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An Evaluation of the Education Policy of the Republic of Indonesia concerning the Use of Information, Communication and Technology (Case Study: Use of E-learning in kindergartens Before and After Covid-19 Pandemic in Yogyakarta, Indonesia)

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Abstrak

Kebijakan e-learning yang dilakukan oleh pemerintah Indonesia memberikan kemudahan kepada pendidik membuat media dengan waktu terbatas. Media/aplikasi berbasis internet akan memberikan kemudahan bagi guru dan memberikan warna lain dalam proses pembelajaran. Penelitian ini bertujuan untuk menjelaskan evaluasi penggunaan e-learning di Taman Kanak-kanak di Provinsi Yogyakarta, Indonesia. Metode yang digunakan dalam penelitian ini adalah analisis kualitatif yang digunakan untuk menggambarkan detail narasumber dengan melakukan wawancara mendalam dengan guru di Taman Kanak-kanak di Kabupaten Bantul dan Sleman. Hasil penelitian ini menunjukkan bahwa kebijakan ini sangat baik dan membantu memfasilitasi semua pihak baik guru maupun siswa. Namun di sisi lain, e-learning masih kurang diminati oleh sebagian pendidik. Pendidik akan membutuhkan waktu yang cukup banyak untuk mempelajari cara mengoperasikan komputer/laptop sebelum mereka mulai mengembangkan media pembelajaran. Sedangkan pembelajaran berbasis teknologi di beberapa sekolah termasuk dalam program ekstrakurikuler. Program ini tidak diikuti oleh semua siswa dan terbatas pada pilihan, tidak wajib. Oleh karena itu, dampak penggunaan teknologi dalam proses pembelajaran tidak dapat dirasakan oleh semua siswa. Hanya sedikit siswa yang dapat menggunakan teknologi ini dalam pembelajaran. Kementerian Pendidikan melalui pusat pengembangan Taman Kanak-Kanak Provinsi telah melaksanakan pendidikan terkait pembelajaran berbasis teknologi. Namun kurangnya sosialisasi menyebabkan pendidik kurang mendapatkan pengetahuan untuk dapat mengaksesnya.

Kata Kunci: Kebijakan Pendidikan, E-learning, TIK, Taman Kanak-kanak, Evaluasi.

Abstract:

The e-learning policy is carried out by the Indonesian government in learning to provide learning by making it easier for educators to create media with limited time. Internet-based media/applications in addition to making it easier for teachers, will also provide other colors in the learning process. Learners will not feel bored easily when listening to explanations/doing something. This study aims to explain the evaluation of the using of e-learning in the kindergartens in Yogyakarta Province, Indonesia. The method that is applied for this study is a qualitative analysis which uses directly to portray the detail interviewees by conducting an in-depth interview with the teachers in kindergartens in Bantul and Sleman districts. The results of this study indicate that this policy is very good and helps facilitate all parties both teachers and students. However, on the other hand, e-learning is apparently still lacking interest by some educators. Educators assume that the use of application/internet-based media is very

confusing. Educators will need a considerable amount of time to learn how to operate a computer/laptop before they begin to develop learning media. On the other hand, technology-based learning in several schools is included in the extracurricular program. This program is not attended by all students and is limited to optional, not mandatory. Therefore, that the impact of the use of technology in the learning process cannot be felt by all students. Only a few students are able to use this technology in learning. The Ministry of Education through the Provincial Kindergartens development center has also conducted education related to technology-based learning in kindergartens. However, the lack of socialization causes eucators not to get information and lack the knowledge to be able to access it.

Keywords: Education Policy, E-learning, ICT, Kindergartens, Evaluation.

