SECONDARY TEACHERS PERCEPTION ON THE EFFECTIVENESS OF GOOGLE CLASSROOM AS A LEARNING MEDIUM DURING MOVEMENT CONTROL ORDER (MCO)

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Abstract

Technology has played vital role in all levels of education especially during the Movement Control Order (MCO) where people are confined to their homes along with the closure of schools, universities, and other educational institution. Generally, educators have turned to online teaching to ensure lessons are still going on. Google Classroom is one of the instruments that is free of charge and has earned recognition within a short period of time. However, online learning can be isolating and disengaging for learners. Sitting in front of a computer screen for hours may prompt a student to leave out a lesson altogether along with other issues that needs to be considered. The main purpose of the study is to explore the effectiveness of Google Classroom during the pandemic of COVID-19 phase from the perspective of secondary school teachers in Malaysia. The objective of the study is to identify teachers' perceptions of effectiveness of Google Classroom and to identify the areas that can improve the effectiveness of Google Classroom as a learning medium. The research is conducted using a qualitative research design. The findings unveiled that secondary school teachers were neutral as they deem it as a minor part of their overall teaching approach. The evaluation of the discussions disclosed that Google Classroom has not produced a significant effect on the whole classroom teaching. The most important part that needs to be improved is the availability of Internet and gadgets as it is the core component needed to operate Google Classroom.

Keywords: *Effectiveness, Google Classroom, Learning Medium, Online Teaching, Movement Control Order*

1.0 Introduction

Developments in science and innovation are growing swiftly, notably in the area of technology. The dynamics of modern-day technology attain remarkable increase of velocity [1]. There are various things that are transforming as COVID-19 have an effect on people all over the world and that includes education. The academical structure has now verified that a most of learning lessons cannot be separated from technological practices [2]. Technological advancements play a part in assisting the educational process. Furthermore, online media has turn out to be a platform for information and are able to be utilized as an education resource [3]. Thus, the education resources can now be accomplished, that is not merely come from lecturers or teachers, but knowledge can also be gained from the online platform. The usage of online platform as educational resources is considered suitable to generate worldwide information without the restriction of time and distance [4].

The educational activities are transformation of communication process in the context of learning instrument from educational resources to students. Resources of education in the learning task are educators and the messages distributed are the educational materials obtained by the receiver of the message, for example students. The meaning during the process of learning to deliver the message of the teacher to the students have to be obtained properly to alter their comprehension and encourage changes in their attitude [5]. Hence, the achievement of learning activities relies on the effectiveness of the communication process that happens during the class session [6]. Method to have a class session via Google Classroom is a component of a tactic that utilize technology to allow teachers and students in the learning process [7]. Educators can deliver resources on the topic being tutored using Google Classroom. The teachers can publish some educational materials, appoint homework for students, and upload the students' grade, so that students are able to instantly see the scores attained for the subject. Moreover, Google Classroom have the ability to be a substitute platform to set different date or time for class session if the teachers cannot make it during class period.

1.1 Problem Statement

Online learning can be isolating and disengaging for learners. Sitting in front of a computer screen for hours may prompt a student to leave out a lesson altogether along with other issues that needs to be considered. Among the major obstacles for achieving the effectiveness of having online classes is that not many of the pupils have an online account [8]. Besides, there are also school children that does not own smartphones or afford internet data packages to join online discussion sessions. As an outcome, the usage of Google Classroom by school teachers might not be ultimately effective. Literature review on Google Classroom displays that certain research concentrate on the effectiveness of E-learning Moodle, Google Classroom and Edmodo [9], optimum utilization of using Google Classroom as an instructional media [10], Google classroom as a substitute method to improve education value [11], and Google Classroom as a medium for refining fulfilment of advance students' attributes [12]. The current research highlights on means where Google Classroom can be utilized effectively as an educational platform.

1.2 Research Objective

RO 1:   To identify the teachers' perceptions of effectiveness of Google Classroom.

RO 2:   To identify the areas that can improve the effectiveness of Google Classroom as a learning medium.

