

Adoption of Google Meet Technology and Evaluation Competence of Evaluation Students in Nigeria

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DOI: <https://doi.org/10.37745/ijeld.2013/vol11n1112>

Published: 2nd January 2023

Citation: Eduwem J.D., Ekim R.E.D., Tommy U.E., Nduesoh I.N. (2023) Adoption of Google Meet Technology and Evaluation Competence of Evaluation Students in Nigeria, *International Journal of Education, Learning and Development*, Vol. 11, No.1, pp.1-12

ABSTRACT: *This study examined the adoption of Google meet technology and evaluation competence of evaluation students in Akwa Ibom State, Nigeria. Three objectives, three research questions and three hypotheses were respectively formulated to guide this study. Ex-post facto research design was adopted for this study. The population of this study was all the 30 master and doctorate degree evaluation students in the Faculty of Education, University of Uyo and Akwa Ibom State University from the 2016/2017 to 2019/2020 academic sessions. A 4-point scale titled Google Meet Technology and Evaluation Competence Scale was developed by the researcher and used for data collection with reliability index of 0.73 was used for data collection. The instrument was duly administered on the respondents and the data collected were analyzed and used in answering the research questions and testing the hypotheses at .05 alpha level. The findings of the study revealed that Google meet technology is reliable, effective and efficient in improving instructional delivery of evaluation courses, evaluation knowledge as well as evaluation competence of evaluation students. Based on the findings of the study, it was concluded that Google meet technology enhances evaluation competence of evaluation students in Akwa Ibom State. It was recommended among others that evaluation lecturers and students should have positive attitude towards technology usage, acquire the necessary technological skills and adopt Google meet technology in teaching and learning of evaluation as this would help to improve evaluation students' competence.*

KEY WORDS: Google meet technology, evaluation, competence, students, Nigeria

INTRODUCTION

Evaluation students are expected to demonstrate professional competency in evaluation and contribute meaningfully to the society. This can only be made possible through mastery of a defined set of structured courses tertiary institutions of learning. Typically, student progress and competency are measured using assessments that require students to apply their knowledge, and students receive more time, and possibly personalized instruction, to demonstrate mastery if needed (Torres and Cox, 2015; Sturgis, 2016). Evaluation competency requires evaluation students to be effective through mastery of rigorous content and skills rather

than measuring evaluation students' learning by the amount of time they have received instruction. Evaluation competency demands that training institutions transform from a time-based system to a competency-based system. Evaluation competence has garnered support because a competency-based approach seeks to directly address issues of inequity to ensure that all evaluation students; students with disabilities and students from disadvantaged and different racial, ethnic and linguistic backgrounds meet high expectations to prepare them for the job after graduation (Sturgis, 2017). Supporters also argue that evaluation competency incorporates many practical teaching and learning approaches that improves student learning, including acknowledging and using student background knowledge for pacing instruction, using formative assessment and mistakes as learning opportunities, establishing intrinsic motivation for learning and emphasizing assessments that measure application and deeper learning and skills (Silva, White and Toch, 2015).

Evaluation competence of evaluation students may be easily guaranteed through adoption and implementation of technology-based course delivery approaches such as Google meet technology. This era of information communication technology (ICT) revolution has impact on various aspects of which one is education. Through ICT, development of new information and knowledge spreads easily and can be accessed by anyone in need from anywhere. The education system requires new adaptation with changes in technological revolution. Evaluation experts ought to adapt and adopt information technology like Google meet technology so that learning objectives can be achieved by evaluation students (Hamilton and Suda, 2020). Google meet technology makes it easier for evaluation experts and students to achieve learning goals because as an online learning platform, it has a positive impact on evaluation competence (Zulfikar and Muhidin, 2019).

