Teachers Experiences on Blended Learning: a Case Study of a Group of Secondary School Teachers in Malaysia and Indonesia

Susruhiyatun Hayati*, Youdi Armansah, Siti Farah Adilah Binti Ismail
Department of Educational Management and Leadership,
Faculty of Education University Technology MARA, Malaysia
*Corresponding Author. Email: Susruhi28@gmail.com

Abstract: The purpose of this study is to identify the experiences and challenges of teachers in using the blended learning method during the teaching and learning process. This study used a case study method with a qualitative approach. This case study was conducted through interview with 6 of respondents involves the group of secondary school teachers from Malaysia and Indonesia. The instrument used is open-ended questions. The collected data were analyzed using descriptive. The results showed that the blended learning environment was built with a combination of face-to-face and online sessions. This case study found common challenges that was faced by teachers are the students’ lack of devices and equipment. From the results, teachers explained how dissatisfied they were in order to deliver information towards their students. Teachers’ experiences of engaging the students in a blended learning class by getting attention and students interest with fully applying technology. Practice with technology-mediated learning creates challenges that must be taken into account when planning and implementing integrated teaching and learning. The challenges that the teachers face in engaging the students in a blended learning class from 3 factors: First factor from environmental factors is lack of internet connection so that it hinders the blended learning process, second factors that come from students are lack of students' interest and student motivation, take a lot more time, students lazy during online class, students pay less attention and maintain consistency of participants in the class, and the last factor that comes from the teacher is unable to be assessed students task. However, it provides a good opportunity to enhance student learning using blended learning methods.

Article History
Received: 03-09-2021
Revised: 24-10-2021
Accepted: 25-10-2021
Published:.11-12-2021

Key Words: Teacher Experiences, Blended Learning, Engagement, Students.

Introduction

Today, the times are growing rapidly, as well as in the world of education. Many learning methods are being developed, one of which is the blended learning method. In recent years, the term “integrated learning” has become a buzzword among educators and trainers (Graham & Allen, 2005). Online learning platform, or learning management system (LMS), facilitates communication between students and teachers and allows professors to scaffold student participation in collaborative and cooperative activities outside the classroom. This statement is also supported by previous study who said that online teaching offers vast opportunity to expand the learning environment for diverse student’s populations (Keengwe & Kidd, 2010) In higher education, there is a growing trend towards a combination of online and face-to-face teaching modalities, which are often referred to as blended learning (Garrison & Kanuka, 2004). Blended learning allows students to visualize, listen, feel, and interact with educators and learning materials.
Nowadays in the 21st century, many countries are seeking to develop their educational systems through the use of these technologies and methods of modern learning (such as blended learning in the field of education). There are many research studies conducted regarding blended learning in this pandemic of Covid-19 because blended learning is popular among educators and there are constraints of having full physical class during the outbreak of pandemic Covid-19. Beiswenger (2009) found that blended learning can help the challenged learner have more time with the material, and thus the potential for increased performance resulted in line with previous research “Blended instruction has been touted as a viable instructional model that will increase student performance” (Doo Hun & Morris, 2009).

Taken together, this study supports teachers to apply and how teachers experience blended learning. And also the students will have a lot of experience in learning, because they use other methods, not only focusing on traditional methods, but also they have two methods, namely face-to-face and online learning methods, this combination method is called the blended learning method. As stated by Jokinen & Mikkonen (2013), that students are faced with various learning activities through a blended learning approach. Mixed learning environments can include face-to-face and online lectures, simulations, workshops, self-study, as well as discussion and online learning.

The constraints (because of the outbreak of Covid-19) of having full physical class has resulted in the impossible of applying face to face classroom teaching. Alternative methods of teaching have been introduced. Among the methods are online learning and blended learning. Even though online learning is receiving the most acceptance rates, nevertheless not all schools are ready with this method since there are problems getting a good environment of accessing the online materials and online synchronised learning (Appanna, 2008).