1. INTRODUCTION

The development of information and communication technology or often known as ICT (Information and Communication Technologies) in the current era is going very fast in Indonesia. The acceleration of development has had an impact on various fields. Education is one area that could not be separated from the impact of the development of ICT. Learning by utilizing or integrating ICT can make it easier for teachers and students because it provides opportunities for students to learn dynamically and interactively (Morris, 2010: 4012). According to Mooji (2007: 1359) there are classifications of the use of ICT into three types, namely: First, ICT as an educational medium (tool) is only as a complement to clarify the details conveyed. Second, ICT as a source that is as a source of information and seeking information. Third, ICT as a learning system. Heinich in Sánchez *et al* (2012: 65) said that IT is all forms of use or utilization of computers and the internet for learning. Forms of utilization of information technology, namely: (1) Tutorial, is a program in which the delivery of material is done in a tutorial, namely a concept that is presented with text, images whether on or moving, and graphics; (2) Practice and training (drill and practice), which is to train students so that they have skills in a skill or strengthen the authority of a concept.

These days kindergarten instruction is thought of and realized to be significant in everywhere throughout the world. As it is known kindergarten understudies (4-6 years of age; relies upon the nation's guidelines) are exceptionally inquisitive to their environment, open to learn, anxious to attempt new exercises and accordingly kindergarten training is accepted significant to empower them to comprehend their condition (Parette and Blum, 2013: 80). It is thought additionally significant for kindergarteners to encounter and learn by doing and subsequently teaching small kids is indispensable for future idea advancement. The key job of youth training for improving instructive results over the instructive framework has increased worldwide acknowledgment during the most recent decade, particularly among developing nations (Drigas and Kokkalia, 2014: 54).

The majority of the learning process in Indonesia still uses the classical method in which students and teachers are in one room and carry out the teaching and learning process. The learning process takes place with the teacher explaining to students the learning material by explaining or using props. The props used are in the form of real or artificial objects. Real objects are brought into the classroom with the consideration of making it easier for students to study learning materials. The learning process that takes place rarely uses technology as a learning tool. This is due to the limited availability of technology in schools and the inadequate ability of teachers to master technology.

Even though the use of technology in the learning process is needed to support learning. Students' high curiosity about something can be channeled by providing appropriate learning. HOTS (High Order

Thinking Skill) can be developed in various ways, in direct practice or with online media (Liu and Yu, 2019: 847). Teacher competence can be seen from the ability to master technology, knowledge of student growth and development, and utilization of the surrounding environment (Instefjord and Munthe, 2016: 80). If these three components are applied by the teacher in preparing a lesson plan and applied in the learning process, it will produce innovative learning and it is hoped that it will show satisfactory results. The technology used in the learning process must be attractive so that educational goals can be achieved (Marthese and Chang, 2020: 121).

Innovation in the kindergarten emphatically influences the nature of kids' play and learning by advancing imagination, interest, investigation, coordinated effort, and critical thinking, in this manner influencing early intellectual turn of events (Vitoulisi, 2017: 97). The utilization of ICTs in the kindergarten is unique in relation to their utilization in higher evaluations, because of youngsters' restricted perusing and composing capacities, and learning strategies for the most part dependent on visual portrayals and sound-related methods. In any case, ICT has been found to improve kids' intellectual capacities, for example, visual, analogical, unique, and scientific coherent, and their innovative reasoning, memory, proficiency advancement, engine visual coordination, jargon, and metacognition (Safitry et al, 2015: 13). Government policy is needed to determine the steps of a thing. Government policies regarding education are needed as a step reference for educational devices in Indonesia. This education policy includes decisions, rules, obligations, and rights for education actors. Education policies can change according to school needs (Caner, 2017: 34). The success of education cannot be separated from the availability of all these components. The ability of students to receive learning material shows increased results with increasing teacher quality (Baker et al, 2017: 1201). Right learning planning will produce interesting learning (Hill, 2016: 363).