Google meet is a new interactive approach that makes new knowledge and experience different both by evaluation educators and students. Different knowledge and experience are gained through new interactive approaches (Borges and Mello-Carpes, 2015). One of the responsibilities of tertiary institutions is to build evaluation students' learning outcomes, knowledge and skills (Mercer, 2016). Evaluation students study from their locations through applications that have been agreed upon by evaluation educators and students. The learning room component that is originally a classroom in the school environment can be shifted to the Google meet application room. Google meet is an interactive and alternative media for effective online learning. Google meet technology can assist evaluation educators use the lecture method in indirect learning activities. Interactive learning is expected to help evaluation students in building knowledge and learning outcomes (Roscoe, 2014).

Google meet technology becomes a tool for information sharing and can be used as a learning resource. Hence, learning resources for evaluation competence can be easily completed, which is not only coming from lecturers or teachers but information can also be obtained from the online media. The use of online media as learning resources is deemed appropriate to produce global information without time and distance limitation (Hamid, 2015). Evaluation learning activities are educative message transformation process in the form of learning materials from learning resources to evaluation students. Learning resources in the learning activities are

evaluation lecturers and the messages delivered are the learning materials received by evaluation students. In the process of learning, to communicate evaluation contents by lecturers to students, the messages need to be received well to affect their understanding and bring about evaluation competence (Anshari, 2017). Thus, the success of learning activities is dependent upon the effectiveness of the communication process that occurs during the lesson (O'Flaherty and Phillips, 2015).

Through Google meet, evaluation lecturers can provide materials on the subject being taught. The lecturers can post some teaching materials, assign tasks for evaluation students, and upload the students' grade, so that they can immediately see the scores obtained in the course. In addition, Google meet can be an alternative to postpone meetings when the lecturers are outside the city or are busy during class hours. Google meet also minimizes the costs incurred due to the use of more affordable stationery and other materials, and can minimize time-released energy (Inoue and Pengnate, 2018). In short, the time and energy spent by Google meet users will be lesser than the usual.

Adoption of Google meet technology by evaluation experts in training institutions is of great importance. Google meet classroom is an internet-based service provided by Google as an e-learning system (Martínez-Monés, 2017). This service can help evaluation experts create and distribute tasks to evaluation students in a paperless way. Google meet classroom facilitates interaction of evaluation experts with students in the virtual world. Evaluation experts can freely hand out assessment and provide an independent assignment to evaluation students. In addition, evaluation experts can also open space for online discussion for evaluation students. Google meet classroom utilization can be made through multiple platforms like computers and mobile phones.

Google meet classroom can be used by evaluation experts and students as a means for the distribution of tasks, assignments submission as well as assessment. One of the sophistications of this application is that it can be used collaboratively with other groups. There are so many advantages of using Google meet technology as one of the learning management systems. The setup process of Google meet classroom is very fast and convenient than having it installed or registered to local learning management systems or learning management systems provider. Evaluation lecturers and students can access Google applications and can begin to share tasks and learning materials which can leads to evaluation competence among students. Google meet technology is simple and easy to use, making it ideal for evaluation lecturers and students although the levels of e-learning experiences are diverse. Evaluation students no longer have to download a particular task by lecturers. Evaluation lecturers just need to create and distribute files of duty to their students online. Lecturers can also determine the ranking, provide feedback for all the tasks and assess them using Google meet. Thus, there is the potential to save most of the time for both of them, both students and lecturers. Everything is paperless, so that no time is wasted distributing physical documents and that students can complete their tasks online on time, making it easier for them to meet the deadline and online learning can be tailored to evaluation students' mastery of learning contents and competency.

One of the most important benefits of using Google meet is the very possibility to achieve an efficient collaboration. Evaluation lecturers can send notifications to their evaluation students to start an online discussion or tell them about certain online learning activities. On the other hand, students have the opportunity to give feedback to their friends by posting directly to the flow of discussions in Google meet classroom. Thus, if they need help because they have difficulties to understand an assignment or want to learn more about a particular topic in order to acquire the necessary evaluation competence, they can get feedback directly from their virtual classmates or lecturers. With Google meet classroom, all participants including students and lecturers are located in one centralized location. Students can view all their tasks in a specific folder, the lecturer can keep learning materials and activities for the academic year in the cloud and all the scores/grades can be seen in this application.