In Malaysia, ever since the implementation of the first Movement Control Order (MCO) in March 2020, the Malaysian government has made a decision that students are supposed to have their learning process online. With that, Kementerian Pendidikan Malaysia (KPM) or the Malaysian Ministry of education has come out with a manual for teachers to use throughout their teaching. The manual which is for Pembelajaran dan Pengajaran di Rumah (PdPR) will be used to have a smooth teaching at their own respective homes. MOE (2020), stated in the manual that PdPR is a combination of learning whereas students can learn online, offline or offsite. This is aligned with the concept to blended learning. However, this is the first time that the country has encountered it. With blended learning, students are not familiar with the procedures that have been set. In addition, teachers who are not trained with proper training and knowledge will have a hard time adapting to technology, especially senior teachers. Senior or older teachers may have a hard time adapting thus may develop less positivity towards their teaching (Hung & Hsu, 2007). With less positivity, teachers may experience such difficulties throughout learning through a medium in the pandemic. In contrast, according to Comber et al., (1997), they added that young teachers may have exhibited positive attitudes towards the frequency of technology usage. This results in the level of satisfaction from both categories of teachers. Senior teachers may experience psychological impact. On other hand, blended learning or PdPR has become complicated for the teachers. This is because from the policy-making from the authorities. According to NST (2021), it was reported that schools will be open in September. This is a sudden change whereas previously students are ordered to continue blended learning until further notice. With sudden changes, teachers had to adjust according to the situation.

In Indonesia Covid-19 gives a major impact on various human activities, such as educational activities and learning activities at school. Face-to-face learning in schools is...
discontinued temporarily since March 2020. The Government of Indonesia issued a Circular (SE) on 18 March 2020 states that all indoor and outdoor activities in all sectors will be temporarily postponed, especially in the education sector. Ministry of Education and The Culture of the Republic of Indonesia then followed up by issuing a Letter of Circular Number 4 of 2020 concerning Implementation of Educational Policies in Emergency Periods Spread of Covid-19. Learning at school is then carried out online or online distance learning. The Covid-19 pandemic has completely changed the practice of learning drastically become learning based on the learning independence of students and the use of information and communication technology is becoming more mainstream. Electronic education (education) and electronic learning (e-learning) with internet facilities really run completely because it is driven by the pandemic situation (Pujilestari, 2020).

Furthermore, some schools are practising sending materials from school to their students and using the minimum internet to communicate with students during a pandemic. This is a problem for the teachers as students may live in rural areas. These practices are online learning and blended learning, hence educators must prepare many things in order to develop the educational process and to provide better learning and education. Hence, it is crucial to have more input on how blended learning can be successfully implemented. More studies are needed to get more insights about the implementation. The purpose of this qualitative study was to explore how teachers who use blended learning perceive that it influences their teaching experiences or practices and assists students in the learning process and also perceive teachers challenges using blended learning. Researchers have indicated that blended learning environments can enhance student learning and improve teacher pedagogy (Delialioglu, 2012). Therefore, the development of the best practices for blended classrooms needs to be investigated, so the researcher wants to investigate teachers experiences and challenges on blended learning. The studies were conducted for the improvement of teaching and learning. The inputs are crucial since the words are affected by the outbreak of pandemic.

Research Method

This research uses qualitative approach. Qualitative data sources include interviews, observations, documents or text. Population for this study involves the group of secondary school teachers from Malaysia and Indonesia that is selected for this study. The selected sample consists of 6 respondents range from age 25 to 43 years old. All the samples have experienced using blended learning thus makes it easy for them to explain. Researchers used purposive sampling whereas judgemental sampling. Purposive sampling offers the researcher to concentrate on the specific characteristics of the populations’ interests. The quality of the research depends on the samples themselves hence the researcher has screened each teacher to be chosen to be a part of this research. In order to obtain the goal of this study, interviews are conducted with selected respondents.

The instrument used is open-ended questions. Open-ended questions are important to find out what the respondents think of a certain situation. In this study, open-ended interview questions are developed to explore the respondents’ responses. The data collection was made through 6 teachers from different backgrounds in Malaysia and Indonesia. Before conducting the interview, the researcher discussed with the supervisor beforehand. After then, the researcher manages to aligned what is needed before the actual interview. Thus, the interview conducted with the chosen respondents has been made via appointment that has been discussed virtually. The interview session took around 29 minutes until 50 minutes for the respondents. The data has been collected via google meet and phone calls, which each of the
respondents were given a link and heads-up. The interview was recorded as well and the respondents were well noted for confidentiality. After gaining the data, the researcher will transcribe the interview as supporting evidence and reference. The purpose of doing so is to gain a good framework from the data (Beck, 2010).