1.3 Research Question

RQ 1: What are the teachers' perceptions of effectiveness of Google Classroom?

RQ 2: What are the areas that can improve the effectiveness of Google Classroom as a learning medium?

2.0 Literature Review

2.1 Google Classroom

Google Classroom is a service that requires internet offered by Google as an online learning tool [13]. This platform was developed to assist educators build and disseminate assignments to the students in a way of not using physical papers. Individuals that use this service need to have an account in Google. Additionally, only learning institute that have Google Application for Education can operate Google Classroom. It was utilized to simplify the communication of a teacher or an educator with students in the online realm [14]. Academicians easily give out a task and give an individual task to the students [15]. Shaharanee, Jamil, & Rodzi [16] examined Google classroom's dynamic education activities in which the researchers used TAM (Technology Acceptance Model) to examine the effectiveness of the acts published to the medium. Findings of 100 students exposed that reasonable implementation of Google Classroom was much greater in the field of communication, interaction, perceived usefulness, ease of use, and students' overall satisfaction. By the same token, group of researchers performed a study to examine the uses of Google Classroom as a "Learning Management System" (LMS) [17]. The main factor for the adoption that was discovered from the study was cost. Joint learning via assignments was perceived as an exceedingly effective instrument for improving students' involvement.

Liu & Chuang [14] performed an act examination in Taiwan where they applied Google Classroom with the combination of fellow teacher method for 6th grade students. The outcome discovered was students maintained a positive opinion concerning the usage of Google Classroom and the objectives of the study were also accomplished. Martínez-Monés et al. [13] did a combination of studying analytics with Google classroom as they assumed that this is a leading drawback of the developing instrument. As far as the best awareness of the researcher, majority of the study regarding Google classroom have suggested a positive feedback from the students. There is a limited number of research that has concentrated on taking into account the schoolteacher's perspectives of the effectiveness of Google Classroom. The responsibility of tutors in the acceptance of any new educational system must not be disregarded as they are the main character in the changing of educational landscapes. Among the complexities of this service is that it can be utilized in collaboration with other groups of individuals.

2.1.1 Quick and convenient setting

The Google Classroom's setup procedure is exceptionally quick and easy than to have it registered or installed to local LMS or LMS source. Educators can have the access to Google applications and are enabled to start on sharing tasks and educational materials. Teachers be able to do this by means of featuring a list of students or give out a unique code that permits access to students' virtual lessons in Google Classroom. Google Classroom is uncomplicated and convenient to use, which makes it perfect for educators even though the levels of e-Education experiences are varied.

2.1.2 Time saving

Certain tasks given by teachers no longer needs to be download by students. Teachers just have to post and distribute assignments through online for their students to be able to see it. Educators are also able to identify the ranking, give out comments for every assignments and assessments through Google Classroom. Hence, there are possibility to save both the teacher's and the students' time as there is no requirement to distribute physical paper so the students can finish their assignments through online, and on time which makes it more convenient for them to meet the deadline and online classes can be personalized to daily timetable.

2.1.3 Increase in cooperation and communication

Among the most vital advantages of utilizing Google Classroom is the likelihood to attain an effective online alliance. Educators are able post notifications to their students to begin a virtual class or inform them about some educational activities through online. Conversely, students have the chance to provide feedback to their peers by publishing it straight away to the course of discussions in Google Classroom. So, if they have difficulties to understand a task and require any assistance, they can gain response straight from their online classmates.

2.1.4 Centralized data storage

By using Google Classroom, all members of the group comprising students and teacher are positioned in one centralized place. Students are capable to see every assignment in a particular file, and teachers have the ability to store educational materials and activities for the educational storage in the cloud and all the results and scores can be viewed in this application. Since it is stored properly in this LMS, there is no need to be concerned about missing files or papers.