There is no need to worry about missing documents because it is all stored in this free learning management system. Online facilitator/lecturer has the power to share information and resources directly online with their students. Instead of having to update the e-learning courses or sending individual emails to each student, they stay connected to Google meet classroom and distribute links to online resources and e-learning materials enhancements that can benefit their students in evaluation competence. This gives students the opportunity to obtain timely updates related to the current lesson, so that they can better understand the material and access multimedia equipment that can improve their evaluation competence (Anshari, 2017).

Digital technologies also allow students to explore extensively about what they are learning by taking the learning and teaching outside the classroom walls. Teachers' application of digital technologies in their teaching depends upon the teaching objectives and nature of subject matter (Geertsema, 2014). Therefore, for teachers to use digital tools effectively they must consider the size of the class they are teaching, availability of the equipment's to be used and they should have the skills required in applying the tools. In a study conducted by Salavati, (2016) on the use of digital technologies in education, he stated that digital technologies are applied to complement the traditional approach of teaching. Supplying these tools in schools cannot solve all the problems associated with learning, he further mentioned that the outcome of the licentiate research has shown that there must be a deeper understanding of the different worldviews recognized, particularly teachers and their attitudes with regards to teaching and learning, it is also required to have a deeper knowledge of existing pedagogical models and potential new models and strategies that are beneficial to teachers' daily work.

Hussain (2020) evaluated students' perceptions on the effectiveness of Google classroom as a digital tool in Teaching and Learning. The results of the study indicated that Google classroom is effective in improving Students access and attentiveness towards learning, knowledge and skills gained through Google classroom makes students to be active learners, as a digital tool, it provides meaningful feedback to both students and lecturers. However, poor network hinders students from effective utilization of Google classroom; thus, submitting their work late. Therefore, teachers should integrate the conventional teaching with Google classroom to improve students' performance. Google classroom should also be a form of assessing students' assessment through online assignments and quizzes; hence making Students to participate

actively in Educational Technology classes. Setyawan (2020) investigated the effect of the Google meet media-assisted lecture method on building student knowledge and learning outcomes while learning from home. The results of the two-way MANOVA revealed that students taught using the Google meet media-assisted lecture method have posttest scores building knowledge and learning outcomes higher than comparison groups. Therefore, it was concluded that the method of lectures assisted by Google meet media had a significant influence on building knowledge and student learning outcomes in lecturing learning strategies in elementary schools.

Several studies by Mafa (2018) and Nizal, Shaharanee, Jamil, Syamimi and Rodzi (2016) found out that Google classroom is fascinating in educating and learning, students' taught indicated satisfaction towards the learning activities in Google classroom. Furthermore, Fahrurrozi and Hasanah (2019) conducted a study to determine the requirements for the development of learning that is exciting, active, autonomous and effective. The results of the study show that integrated learning design based on Google classroom is needed to improve student digital literacy. All the reviewed literatures indicated that Google classroom is an effective tool in improving teaching and learning. The use of Google meet technology in the classroom has the benefit of increasing academic achievement and competence from the perspective of both the students and the educators. Real-world applications of technology along with other academic subjects help motivate students to learn. When technology-based inquiry-learning correlates with real-world situations, students begin to see the intrinsic value of what is being learned which increases interest and motivation by the student. In addition, by applying abstract ideas into real-world situations, students can understand complex concepts, which will then increase competence.

Today's generation of students learn differently than those of the past. Technology is all around them, and access to a wealth of information is only a click away. Pedagogy must change with the times. By adopting Google meet technology in evaluation classes, evaluation lecturers can utilize this technology to deliver instruction, motivate students, and include all skill levels. By integrating Google meet technology into instructional delivery of evaluation contents, evaluation lecturers may be able to motivate, include the entire spectrum of students and bring about their evaluation competence. The adoption of technology in the classroom to assist with academic success has been studied extensively in other academic areas but such studies are lacking on role of technology on evaluation competence of students. It is based on these stated problems that this study on adoption of Google meet technology and evaluation competence of evaluation students in Akwa Ibom State, Nigeria was conducted in order to fill this gap.