Results and Discussion

This finding is based on data from all respondents and is supported by related excerpts from all respondents, namely respondent 1 (R1), respondent 2 (R2), respondent 3 (R3), respondent 4 (R4), respondent 5 (R5) and respondent 6 (R6). The first question in this study asks about what are the teachers’ experiences of engaging the students in a blended learning class and the purpose of this research question one is to elaborate on the teacher's experience in engaging students using blended learning. For research question one there is one theme with two codes from 6 respondents.

| Codes                                                                 | Theme     |
|-----------------------------------------------------------------------|-----------|
| Engage with students by getting students’ attention                    | Engagement|
| Engage with students to increase their interest with in lessons through technology |           |

Based on table 1 above, shows 2 codes for research question one. A theme named “engagement” emerged from codes: Engage with students’ attention and Engage with students to increase their interest within lessons through technology.

Based on table 1 above, the teacher has experience in engaging students during blended learning in various ways, first by engaging students by getting attention. Students’ attention in class and their academic achievement are two related variables, and they are reflected in students’ understanding and ability to remember. Engagement is very important for student learning. Engagement strategies aim to provide a positive learning experience including active learning opportunities, such as being active in collaborative group work, asking students to be actively involved in presentations and discussions, actively share resources, create courses with practical components, and integrate case studies and reflection (Martin, 2018).

Fully applying technology in blended learning can make students pay more attention and keep students engaged. This result is related to a previous study from (DePietro, 2013) “Technology allows students to be active learners in different ways traditional education by promoting new and effective ways to communicate and collaborate, which occurs in a blended learning environment”. Blended learning has proven to be beneficial for students. The finding shows the teachers were seriously engaging the students with multiple ways. They believed that students would pay attention if they provided more interesting materials. In addition to increase the students interest could be done by communicate using instagram stories, colourful slide, pictures and videos. This result in line with Paul (2011) “Almost all the students indicated that the use of technology assisted them with note taking and helped them focus on the material being presented. Students also indicated that concepts were easier to understand and videos enhanced the learning process”. Similar study was conducted by Gikas (2013) revealed how technology and social media provide opportunities for real interaction among the students and offer them chances for collaboration.

All of the respondents agree with Engage with students by students’ interest within lessons through technology in blended learning. Interest describes qualities such as feeling,
pleasure and excitement. Student interest is very important in the success of the teaching and learning process, especially in blended learning this is because student interest provides a very important role, if students are interested in learning then it will make students pay more attention to the material. Based on the data from respondents get the interest of the students themselves by engaging students in blended learning through technology. This is related with Gedik et.al. (2012) said that blended learning students were more engaged and motivated to learn, especially when the activity has real-world relevance and personalize pedagogy and serve as a tool for providing effective feedback.

The finding shows the teachers believe that to engage students in order to increase students' interest in blended learning by connecting the material with student experiences and fully applying technology in their learning, such as showing interactive videos to students. This result in line with previous study “The majority of students answered that technology helps them focus and take notes. Technology also enhances discussion and encourages students to interact with each other and the instructor due to the concept introduced easier to understand” (Paul, 2011).

Majority of our respondents mentioned that teachers' experiences of engaging the students in a blended learning class by getting attention and students interest with fully applying technology and that shows a good response to students because students become more attentive to the material and are more interested in learning this can be seen from the data obtained from respondents that by applying technology in blended learning this can increase students engagement in learning. For research question two there are five themes with twelve codes from 6 respondents.

| Codes                                      | Theme                               |
|--------------------------------------------|-------------------------------------|
| Lack of internet connection                | Challenges caused by an environmental factor |
| Lack of facilities                         |                                    |
| Lack of students’ interest and student motivation | Challenges caused by students factors |
| Time-consuming                             |                                    |
| Students lazy during online class          |                                    |
| Students’ pay less attention               |                                    |
| Maintain consistency of participants in the class |                                    |
| Unable to assessed students task           | Challenges caused by teacher factor |
| Understanding students condition           | Psychosocial Mechanism              |
| Keep in touch with parents on lessons      |                                    |
| Effective Learning                         |                                    |
| Creativity limits is pushed                | Critical thinking                   |

Based on the respondent the problem faced is the lack of internet connection during blended learning. The finding shows the teachers believe that the internet was a problem in applying blended learning. This internet problem is a challenge caused by environmental factor. This finding relate with previous study “limited internet access is a major concern in the application of blended learning (Garrotte Jurado, et al 2010).

