A Digital Teacher's Guide to Online Learning With Social Media

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Abstract. The COVID-19 pandemic around the world has rapidly changed learning patterns. Students are more interested in social media than online learning. This is reinforced by recent statistics showing increased social media use worldwide during the COVID-19 pandemic. Social media has become an attractive alternative for teachers in online learning activities because ready to use, and many students use it. The use of social media should encourage active, interactive, communicative, creative, and collaborative learning in students because they are used to using it. This research aims to develop a digital guide to help teachers design online learning using social media. This research uses a qualitative approach through the case study to make the model allow the teacher to develop online learning with social media by Combining two models, the ASSURE Model and the Conley and Sabo Model. This research collaborates with high school teachers to conduct focus group discussions. The results of this study illustrate the teacher's view of the digital guidelines developed. Limited ability to use technology is one of the things to consider. This online learning digital guide motivates teachers to innovate amid the COVID-19 pandemic. The digital guidelines for online learning guide teachers in developing online education in social media so that students feel comfortable studying.

Key words: COVID-19, digital guide, learning design, social media

INTRODUCTION

The condition of the COVID-19 pandemic worldwide has rapidly changed learning patterns (Sparrow et al., 2020). The implementation of various government policies, both nationally and regionally, contributes to the performance of the learning process in multiple institutions. Circular Letter of the Minister of Education No. 4 of 2020 on the Implementation of Education Policy in the Emergency Period of The Spread of COVID-19 recommends learning through online learning. This policy requires teachers to be more innovative and creative in designing a learning process through various online-based media (Olum et al., 2020). But now, students are more interested in social media than online learning (Fleischmann, 2018). This is reinforced by recent statistics showing increased social media use worldwide during the COVID-19 periods. Students are increasingly active on social media for various purposes, citing socializing and looking for references to entertainment activities (Al-Bahrani et al., 2015; Supardi et al., 2021). Therefore, teachers should see this as an opportunity that can be used to overcome polemics on problems that arise in the implementation of online learning (Liu & Zhang, 2021; Yuzulia, 2021). This seems possible, considering the use of social media in learning is one of the trends and issues growing in the world of Educational Technology lately (Selwyn & Oliver, 2011). The use of social media in the learning process is familiar (Bearman et al., 2020). There has been much research that addresses this both in the context of formal and informal education. Various platforms have been developed and utilized to support the learning process.

According to Dhawan (Dhawan, 2020), online learning involves learning experiences in a synchronous or asynchronous environment using different devices (e.g., mobile phones, laptops, etc.) with internet access. With online learning, students can be anywhere (independently) to learn and interact with instructors and students (Williams-Pierce, 2016; Aswan, 2022). Online learning is creating learning by using technology in the form of media such as the internet and other media in accessing learning to generate interaction between learners, and provide support during the learning process as an effort to gain, form knowledge and build a pleasant learning experience. Research on the use of social media in the learning process was conducted by Dennen et al. (Dennen et al., 2020) to review the scope of research on social media and its relationship to education. Based on the above analysis, this study has the novelty of developing a digital guide to help teachers design online learning using social media. Based on the foregoing, the author believes there is a need to develop a guide for teachers in developing online learning using social media that can be used optimally.