Besides, ICT has been found to advance important collaborations among kids, and educator intervened conversation improves youngsters' conversational aptitudes (Hsin and Tsai, 2014: 87), however some case that the utilization of ICT for correspondence isn't as huge as kindergarten age (Magen and Shamir, 2017: 88). Rivals of ICT use in kindergarten express concern and questions in regards to its commitment to the kids' turn of events (Blackwell and Lauricella, 2014: 87), guaranteeing that intellectual increasing speed utilizing a PC is opposing to the common mood of a kid's comprehensive turn of events; disregards the youngster's dynamic, tangible, and exploratory learning nature; and forestalls direct learning of the world. Rivals additionally contend that the web contains a lot of substance not suggested for youngsters, and that ICT use meddles with free play and invigorates singular exercises to the detriment of social communications (Fenty and Anderson, 2014: 124).

Related to the above, Mariyana (2013: 74) explained that in 2012 in general, the quality of teachers and teacher competencies in Indonesia were still not as expected. In terms of educational qualifications, to date of 2.92 million teachers, only about 51% have a bachelor degree or more while the rest have not had a bachelor degree (Mariyana, 2013: 75). The low quality of these teachers, causes PAUD learning carried out in class to be monotonous, less varied and not challenging. In fact this can cause early childhood tend to feel bored and saturated in learning activities in class. In addition, PAUD learning also does not yet utilize and involve the use of adequate technology, so that it causes the learning atmosphere to become less effective, inspiring, and productive. Based on the 2012 Program for International Study Assessment (PISA) research, Indonesia is in the second lowest position of the 65 countries studied in terms of achieving education quality. In order to synergize the modernization process and the

quality of education, it is necessary to change the paradigm carried out by teachers in implementing the learning process in schools. Now teachers must be able to master and utilize information and communication technology in learning both indoors and outdoors. It aims to stimulate physical and psychological development in this modern era through the help of technology. Some learning will effectively with the collaboration of technology (Menon et al, 2020: 267). Educational policies related to these needs and conditions can be applied when the Covid-19 pandemic occurs (Kurniawati, 2018: 190; Dachlan, 2017: 1251 Lee, 2020). Evaluation should be focused on quality teaching and learning and can be re-evaluated (McFadgen, 2017: 648; Derrington, 2019: 67).

Today's learning is directed more towards modernization activities with the help of sophisticated technology in the hope that it can help young children explore potential, interests and talents in an interactive, productive, effective, inspiring, constructive, and fun way. In addition, early childhood is also expected to have a simple life skill from the application of the technology. The Ministry of Education has provided a platform for educators to access some technology-based learning media. In addition to the Ministry of Education, the Provincial Kindergartens development center has also conducted education related to technology-based learning in kindergartens. Therefore, this paper aims to evaluating of the education policy of the republic of Indonesia concerning the use of information, communication and technology. The Ministry of Education and Culture, through the Joint Decree of 4 ministers, issued a learning guide for the new school year 2020/20201. One of the points in the guide is the prohibition of face-to-face Teaching and Learning Activities in 94% of Indonesia which are in the red, orange and yellow zones due to the Covid-19 pandemic (Fahriyadi, 2020), in these areas learning can only be done online. On the other hand, these sudden challenges and complexities are considered as a momentum for the transformation of the education system to digital. A similar complexity is experienced by policy makers, who are forced to pull forward the new education system, 10 or even 20 years earlier. At the time of transformation, education was still constrained by infrastructure readiness and technology uptake. The education policy by the government which is the main discussion in this paper is the policy related to the use of technology in the learning process. The use of technology in the learning process is felt to increase student competence. This is because learning that collaborates with technology, practice, and explanation will provide more meaningful learning for students. The use of technology can adjust learning material (Kopcha et al, 2020: 734) so that all learning can be served by the use of technology. Technology, especially the internet, is considered by some to be easily accessible. It does not take a lot of skills to be able to operate the internet (Kopcha et al, 2020: 734). Hoewever, for some other people, using this technology is new and quite complicated to do. This paper focus on Use of E-learning in kindergartens Before and After Covid-19 Pandemic in Yogyakarta. Section two provides the research method, then continue to the theoretical framework, section four focus on result and discussion, then the last section provides conclusion.

