatan. Disertasi Ijazah Sarjana Pendidikan. Universiti Pendidikan Sultan Idris.