According to Mahmud et al. (Mahmud et al., 2020),

social media may be another technology that has great potential to improve the learning experience but has yet to be adopted. Educators' failure to form and use or adopt social media to achieve learning goals may be due to the tendency to use digital technologies such as social media in learning to be ambiguous and complex (Szeto et al., 2016). There is also a need for more specific guidance on the potential and characteristics of social media (Conley & Sabo, 2015). Social media in the context of learning is thought to encourage active, interactive, communicative, creative, and collaborative learning (Greenhow, Cho, et al., 2019; Greenhow et al., 2020; Greenhow, Galvin, et al., 2019). In addition, using social media can also help the learning process become more contextual because it can connect learning inside and outside the classroom for students (Hrastinski & Aghaee, 2012). But using social media in this learning process could be more optimal. Teachers still need to see the value of using social media correctly. The tendency to use social media in learning still needs to be clarified, and complex choosing the type of social media in learning design, mostly done without foundation (Bal et al., 2015). It is said that when teachers design learning activities using social media, some do it intuitively because they feel they have used that particular social media for a long time. In contrast, others choose certain social media because of their popularity and feel they have experienced the learning process. There has been much research that discusses the use of social media in learning in the context of formal education at the level of K-12 or primary and secondary education (Askari et al., 2018), higher education (Ansari & Khan, 2020), as well as non-formal education to develop educators' professional practices in learning (van Bommel et al., 2020). Various social media platforms have been used for learning purposes, including 500 social networking sites such as Facebook, Twitter microblogging, YouTube media sharing, and so on. Some studies show positive results and are promising. The use of social media in this learning can encourage active, interactive learning, communicative (Ma et al., 2017), creative (Greve et al., 2020), collaborative (Greenhow, Galvin, et al., 2019), and contextual (Greenhow & Chapman, 2020). In some cases, there are challenges in the use of social media, such as challenges that are present intrapersonally and interpersonally from the school community as well as educators and social culture (Carpenter & Harvey, 2019). This is due to a variety of issues such as misleading information in online sources, privacy concerns, etc. The problem arises when teachers need to see the value of social media or build and use the network to advance learning and teaching goals.

METHOD

After conducting a literature review on several kinds of literature related to learning design, online learning, and social media, a model for designing online learning was found, with the primary reference being the social media learning design model (Social media instructional design, Conley & Sabo, 2015 and the ASSURE model. The model found it consists of six steps, namely: analyze learner characteristics (analyze student characteristics), state objectives (state objectives), select, modify, or design materials (choose, change, or design materials), utilize media and materials (use media and materials), require learner participation (ask for student participation), and evaluation (assess).
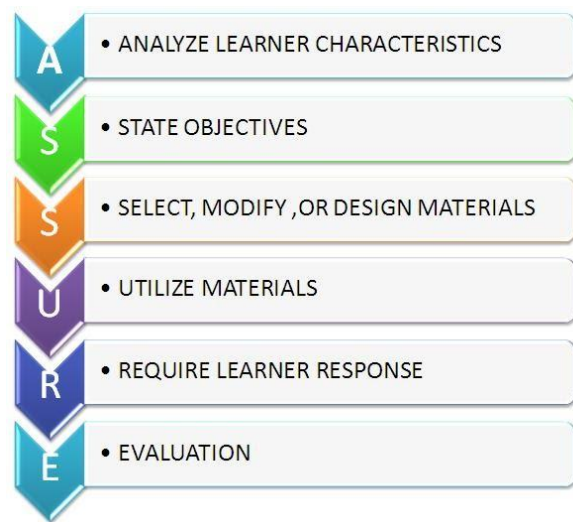

Figure 1. ASSURE Model

The ASSURE model has six stages in the development/selection of media in learning. The ASSURE model is widely used for media selection because the steps in this model help us to choose suitable media for learning materials. So this model becomes one of the options to be modified and paired with other models that will complement each other in creating digital guidelines.
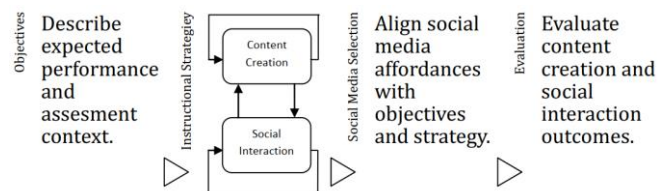

Figure 2. Model Conley & Sabo

The social media learning design model was developed by Conley & Sabo as a tool for designing learning using social media. The social media learning design model that they developed can be used to create

formal and informal learning activities that can increase knowledge acquisition both individually and collaboratively. This model aims to guide designers and to systematically learn developers in the creation process through several steps.