2.1.5 Quick sharing of resources

Online educators have the authority to disseminate material and resources to their students straight through online. As an alternative from requiring updating the e-Learning lessons or distributing emails individually to every student, they stay linked to Google Classroom and are able to send links to virtual resources as well as e-Learning items improvements that can be useful for their students. This offers students the chance to gain appropriate updates in relation to the present lesson, so that they are enabled to better comprehend the items and gain access to multimedia instruments that able to enhance their online learning journey [5].

2.2 Google Classroom features

There are numerous features of using Google Classroom as one of the Learning Management Systems (LSM) [18]. Google Classroom has various amenities such as Google Drive, Google Docs, Sheets and Slides, as well as Gmail, that can assist learning institutes to teach without physical things further effortlessly as in classroom, whiteboards, and writing materials. These are several features that truly support this virtual education platform:

2.2.1 Assignments

Every task that has been downloaded will be saved and reviewed in the Google productivity suite apps which have made this collaboration through online feasible. Rather than merely distributing files that are in a student's Google Drive shared with the tutor, the document is held on the student's Google Drive and then sent it for assessment. The teachers are able to select the file as a template, permitting all student to amend their personal copy and send it to be reviewed. Thus, each and every student are able to

see, duplicate, or amend the same file. Students are also able to decide to add more files from their Drive to a task.

2.2.2 Grading

Google Classroom back up various evaluation methods. Teacher could supervise the progress every student does on each task, and they are also capable to give comments and edit. Edited assignment can be graded by the teacher and respond with comments to let students to amend the work and resubmit it. Next, after being reviewed, the work can only be altered by the teacher only if the teacher returns the assignment.

2.2.3 Smooth communication

Announcements can be published by teachers to the class page, where it can be commented by students permitting two-way communication among teachers and students. Students are also able to comment on the class page but will not be as a top priority as an announcement by the teacher. Different kind of media from Google products as in videos from YouTube and Google Drive documents can be published along with the announcements for distributing content. Class sessions can be streamed on the internet or via the Google Classroom mobile apps.

2.3 Acceptance of Integrating Technology in Classroom

Management of educational institute holds a main responsibility to act in combining technology in classrooms because they have to handle the procedure and eventually make decision to what level they expect to utilized technology. A researcher and his colleague organized an experiment in high schools on the responsibility of administrators in the usage of technology where the researchers found that the administrators took positive views about integrating technology in the classroom [19]. Among various factors for the failed technology integration was that the administrators considered 80 percent of their educators were not prepared in term of technology usage to utilized it efficiently, thus, the experiment failed.

Other prior research by Machado & Chung [20] revealed similar findings where they analyzed the role of teachers in the practice of technology integration in the classroom. Results disclosed a strong principle that teachers' lack of practical training and proficiency was stopping the schools from integrating technology. Samy et al. [21] deem educators' acknowledgment as a crucial element in the effective usage of technology in classrooms. The responsibility of administrators is to help the training and structure for the educators, nevertheless, in the long run it is the tutor that has to develop the usage of technology with the students.

It is certainly vital that teachers' acknowledgment of technology is present due to the fact that student learning can be better merely through a teacher. Blair [22] has stated two aspects in giving a chance for integration of technology. Initially, educators need to position technology into the hands of students properly by choosing the correct platform. Next, technological instrument ought to be continually growing to improve problem-solving, invention, making a decision, and cooperation. Referring to the literature review division, this research is concentrating on teachers' perspective of the effectiveness of Google Classroom.

2.4 Theoretical and Conceptual Framework

2.4.1 Technology Acceptance Model (TAM)

The technology acceptance model (TAM) is a theory of information systems in which it shapes the way consumers are enabled to adopt and utilize a technology. The theory proposes that at the time consumers are provided with a new technology, various reasons may affect their choice regarding the way and the time they will utilize it, particularly, the perceived usefulness that was described by Fred Davis as "the degree to which a person believes that using a particular system would enhance his or her job performance". Perceived ease-of-use (PEOU) was categorized as "the degree to which a person believes that using a particular system would be free from effort" [23]. External variables as in social influence is a crucial element to define the attitude. When the theory is put in position, people will have the attitude and intention to use the technology. Nevertheless, the opinion may be different varying on age and gender due to the fact that individuals come from various background.