Followed by the second code by the respondent mentioned that the place where the respondent teaches the main problem is the lack of facilities for conducting blended learning classes such as mobile phones and computers. The respondents believe that applying blended
learning requires equipment that can help the learning process in blended learning and the problems encountered by teachers in applying blended learning are the lack of facilities that support the learning process. Due to lack of equipment has led to dissatisfaction of learning for the respondents and their students.

During blended learning the problems faced by the teacher caused by the student factor themselves were the lack of interest and motivation of students in learning so that this had an effect in engaging students in the classroom. The problem that comes from students is that in doing blended learning there are students who have different abilities in the class so students who have lower abilities in understanding the material must be explained again in order to understand the material and can be like other friends. make the time longer in teaching so that it cannot move to the next material. Every student has their own unique abilities hence the level of understanding varies from each student. R1 experienced this as a challenge to come up with approaches in order to have the knowledge intended to be delivered towards all students. This can be supported by Adunoula (2011), where she explained how learners' low academic performance is essentially connected to instructors' use of inefficient teaching methods to impart knowledge to pupils. R2 encountered the lack of connection are a source of limitation towards having a smooth process of teaching and learning especially during classes that conducted online requires a smooth connection. At the end R2 has to find other approaches to explain what had been taught throughout the class session. Adunoula (2011) added how teachers should be conservant due to numerous teaching strategies.

The teacher also gets a challenge that comes from the students themselves in managing the students, namely when doing blended learning, there are students who are lazy in taking lessons. The finding shows teachers' challenges when doing blended learning come from students themselves, when doing online learning students are too lazy to participate. This is aligned with Bandura’s Theory. Bandura (2010), explains how learners believe their own capabilities towards the medium of learning. Meaning to say, the students have already perceived that learning through a medium especially at home in the pandemic is a hassle. Thus, teachers perceived this as a challenge for them to encounter.

A teacher has an obligation to teach students through various learning models so that students are easy to understand the material but in doing all of that there are challenges. like what respondents have done when doing blended learning, the challenge that comes from students is when doing blended learning students don't pay attention to the material taught by the teacher.

The finding shows the teachers found problems that come from the students themselves, namely lack of students attention in the teaching and learning process. The statement can be explained by the findings from Chin & Daud (2010) where they explained that teaching should not only focus on rules, definitions and procedures. Teaching should actively engage students as their primary participants. In other words, delivering materials should consist of two-way communication. In contrast, Bandura (2010) in his theory of self-efficacy where learners have a little to minimal effort to participate themselves in class. Hence, students appear not engaging in class.

In doing blended learning teachers difficult to keep students present in class following the lesson, because students are not disciplined. The challenges that come from environmental factors and students factors have been described above, and there are also challenges that come from teachers as well as in engaging students in blended learning, the finding shows the teachers realized it is difficult to assess student when doing blended learning.
R1 highlighted that the Indonesian government should look into this matter as teachers couldn’t do much except assisting the students through the teaching and learning process. From Bandura’s theory of Social Cognitive Theory in Mass Communication, (2010), the psychosocial mechanism through communication influences human thoughts, effects and actions. In short, respondents expressed there were ways to overcome certain challenges as this was supported by Bandura’s Theory (2010) where human behaviour often explained environmental influences.

Overcoming the challenges stated was critical thinking. R5 responded on how creative thinking is needed when it comes to blended learning, especially when students are spent learning at home via online. Creative thinking was needed as to overcome the inconsistency of the engagement in class. As responded by R6 where the practical approach was used during the lesson. Bandura (2001), explains how an agent was to intentionally influence one’s functioning and life circumstances. In this case study, R6 used a practical approach in Science subject for the students to easily understand the concept. Not only it is fun for the students, but they also engage in the class with knowledge.