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Figure 3. Digital Guide to Social Media

From the two model learning development models that become the primary reference, a model for designing online learning, especially one that utilizes social media, consists of 6 steps as follows: 1) student analysis, 2) formulating goals, 3) determining learning strategies, 4) choosing social media, 5) develop learning experiences and 6) evaluate. This model will combine. This model of guidelines will assist the teacher in providing online learning through social media.

Population and Sampling

This research is in collaboration with the Education Office of Bogor Regency, West Java, Indonesia. Researchers are interested in researching there because the learning media are not only conventional; learners can use their gadgets for learning media, one of which is browsing the internet about the task and the teacher's supervision. In addition, five high schools use social media as an alternative to learning media. The study was in collaboration with 15 high school teachers who had used social media as a learning medium and 15 teachers who had never used social media.

Data Collection and Analysis

In the collection of data related to the implementation of digital guidance, researchers used the Focus Group Discussion (FGD) process (Odimegwu, 2000).

Qualitative data retrieval through FGD is widely known for providing convenience and opportunities for researchers to establish openness, trust, and understanding of informants' perceptions, attitudes, and experiences. FGD allows researchers and informants to discuss particular issues intensively and not rigidly. FGD also enables researchers to gather information from participants with different backgrounds quickly and constructively. In addition, group dynamics that occur during the discussion process often provide essential, enjoyable, and sometimes unexpected information. Considering the number of groups is 5, each group consists of 6 high school teachers. In this study, researchers use in-depth interviews so that the issues studied can be approached more efficiently, but the principles of comparability and reliability can still be met. During the interview process, we randomly selected participants. The interview was conducted after FGD activities took place with five high school teachers. Before completing the interview, the researcher uses interview guidelines and a pre-prepared recording device. The names in this study are pseudonyms. This is a form of maintaining a research code of ethics.

The data analysis used by researchers in this study is based on research methods, namely qualitative analysis, which is a research method that has a complex focus and is respondent and thorough. The analysis is done at the time of data collection and after data collection. The data obtained when conducting a study is raw data, so it must be edited, sorted, merged, and then analyzed into data that is for the research. Data analysis in qualitative research is carried out at the time of data collection and after the completion of data collection within a certain period. Researchers used qualitative data analysis of the Miles and Huberman Model(Miles & Huberman, 1994). This data analysis includes data reduction, data display, and conclusion drawing/verification. Before entering the data reduction stage, researchers collect data first in the data collection period. After collecting data, researchers perform anticipatory for reduced data. The conclusion in qualitative research is a new finding that has never existed before. Findings can be a description or picture of an object that was previously dim or dark, so that after research it becomes clear, it can be a causal or active relationship and theory, or it can be a causal or active relationship and theory. This stage is the withdrawal of conclusions from the data that has been analyzed. Data collection comes to an end, and researchers begin to make efforts in the form of discussions to draw conclusions based on data decisions and presentation. According to Sudjana (Sudjana, 2002), results of the assessment of each expert are taken from average and interpreted using the following criteria: 3.26 – 4.00 = very good, 2.50 – 3.25 = good, 1.76 – 2.49 = Bad, and 1 – 1.75 = Very Bad.

RESULTS AND DISCUSSION

A focus group discussion (FGD) was also conducted in this study to assist researchers in understanding the findings. FGD is done twice, before and after the introduction of digital guidance. The subjects in this study consisted of 12 male teachers and 18 female teachers who taught at a high school in Bogor, West Java. The age range of participants was 25 to 50 years. The purpose of implementing this FGD is to identify in detail the implementation of digital guidelines that researchers have developed.