Purpose of the Study

This study examined the adoption of Google meet technology and evaluation competence of evaluation students in Akwa Ibom State. Specifically objectives of the study were to:

1. Examine the efficacy of adoption of Google meet technology in instructional delivery of evaluation courses.
2. Assess the effectiveness of evaluation knowledge of evaluation students acquired through adoption of Google meet technology.

3. Ascertain the efficacy of adoption of Google meet technology in developing evaluation competence of students.

Research Questions

The following research questions were raised for this study.

1. To what extent does adoption of Google meet technology predict effective instructional delivery of evaluation courses?
2. To what extent does adoption of Google meet technology predict students' acquisition of evaluation knowledge?
3. To what extent does adoption of Google meet technology predict students' development of evaluation competence?

Hypotheses

The under listed null hypotheses were formulated to guide this study.

1. Adoption of Google meet technology does not significantly predict effective instructional delivery of evaluation courses.
2. Adoption of Google meet technology does not significantly predict students' acquisition of evaluation knowledge.
3. Adoption of Google meet technology does not significantly predict students' development of evaluation competence.

METHODOLOGY

This study adopted ex-post facto research design. Ex-post facto design is a design that the researcher cannot manipulate/control the variables because the variables have already occurred but can only report what has happened or what is happening. Ex-post facto research is a systematic empirical inquiry in which the researcher does not have control of the variables because their manifestations have already. Inferences about relationships among variables are made, without direct intervention, from concomitant variation of independent and dependent variables. The study was conducted in Akwa Ibom State. It is located in the coastal southern part of Nigeria, lying between latitudes 4⁰9057'N, and longitudes 7⁰8537'E. University of Uyo and Akwa Ibom State University are located in Akwa Ibom State. The State is among those classified as educationally advantaged states in the country as a lot of her citizens are exposed to all levels of education with literacy rate of 78.84% (National Bureau of Statistics, 2017). The population of this study was all the 30 master and doctorate degree evaluation students in the Faculty of Education, University of Uyo and Akwa Ibom State University from the 2016/2017 to 2019/2020 academic sessions. The choice of these postgraduate students is based on the fact that they are currently undergoing an online course on data analysis. This e-learning course is being carried out on Google meet and Zoom technologies. All the 30 evaluation graduate students were purposively sampled and used for this study. A 4-point scale titled Google Meet Technology and Evaluation Competence Scale was developed by the researcher and used for data collection. The scale had two sections. Section A elicited information from the respondents on adoption of Google meet technology while Section B elicited responses on instructional delivery of evaluation courses, acquisition of evaluation knowledge and evaluation competence. The items on the scale were declarative statements with response

format of strongly agree, agree, disagree and strongly disagree. The scale was duly validated by experts in educational evaluation and its reliability index based on Cronbach alpha method was .73. Copies of the scale were administered on the 30 respondents and the responses were coded and subjected to analysis using regression statistical technique, and the hypotheses tested at .05 alpha level.

RESULTS

The results of the data analysis based on the three research questions and hypotheses are presented in this subsection.

Hypothesis 1

Adoption of Google meet technology does not significantly predict effective instructional delivery of evaluation courses.

In order to test hypothesis one, a regression analysis of adoption of Google meet technology and effective instructional delivery of evaluation courses was carried out and the result is shown in Table 1.

Table 1: Regression analysis of the extent to which adoption of Google meet technology predict effective instructional delivery of evaluation courses

Variables	R	R ²	β	t
Adoption of Google meet (X)	.711	.506	.332	51.9
Effective instructional delivery(Y)				

Sources of variation	Sum of squares	df	Mean Square	F	Sig
Regression	132.440	1	112.35	41.55	.000
Residual	665.020	28	3.889		
Total	8645.534	29			