Main finding for research question two are the challenges that the teachers face in engaging the students in a blended learning class from 3 factors: First factor from environmental factors is lack of internet connection so that it hinders the blended learning process, second factors that come from students are lack of students' interest and student motivation, take a lot more time, students lazy during online class, students pay less attention and maintain consistency of participants in the class, and the last factor that comes from the teacher is unable to be assessed students task.

Discussion

All of the respondents experienced blended learning, mostly on one sided as currently the pandemic. Since the pandemic for both Indonesia and Malaysia are quite high number of cases, authorities asked for the teachers to continue teaching through of online medium. According to Platt et.al (2014), they claimed that online education has the potential to transform the education by expanding opportunities with new pedagogical methods hence making it reliable for both educators and students. In other words, blended learning implies to online learning as well since it is the combination of both teaching. From the interview, all the teachers are able to explained their experiences in comparison of face-to-face teaching, online teaching and blended learning.

Moreover, to discuss the computer and internet efficacy encountered by the students thus giving an impact to the teaching and learning process. Teachers experienced this throughout their teaching of blended learning mainly through online learning. In a Hong Kong study by Lee, Yeung & Ip (2016) found the major factors that affected technology use for learning were the students’ own computer skills, their attitudes towards the computer, teachers’ support and learners’ learning styles. Bandura (2001) in his Social Cognitive Theory highlighted the students belief onto their learning abilities. From the interview, the researchers have discussed that the both teachers and students enhance their efficacy via medium to learn. In other words, teachers engage with the students through various platforms as to get their attention in class.

A study was done by Paul & Glassman (2017) about the relationship between internet self-efficacy and internet anxiety has concluded that the study of internet self-efficacy and internet anxiety found that different components of internet self-efficacy, such as search self-efficacy, communication self-efficacy, organisational self-efficacy, differentiation self-efficacy, and reactive/generative self-efficacy, have varying degrees of significance in
predicting internet anxiety in blended learning environments. This statement can be interpreted as the willingness of the student to engage with the teacher through a medium.

The respondents explain their experiences well in terms of interaction whereas they have their own practices of teaching to make it more lively in the classroom session. This was supported by Ha et al. (2020) believes, learning without an instructor or teachers’ interaction makes the students less comfortable. This is aligned with the respondents explanation as to have an interaction with the students well. The interactivity is the key element of a positive learning impact. Similarly, to Preradovic (2020), interactivity appears as a vital learning experience.

Another discussion under research question one is the motivation from the students. Teachers experience that students level of motivation is not consistence each class. Motivation for learning can be divided into two categories which are intrinsic and extrinsic motivation. Ryan & Deci (2000), explains the intrinsic motivation refers to mental capacity, social and physical development of one that affects a person’s interests towards certain choice of life. In this study context, the student capacity of interest towards their teachers’ teaching. They added that extrinsic motivation is the inclination to achieve goals based on external rewards. R1, R2 and R5 has explained their experiences to gain their students attention. In other words, approaches needed to be flexible in order to gain the students’ attention and interest thus gain their engagement in class. Paul (2018), highlighted that motivational factors being crucial precursors for online discussion in the context of blended classrooms.

Regardless of the shifting teaching and learning process, results are obtained successfully as blended learning is a combination of both teaching. They showed a positive attitude in delivery their experiences according to the research topic. However, the teachers preferred teaching face-to-face rather than online. This statement was supported by Rosalina et al. (2020) as they found teachers are comfortable teaching face-to-face as it delivered a direct information.

This case study found common challenges that was faced by teachers are the students’ lack of devices and equipment. From the results, teachers explained how dissatisfied they were in order to deliver information towards their students. Especially students who are lack of devices or the teachers themselves are lack of equipment to teach. Shahzad et al. (2020), explains the online learning environment had impact instructors instructional teaching thus may have caused failures in teaching processes. With that, this was a challenge as it involves critical thinking to figure the suitable approach for the teachers to used. According to D’Andrea & Ferri (2009), although learning via devices offers ever-present computing. There are limitations towards it. Hence, the teaching and learning process becomes ineffective.