CB: I think teachers are required to implement effective online learning, but we have limited capabilities in using technology. So, we need an online learning guide. (Group 2, 2021)

AL: My experience in doing the online learning process is that, after completing the task, students collect the study in a Whatsapp group. However, due to the limited use of technology, I often lose task data. In addition, the inequality of facilities and infrastructure owned by teachers is the cause of the inhibition of learning activities. (Group 4, 2021)

BA: In my opinion, as a teacher, training often held by the department in mastering technology takes a long time. So, I have difficulty understanding learning media training in just a short time. At the same time, the learning process must continue. (Group 5, 2021 Based on the results of teacher discussions, they feel difficulties in the online learning process. This is because they often follow training but in a short time. One of the participants in group 2 needed a learning guide. So, one alternative is to facilitate teachers by mastering various online learning applications through guidebooks. In addition, this online learning digital guide is used as a teacher reference. Therefore, we process the results of FGD by conducting an analysis. This stage of analysis summarizes the teacher's competence and learning needs. Participants in groups 1 to 5 can operate technological tools. Only indeed, they need guidance to learn independently for online learning. However, this study found evidence that designing social media learning activities considering the suitability of social media technology based on various learning categories can achieve the highest cognitive processes and knowledgeability in students. This is based on the study by Greenhow et al. (Greenhow, Galvin, et al., 2019). So, we do the design guide according to the teacher's needs. In the second meeting, we did FGD again. Before FGD began, researchers introduced and gave examples of the use of digital guidance to teachers. After that, each group is directed to use the guide.

JJ: ....this guide is enjoyable to use for teachers. In pandemic circumstances like this, we need training and guidance to improve pedagogical competence in teaching. So, this guide is very much to our needs. Some teachers in Bogor regency still need help developing a learning model suitable for students. Therefore, this digital guide can motivate teachers to innovate. (Group 1, 2021)

LL:...this guide is easy to understand for me. Social media, which students often use, can be used as an innovative learning medium because almost all students use social media such as Instagram and Facebook. With this guide, we are helped to determine which materials fit this online learning model. (Group 2, 2021)

AO:…I can't wait to introduce this online learning medium to students. Although the use of social media has been applied in some schools and teachers, in my area, few still use it. Thus, this guide helps in providing references for us. (Group 3, 2021)

The results of this discussion show that the use of learning resources from the internet and learning online allows students to express themselves in doing tasks and seek inspiration through existing reading resources and unlimited study time space and time. The existence of the internet should be viewed as an ease that helps students learn in the modern era (Fianu et al., 2020). The concept of independence needs to be taught to all existing students. Teachers' role as motivators, simulators, and guides is required for self-learning in the learning process to be more meaningful for students (Xie et al., 2020). First, learning outcomes will be more quality, original and durable because students experience firsthand, actively, and participatory by involving feelings, thoughts, and skills. With the rapid advancement of science and technology, what students learn today will quickly go out of fashion, so they must be ready to learn for life. Teachers must be empowered to develop competencies in the current pandemic situation. Through empowerment, teachers are trained to create professional conditions for their duties and roles. This strongly supports the progress of students and teachers in teaching and learning activities in times of pandemics. Mitchell Steward (Mulyani et al., 2021; Perguna et al., 2021; Thoonen et al., 2011) expresses that empowerment allows organizations to quickly, flexibly, and efficiently reach customers and market demands. With the appointment of teachers, it is expected that schools can provide good services, such as when learning in schools before online.

The implementation of online learning is a series of planned and systemized activities carried out by teachers and students. Online learning uses internet-based interactive models and Learning Management Systems (LMS) (Arriany & Aswan, 2022; Hsu et al., 2019). According to Williams-Pierce (Williams-Pierce, 2016), online learning is a program to organize online learning classes to reach a massive and broad target group. The online mode approach has characteristic construc-

tivism, social constructivism, inclusive community of learners, computer-based learning, digital classes, interactivity, independence, accessibility, and enrichment. During the COVID-19 pandemic, this learning method can be a solution to continue the teaching and learning process (Jogezai et al., 2021; Kuhfeld et al., 2020; Senapati et al., 2020). Teachers can still teach, and learners can still learn at home during this pandemic. Online learning is synonymous with the utilization of internet-based technology features, which rely heavily on the availability of information technology. Research also shows that online learning can improve student outcomes through good and correct development (Arnidah et al., 2022; Aswan, 2018; Siregar & Aswan, 2019).