*Significant at $P < .05$, $n = 30$

The result in Table 1 reveals the coefficient of correlation to be .711 which means that there is a strong positive relationship between adoption of Google meet technology (predictor variable) and effective instructional delivery of evaluation courses (criterion variable). The coefficient of determination (.506) indicates that 50.1% of effective instructional delivery of evaluation courses is predicted by adoption of Google meet technology. Adoption of Google meet technology when taken against effective instructional delivery of evaluation courses, yields a positive regression coefficient of .332 which means that for every unit increase in adoption of Google meet technology, there is a corresponding .332 unit increase in effective instructional delivery of evaluation courses. The t-value (51.9) shows that adoption of Google meet technology contributes effectively to effective instructional delivery of evaluation courses. The

result further shows that the F-cal (41.55) with p (.000) at degree of freedom of 1 and 29 at .05 alpha level is significant which indicates that the null hypothesis is rejected. This therefore means that adoption of Google meet technology significantly predicts effective instructional delivery of evaluation courses.

Hypothesis 2

Adoption of Google meet technology does not significantly predict students' acquisition of evaluation knowledge.

In order to test hypothesis two, a regression analysis of adoption of Google meet technology and students' acquisition of evaluation knowledge was carried out and the result is shown in Table 2.

Table 2: Regression analysis of the extent to which adoption of Google meet technology predict students' acquisition of evaluation knowledge

Variables	R	R ²	β	t
Adoption of Google meet (X)				
	.702	.493	.362	57.15
Evaluation knowledge (Y)				

Sources of variation	Sum of squares	df	Mean Square	F	Sig
Regression	139.213	1	214.491	39.19	.001
Residual	695.443	28	3.886		
Total	7491.110	29			

*Significant at $P < .05$, $n = 30$

The result in Table 2 indicates a coefficient of correlation of .702 which means that there is a strong positive relationship between adoption of Google meet technology (predictor variable) and students' acquisition of evaluation knowledge (criterion variable). The coefficient of determination (.493) indicates that 49.3% of students' acquisition of evaluation knowledge is predicted by adoption of Google meet technology. Adoption of Google meet technology when taken against students' acquisition of evaluation knowledge, yields a positive regression coefficient of .362 which means that for every unit increase in adoption of Google meet technology, there is a corresponding .362 unit increase in students' acquisition of evaluation knowledge. The t-value (57.15) shows that adoption of Google meet technology has a great impact on students' acquisition of evaluation knowledge. The result further indicates that the F-cal (39.19) with p (.001) at degree of freedom of 1 and 28 at .05 alpha level is significant which signifies that the null hypothesis is rejected. This means that adoption of Google meet technology do significantly predict students' acquisition of evaluation knowledge.

Hypothesis 3

Adoption of Google meet technology does not significantly predict students' development of evaluation competence.

In order to test hypothesis three, a regression analysis of adoption of Google meet technology and students' development of evaluation competence was carried out and the result is shown in Table 3.

Table 3: Regression analysis of the extent to which adoption of Google meet technology predicts students' development of evaluation competence

Variables	R	R ²	β	t	
Adoption of Google meet (X)					
	.722	.521	.367	55.2	
Dev't of evaluation competence (Y)					
Sources of variation	Sum of squares	df	Mean Square	F	Sig
Regression	558.91	1	245.306	32.11	.000
Residual	625.803	28	3.655		
Total	7118.854	29			

*Significant at $P < .05$, $n = 30$

The result in Table 3 shows the coefficient of correlation to be .722 which means that there is a strong positive relationship between adoption of Google meet technology (predictor variable) and students' development of evaluation competence (criterion variable). The coefficient of determination (.521) indicates that 52.1% of students' development of evaluation competence is predicted by adoption of Google meet technology. Adoption of Google meet technology when taken against students' development of evaluation competence yields a positive regression coefficient of .367 which means that for every unit increase in adoption of Google meet technology, there is a corresponding .367 unit increase in students' development of evaluation competence. The t-value (55.2) shows that adoption of Google meet technology contributes greatly to students' development of evaluation competence. The result also indicates that the F-cal (32.11) with p (.000) at degree of freedom of 1 and 28 at .05 alpha level is significant which indicates that the null hypothesis is rejected. This therefore means that adoption of Google meet technology significantly predicts students' development of evaluation competence.