In a Malaysian context, Chung et al. (2020) found in their studies that the common challenges faced by students during online learning is the connectivity and the limited data. After the implementation of MCO, private telecommunications companies such as Digi, Celcom, Maxis and others offered a free 1 Gigabyte of broadband data to allow students to engage in their learning. However, this is still concerning for students who could not afford proper WiFi at home. The broadband data given is insufficient to stream clips and videos shared by teachers. Only one respondent willing to help their students but is a challenge for other respondents encountered. In Indonesia context on other hand, Tamah et al. (2020) found the lack of facilities provided by the Indonesian government has given an impact towards both of the teachers and students. They added that with the provision of infrastructure comprising devices for both teachers and students will allow them to interact hence connect to a wider context. This was highlighted by the Indonesian respondent. As a tool, technology
can easily be used to perpetuate the teacher-centred pedagogy if teachers do not integrate their technological knowledge with content knowledge.

In another perspective, Reimers et.al (2020) added that there were senior teachers found it difficult to adapt technological tools. This was explained by a teacher (respondent 6) during the interview. This was supported by U. Verawardina et.al (2020), as a challenge for teachers who are not well-versed in computing skills will have an impact towards their teaching. Similarly to K. Richardson (2020), instructors who could not convey their learning styles due to the implementation of online learning.

In addition to this discussion, all the respondents have highlighted to sustain engagement and participation whereby this is crucial to determine excellent results. According to Gillet (2017), it appears as a challenge where students were consider as anxious added with technical complexity. In other words, it is overwhelming to them hence teachers perceived this as a challenge. Nonetheless, the teachers also delivered their challenges well accordingly to the interview questions, as well as the ways to overcome their challenge stated. The teachers also explained how they overcome their challenges mainly focus on to grasp their students' interest through visual learning. Rodger et.al (2009) explains the definition of visual learning is the assimilation of information from visual formats. Students’ or learners can understand the information better in the classroom session. Visual learning is presented in different formats such as videos, simulations, slideshows or even images. Since blended learning is now focused on the online method, teachers had explained one of the ways to overcome the challenges are to present the students with visuals to stimulate their learning. Visual learning also is one of the strategies to enhance their ability of high order thinking skills (HOTS). Throughout the blended learning, students have the chance to enhance their thinking and problem solving skills especially in the 21st century learning.

Conclusion

The results showed that the blended learning environment was built with a combination of face-to-face and online sessions. This case study found common challenges that was faced by teachers are the students’ lack of devices and equipment. From the results, teachers explained how dissatisfied they were in order to deliver information towards their students. Teachers’ experiences of engaging the students in a blended learning class by getting attention and students interest with fully applying technology. Practice with technology-mediated learning creates challenges that must be taken into account when planning and implementing integrated teaching and learning.

The challenges that the teachers face in engaging the students in a blended learning class from 3 factors: First factor from environmental factors is lack of internet connection so that it hinders the blended learning process, second factors that come from students are lack of students’ interest and student motivation, take a lot more time, students lazy during online class, students pay less attention and maintain consistency of participants in the class, and the last factor that comes from the teacher is unable to be assessed students task. However, it provides a good opportunity to enhance student learning using blended learning methods.

Recommendation

For teachers, should be given proper tools or equipment to students to conduct their lessons at home especially via blended learning. For the next researcher, it is crucial to decide on what scope to focus along with the phenomenon that is occurring. This is because, if the research decides to focus on online learning indirectly will obtain valid results entirely and it is recommended to have more respondents to investigate teacher experiences using blended learning methods.
learning so that the data generated is more and can be more accurate to be used as a reference in making decisions about this blended learning.

**References**

Adunola, O. (2011). The Impact of Teachers’ Teaching Methods on the Academic Performance of Primary School Pupils in Ijebu-Ode Local cut Area of Ogun State. Ego Booster Books, Ogun State, Nigeria

Appanna, S. (2008). *Review of benefits and limitations of online learning in the context of the student, the instructor and the tenured faculty*. Retrieved from: https://www.researchgate.net/publication/237143888_A_Review_of_Benefits_and_Limitations_of_Online_Learning_in_the_Context_of_the_Student_the_Instructor_and_the_Tenured_Faculty/link/5c0741efa6fdcc315f9de15a/download

Bandura. (2010). *Self Efficacy*. Retrieved from: https://onlinelibrary.wiley.com/doi/10.1002/9780470479216.corpsy0836

Bandura, A. (2001). Social cognitive theory of mass communication. Media psychology, 3(3), 265-299.