2.4.2 Conceptual Framework

The conceptual framework of this study is adopted from Davis's (1989) Technology Acceptance Model where the external variable is the user's knowledge of Google Classroom which is a crucial factor to determine the attitude. Perceived usefulness of Google Classroom refers to whether or not the user identifies Google Classroom to be beneficial for what the users want to do. In terms of Google Classroom perceived ease-of-use, it brings the meaning of If the technology is simple and can be use easily, then the obstacles dominated. If it is difficult to operate and the design is complex, there will be no positive attitudes towards it.
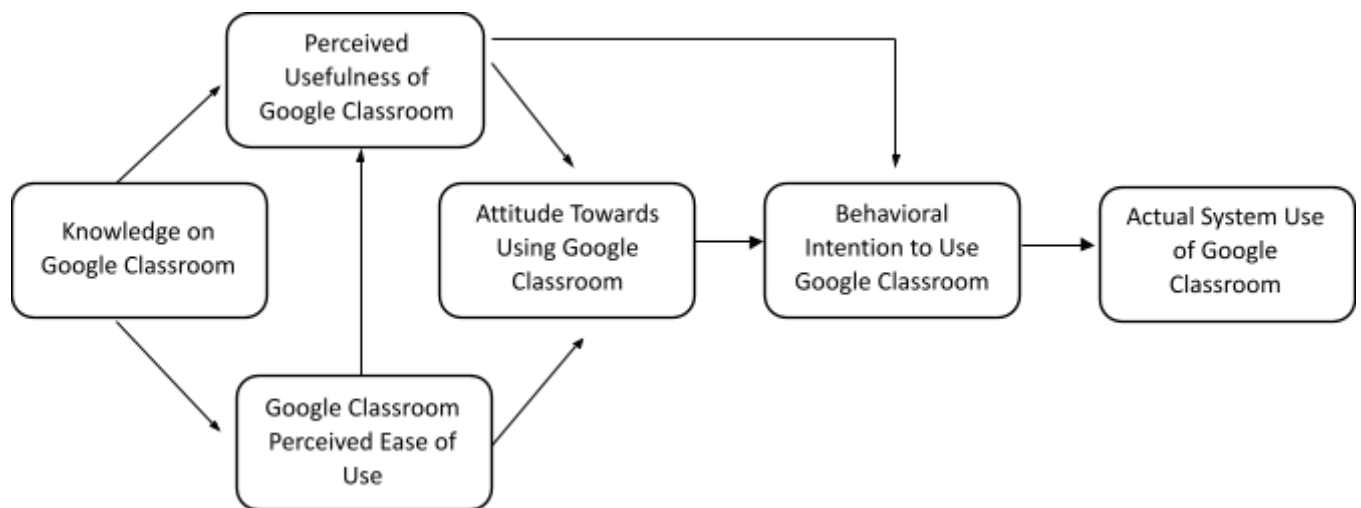

Figure 1: Conceptual Framework of the study

3.0 Research Design

The approach applied in this study is descriptive qualitative via interview sessions with five chosen secondary school teachers from SMK Sentul Utama, Kuala Lumpur. This session was performed with the teachers' approval. Moreover, the attained data were examined to explain the information gathered so that the information can be comprehended not only for the researchers but also for those who seek the findings of this study. Data analysis was conducted as soon as the interviews were finished, and

the researchers studied the findings thematically to describe the results in accordance to the research questions.

Sampling procedure- This research applied purposive sampling where informants for the research were chosen from the teachers that have experience using Google Classroom as a learning medium. The purpose of applying purposive sampling method was to obtain an understanding into the topic under examination [24]. For this research, participants were contacted through email in which they were appropriately explained regarding the purpose of the study before agreeing to volunteer as an informant for an in-depth interview session. Interview then were recorded and transcribed using NVivo 10. Then, it was printed for the participant to sign in ensuring the informants agreed with the statements made during the interview session. In addition, the validity of the instrument was being checked and certified by another teacher.