DISCUSSIONS OF FINDINGS

The result of hypothesis one showed that adoption of Google meet technology significantly predicted effective instructional delivery of evaluation courses. Effective improvement in learning outcomes is guaranteed through Google meet because in the learning process the delivery of information can be done more optimally. Submissions of audio and visual together

can be observed and listened to by students so that they can work optimally. Google meet classroom is very useful in improving the abilities and skills of each student. Students can learn by themselves and through guidance. Students can find new things by demanding to actively learn through Google meet. While the role of supervisor is very vital for students to absorb the knowledge taught, the students can easily obtain the competence of the supervisor. This result corroborate with the findings of Mafa (2018) and Nizal *et al.*, (2016) all found out that Google classroom improves teaching and learning. However, the use of Google meet technology in learning must be supported by technological infrastructure. This requires a set of computers and the internet so that the Google meet technology can run well. The lecturers must prepare the material and upload them in Google meet class so that students can access the material without any space and time constraint. In line with this research, Gunawan and Sunarman (2018) in their research also revealed that Google meet classroom has been adopted by 88% Indonesian Vocational Schools.

The result of hypothesis two revealed that adoption of Google meet technology significantly predicted students' acquisition of evaluation knowledge. Google meet technology ensures the development of new information and knowledge and this knowledge can spread easily and can be accessed by evaluation students' from any location. The education system requires new adaptation with changes in the technological revolution. The process of learning through Google Meet involves audio and visual aspects where the lecturer delivers the material directly through the media. This is also shown during the learning process where students and lecturers communicate with each other about the material and ask questions about what is not yet understood and can be heard directly by other students so that the process of building student knowledge is high. Learning with Google meet classroom has the potential to enhance the problem solving skills of students. In addition, Google meet classroom provides a vital chance to promote blended learning and professional development. The study can be effective in understanding and evaluating the perceptive to teachers 'and learners' quality teaching and learning through Google meet classroom. In line with this finding, Dufresne, Gerace, Leonard, Mestre and Wenk (2016) found that students were very positive about Google meet classroom and believed that they learned more from online classes than they would have from the traditional classes. This study confirms that Google meet classroom is very useful and effective in improving students' skills, abilities, discipline, and independent learning through teaching materials.

The result of hypothesis three indicated that adoption of Google meet technology significantly predicted students' development of evaluation competence. If evaluators adapt to information technology, learning objectives can be achieved easily thereby ensuring evaluation competence of evaluation students. Google meet classroom creates a unique learning experience to achieve learning goals such as building knowledge and student learning outcomes while learning from home anywhere and helps students to find information in supporting learning objectives. The current finding is in line with the research conducted by Rochmah and Majid (2018) about building virtual classes in Indonesia. In their research, they indicated that virtual classes can improve students' abilities, skills, and independence in mastering the subject matter taught.

Students can easily obtain the competence of the supervisor and access the learning materials easily, and the mentor will be able to blend with the students.

CONCLUSION

This study examined adoption of Google meet technology and evaluation competence of evaluation students in University of Uyo, Nigeria. The findings of this study revealed that Google meet technology enhances evaluation competence of evaluation students. It is also reliable, effective and efficient in improving students' access and attentiveness towards learning. Activities conducted in Google meet classroom changes students from passive to active learners. Students can easily track their progress with online assessments in Google classroom, can check and monitor their performances and progress easily and at their convenient time. Google meet technology can help students in learning and build knowledge and achieving learning outcomes and be evaluation competent.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. Evaluation lecturers and students should quickly utilize technology-based instructional delivery platforms such as Google meet technology since technology-aided instructions leads to effective instructional delivery of evaluation courses
2. Evaluation lecturers and students should adopt Google meet technology in teaching and learning evaluation courses because it would help evaluation students' greatly acquire evaluation knowledge. More so, online media create deeper understanding of topics discussed in the class.
3. Evaluation lecturers and students should have positive attitude towards technology usage, acquire the necessary technological skills and adopt Google meet technology in teaching and learning of evaluation as this would help to improve evaluation students' competence.