Beiswinger, J. S. (2009). *Improving academic achievement at a greater rate with increased instructional time for students who qualify for free and reduced lunch*. Education Ed.D., Education, United States -- Missouri. Retrieved from http://proxy.kennesaw.edu/login?url=http://search.proquest.com/docview/305082795?accountid=11824 ProQuest database

Comber, C., Colley, A., Hargreaves, D. J., & Dorn, L. (1997). The effects of age, gender and computer experience upon computer attitude. Educational Research, 39(2), 123-133.

Delialioglu. (2012). *Students engagement in blended learning environment*. Retrieved from: https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.298.8303&rep=rep1&type=pdf

DePietro, P. (2013). Transforming education with new media: Participatory pedagogy, interactive learning and web 2.0. *International Journal of Technology, Knowledge & Society, 8*(5), 1-11. Retrieved from http://techandsoc.com/journals

Doo Hun, L., & Morris, M. L. (2009). Learner and instructional factors influencing learning outcomes within a blended learning environment. *Journal of Educational Technology & Society, 12*(4), 282-293

D’Andrea, A., & Ferri, F. (2009). Mobile devices to support advanced forms of e-learning. In Multimodal Human Computer Interaction and Pervasive Services (pp. 389-407). IGI Global.

Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. The Internet and Higher Education,7, 95–105

Garrote Jurado, R., Petersson, T., Christie, M., Seoane, F., & Sigrén, P. (2010). Training teachers in e-learning without internet access.

Graham, C. R., & Allen, S. (2005). Blended learning environments. In Encyclopedia of distance learning (pp. 172-179). IGI Global

Gedik, N., Kiraz, E., & Ozden, M. (2012). The optimum blend: Affordances and challenges of blended learning for students. *Turkish Online Journal of Qualitative Inquiry, 3*(3), 102–117. Retrieved from http://dergipark.gov.tr/tojqi/issue/21396/229377

Gikas, J., & Grant, M. M. (2013). Mobile computing devices in higher education: Student perspectives on learning with cellphones, smartphones & social media. The Internet and Higher Education, 19, 18-26.
Hung, Y.-W., & Hsu, Y.-S. (2007). Examining teachers’ CBT use in the classroom: A study in secondary schools in Taiwan. Educational Technology & Society, 10(3), 233-246.

Jokinen, P., & Mikkonen, I. (2013). Teachers’ experiences of teaching in a blended learning environment. Nurse education in practice, 13(6), 524-528.

Keengwe, J., and Kidd, T.T. (2010). Towards Best Practices in Online Learning and Teaching in Higher Education. MERLOT Journal of Online Learning and Teaching, 6(2).

Lee, L. T., & Hung, J. C. (2015). Effects of blended e-learning: a case study in higher education tax learning setting. Human-centric Computing and Information Sciences, 5(1), 13. http://doi.org/10.1186/s13673-015-0024-3

Paul, D. (2011). Technology increases students attention. Retrieved from: https://www.researchgate.net/publication/298901482_Technology_Increases_Students_Attention/link/578d046208ae7a588ef3d92b/download

Platt, C. A., Amber, N. W., & Yu, N. (2014). Student perceptions of the equivalence of online classes to face-to-face classes. Journal of Online Learning and Teaching, 10(3), 489.

Pujilestari, Y. (2020). Dampak positif pembelajaran online dalam sistem pendidikan Indonesia pasca pandemi covid-19[The positive impact of online learning in the Indonesian education system after the COVID-19 pandemic]. Buletin Hukum dan Keadilan, Vol. 4, No. 1, 49-56

Rosalina, E., Nasrullah, and Elyani, E.P. (2020). Teacher’s challenges towards online learning in pandemic era. LET: Linguistics, Literature and English Teaching Journal, 10(2), 71-88