The content of material delivered online is only sometimes understandable for all learners. Because the content of this material is presented in the form of e-books offered per chapter, material in the form of PowerPoints, and in the form of learning videos, it seems that according to the author's frugality and based on online teaching experience, the system is only effective for assigning assignments and quizzes. That is, when in a meeting, learners are given a task/quiz, they have the perseverance to study the teaching materials available in the application or search from other sources, so there is "anxiety" if the task/quiz has not been completed. Unlike the case, if the teacher posts material not accompanied by an assignment and only asks to learn it, then the story will be different. The ability of teachers could be improved in using technology in online learning. Not all teachers can operate computers or gadgets to support face-to-face learning activities, especially in online learning (Sütçü, 2020). Indeed, some teachers can handle computers, but in terms of limited expression. They cannot access other internet networks, use various learning applications, create their learning media/videos, etc. Every problem faced can be solved by presenting different solutions from teachers so that learning in the COVID-19 pandemic continues, which is essential for children to continue to learn because the implementation of distance learning does not pursue the completion of the curriculum but emphasizes the competence of literacy and numeracy (Sparrow et al., 2020). In online learning, teachers use various technological devices in the field of education. They can choose multiple applications that suit the needs and characteristics of subjects, learners, and environmental situations to help convey learning materials (transfer of knowledge) to learners. However, it is recognized that in this online learning practice, teachers are more dominant in assigning assignments, not

explaining the material. But in essence, the role of the teacher cannot be replaced with technology, however sophisticated. The use of technology in the field of education is only able to help teachers in the transfer of knowledge, not in the formation of student character.

Therefore, this guide can be used as an alternative learning model for teachers (Holden, 2016). This study classifies social media technology into several classifications experience and resource sharing tools (Rahman et al., 2020; Zgheib & Dabbagh, 2020) , media sharing tools, social networking tools, and communication tools. This classification of social media activities and technologies is based on the knowledge type based on Krathwohl's theory (Kratwohl, 2002) into factual knowledge, conceptual, procedural, and metacognitive. These social media activities and technologies are also classified based on Bloom's Digital Taxonomy (Goranova, 2019) into several categories remembering, understanding, applying, evaluating, and creating. The results of this study show evidence that designing social media learning activities considering the suitability of social media technology based on these various categories can achieve the highest ability of cognitive processes and knowledge in students. The data obtained regarding each aspect is as follows.

The results show that each expert's assessment is taken average and interpreted using the following criteria very well. This model can be used in further learning trials so that the effectiveness of using this model in learning can be tested. Online learning is creating learning by using technology in the form of media such as the internet and other media in accessing learning to generate interaction between learners and provide support during the learning process as an effort to gain, form knowledge and build a pleasant learning experience. Formulate measurable learning objectives describing the expected skills, knowledge, or attitudes, and context to assess essential skills, knowledge, and attitudes. This study tried to develop a digital guide to design learning using social media for teachers that refers to the social media learning design model. The implementation of digital learning design guidelines utilizing social media was developed to be a more practical guide for teachers, accompanied by concrete examples of how it is applied. The development of more applicable and easy guidelines for teachers is a solution to overcome the utilization problem. Digital technologies such as social media in learning are still ambiguous and complex. This refers to design with well-structured social media learning activities that can optimize their use and increase the involvement of higher cognitive processes and knowledge levels.

Table 1. Test Result Data

Aspect	Indicator	Item	Average Indicator	Average Item	Total
Contents	Suitability of the material with the purpose of the guide	1	3.55		
	Explanation of subject matter	2 -7	3.51	3.50	
	The contents of the guide are easy to apply	8	3.40		
Language	The simplicity of language use	9	3.45	3.45	
Message Design Principles	Font size selection	10	3.60		
	Use of color	11	3.45	3.48	3.46
	Compatibility of illustrations/pictures	12	3.40		
Alloy Presentation	The attraction of illustrations/pictures	13	3.45		
Systematics	Adequacy of guide introduction	14-15	3.50		
	Ease of table of contents	16	3.40	3.1	
	Easy access to learning resource links	17	3.25		

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