References

- Anshari, M., Almunawar, M. N., Shahrill, M., Wicaksono, D. K., & Huda, M. (2017). Smartphones usage in the classrooms: Learning aid or interference? *Education and Information Technologies*, 22(6), 3063-3079.
- Borges, S. and Mello-Carpes, P. B. (2015). Undergraduate students as promoters of science dissemination: a strategy to increase students' interest in physiology. *Advances in Physiology Education*, 39(2), 133-136.
- Dufresne, R. J., Gerace, W. J., Leonard, W. J., Mestre, J. P. and Wenk, L. (2016). Classtalk: A classroom communication system for active learning. *Journal of Computing in higher Education*, 7(2), 3-47.
- Fahrurrozi, U. and Hasanah, R. (2019). Integrated Learning Design Based on Google Classroom to Improve Student Digital Literacy. 5th International Conference on Education and Technology. Malang, Indonesia (pp. 108-111).
- Gunawan, F. I. and Sunarman, S. G. (2018). Pengembangan Kelas Virtual Dengan Google Classroom Dalam Keterampilan Pemecahan Masalah. In Prosiding Seminar Nasional Pendidikan Matematika Etnomatnesia.

- Hamid, S., Waycott, J., Kurnia, S., & Chang, S. (2015). Understanding students' perceptions of the benefits of online social networking use for teaching and learning. *The Internet and Higher Education*, 26, 1-9.
- Hamilton, L. A. and Suda, K. J. (2020). The role of online learning in pharmacy education: A nationwide survey of student pharmacists. *Currents in Pharmacy Teaching and Learning*, 45-65.
- Hussaini, I., Ibrahim, S., Wali, B., Libata, I. and Musa, U. (2020). Effectiveness of Google Classroom as a Digital Tool in Teaching and Learning: Students' Perceptions. *International Journal of Research and Innovation in Social Science*, 4 (4), 51-54.
- Inoue, M. and Pengnate, W. (2018). Belief in foreign language learning and satisfaction with using Google classroom to submit online homework of undergraduate students. 5th International Conference on Business and Industrial Research (pp. 618-621).
- Mafa, K. R. (2018). Capabilities of Google Classroom as a Teaching and Learning Tool. *Higher Education*, 3-8.
- Martínez-Monés, A., Reffay, C., Torío, J. H., & Cristóbal, J. A. M. (2017). Learning Analytics with Google Classroom: Exploring the possibilities. In Proceedings of the 5th International Conference on Technological Ecosystems for Enhancing Multiculturality (p. 47).
- Mercer, D. K. (2016). Who is the building leader? Commentary on educational leadership preparation programs for the future. *Educational Considerations*, 43(4), 6-10.
- Nizal, I., Shaharane, M., Jamil, J. M., Syamimi, S. and Rodzi, M. (2016). The Application of Google Classroom as a Tool for Teaching and Learning. *Journal of Technology*, 8(10), 5-8.
- O'Flaherty, J. and Phillips, C. (2015). The use of flipped classrooms in higher education: A scoping review. *The Internet and Higher Education*, 25, 85-95.
- Rochmah, E. and Majid, N. (2018). Membangun virtual classroom melalui social learning networks (SLNS). *Premiere Educandum. Jurnal Pendidikan Dasar Dan Pembelajaran*, 8(1), 15-21.
- Roscoe, R. D. (2014). Self-monitoring and knowledge- building in learning by teaching. *Instructional Science: An International Journal of the Learning Sciences*, 42(3), 327-351.
- Salavati, S. (2016). Use of Digital Technologies in Education: The Complexity of Teachers' Everyday Practice. Department of Informatics, Linnaeus University, Växjö, Sweden: Doctoral dissertation.
- Setyawan, A. (2020). Effects of the Google Meet Assisted Method of Learning on Building Student Knowledge and Learning Outcomes. *Universal Journal of Educational Research* 8(9), 3924-3936.
- Zulfikar, A. F. and Muhidin, A. (2019). The Effectiveness of Online Learning with Facilitation Method. *Procedia Computer Science*, 161, 32-40.