4.0 Results

4.1 RQ 1. What are the teachers' perceptions of effectiveness of Google Classroom?

When the participants were asked regarding the overall effectiveness of Google Classroom, majority of the informants were neutral as they deemed it as a minor part of their overall teaching approach. Majority of the participants mentioned that their teaching effectiveness is the same, but it has assisted them and the students during the MCO. Some participants consider 50 percent success and 50 percent failure in general as they learn that Google Classroom as an average tool. Some of the informants had pessimistic remarks on its overall performance. Even though they were comparing it to other different types of technological media, they had constructed a strong belief against Google Classroom because of their misconceptions. A participant stated that "I formed a Google Classroom for my students since the start of the school year, although I received good response initially, now only half of them is active". The numbers are declining due to complications as in unavailability of IT devices and Internet data. The informant added that some children do not have access to a personal computer or laptop as well as Internet connection, while a few parents cannot be reach by phone. Therefore, what the teacher did was provide such children simple notes and quizzes, that were sent through text messages, in order to make them participate in class lessons.

According to a participant, he mentioned that online communication with students enabled him to concentrate on giving individualized task and responds. Furthermore, there are also participants who agreed that the MCO had improved the function of online learning as an essential component of conventional academic. Some disclosed that it actually formed a chance to prepare teachers to be more competent in utilizing online platform and to participate in structure and sources that encouraged online education. Most of the participants also raised doubts regarding the effect of socio-economic of school closures on school children and did not deny the potential of student dropouts after MCO ended. A participant added that if the assignments are too much there are possibility that students are not able to finish the homework given before school reopens, which can add up to their stress. Additionally, the central advantage that arose from the interviews was correlated to homework of the class. Different tutors applied Google Classroom for different reasons, as in uploading, making announcement, and assigning homework online.

4.2 RQ 2. What are the areas that can improve the effectiveness of Google Classroom as a learning medium?

The informants of the research were asked to pinpoint the parts which can enhanced the effectiveness of Google Classroom. Participants came up with some fascinating elements that can be integrated in Google Classroom. Some informants believed video editing is a component that could enhanced the utilization of Google Classroom. There are also teachers that suggest Google Classroom must have the feature of an individual folder for each student. Majority of the participants agreed that there ought to be a space in which students able to work straight away on documents, rather than need to download, amend, and then uploading back the files. Furthermore, referring to news that prolonged closures of educational institution regularly contribute to an upsurge in dropout statistics, all participants stated that it is vital to offer support and make certain that each pupil go back to school as soon as the MCO ended. Participants also called on the government especially the Education Ministry to urge telecommunications companies to offer more discounts and provide Internet data plan that is reasonably priced for underprivileged students as well as called on TV Okey to deliver content that accommodates to diverse levels of students.

5.0 Discussion and Conclusion

The evaluation of the discussions disclosed that Google Classroom has not produced a significant effect on the whole classroom teaching. It has been utilized efficiently for uploading tasks, management for classroom, as well as interaction with the students. Nevertheless, the entire usage is constrained to just these features, but then Google Classroom has many more to give aside from only the basic aspects. An intriguing analysis from the interviews was that there are no informants accredited or highlight the fact that Google Classroom is a service that is free of charges and has no fee implications which is a foremost deliberation while execution of technology in most of the academic division in Malaysia. These are primary ages for Google Classroom and knowledge regarding this tool will develop upon time that is a considerable obstacle for students and teachers in the current situation. There are teachers that agreed towards the notion of e-learning would get a usage increment after the MCO, but it cannot not substitute conventional classroom environment which provided a personal sense of touch and face-to-face communication. A crucial element of the research was while teachers were trying their best to formulate educational tools, they encountered hardship in the context of not just the discipline of the students and their eagerness to learn, but also a shortage of references and amenities. In terms of areas that can improve the effectiveness of Google Classroom as a learning medium, it seems that government intervention is needed in ensuring all school students are not being left out. The most important part that needs to be improved is the availability of Internet and gadgets as it is the core component needed to operate Google Classroom.

6.0 References

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