2. RESEARCH METHOD

This research used the qualitative approach which means this investigation depends on 21 in-depth interviews with the teachers. The table was shown below:

Tabel 1. Format Tabel

No	Teacher's Initial	Information
1	NF	ICT in school
2	WE	ICT in school
3	SHR	ICT in school
4	NW	ICT in school
5	Y	ICT in school
6	HFD	ICT in school
7	P	Problem with ICT
8	NB	Problem with ICT
9	ER	Problem with ICT
10	KY	Problem with ICT
11	IDP	Problem with ICT
12	A	School during pandemic
13	RRS	School during pandemic
14	S	School during pandemic
15	SS	School during pandemic
16	OW	School during pandemic
17	RF	School during pandemic
18	WB	School during pandemic
19	LA	School during pandemic
20	D	School during pandemic
21	BN	School during pandemic

The interview began with an overall open-finished inquiry in regards to the utilization of ICT in kindergarten and was trailed by several inquiries relating to ICT capacities and objectives, substance and instances of ICT projects and exercises in the kindergarten, ICT functions and goals, content and examples of ICT programs and activities in the kindergarten, chiren's access levels to ICT, ICT schedules, work rules, social and emotional implications, children's independent work and the need for teacher mediation, the importance of teachers' ability to use ICT, ICT extent of use and suitability for all children, as well as advantages and disadvantages in the kindergarten, the contribution of ICT to children with special needs, monitoring of the learning progress, and ICT use to communicate with parents.

3. RESULT AND DISCUSSION

a. Learning Policy Before COVID-19

The government advises teachers to take advantage of technology in the learning process. The world that has entered the industrial revolution 4.0 requires humans to at least know and be able to apply existing technology. In addition to the appeal, the government also tries to "encourage" educators to start actively using technology by providing teaching materials and legislation online available on the official government website. Not only providing teaching materials, the central government through local governments has conducted training for teachers on the use of technology in learning. This training is intended so that teachers are able to operate and master the technology so that it can be applied in the learning process in the classroom. In this case, the government also pays attention to increasing teacher competence through training and teacher competency tests (O'Donovan, 2017: 543).

However, the results were not satisfactory. Researchers conducted a pre-survey in the form of interviews with kindergarten teachers in Sleman and Bantul regarding mastery of the use of technology in relation to the learning process. This kindergarten teacher explained that they often attend IT training, both conducted by teacher working groups and by quality assurance agencies. These teachers can follow the training quite well, but they find it difficult when it comes to applying technology in learning. This is due to the lack of qualified equipment in their schools, teachers who already feel comfortable with the learning process without using technology, or indeed from the beginning teachers have difficulty learning technology. Even though learning training with technology has been carried out quite often.

Periodically, the government, assisted by the local education team, conducts surveys regarding obstacles during the learning process, especially those related to the use of

technology. The results of this survey will help the government to determine further policies related to education in Indonesia. This survey was conducted online and offline. It is carried out online by distributing questionnaires online so that the results will be immediately visible. Furthermore, a joint discussion was held between teachers and policymakers. This discussion was held to discuss further the results of the online survey that had been carried out to find a solution together. The results of this discussion will be followed up with educational policies that have been adapted to field conditions. So that the education policies of the central government can be adjusted to local policies (Cohen, 1990: 145).

However, in fact, not all the results of the discussion were followed up. Based on interviews with teachers, they explained that sometimes teacher input was not always accepted and followed up. Some of the criticisms and input from the teacher were limited to being conveyed, not discussed further, and followed up. This makes teachers disappointed because what they hope to do is actually hampered. In fact, they say, teachers are practitioners who are in direct contact with students and know what is needed and what are the obstacles. When submitted to the relevant agency, the answers given were only asked to wait and wait. Finally, some teachers are forced to make their own policies. One of them is the government policy regarding the use of technology in learning which has encountered obstacles in practice in schools. Not all schools have adequate resources so that teachers are forced to apply classical learning without using technology in the learning process.

Even though the evaluation and educational policies to be applied are determined by observation of students and educators (Mero and Piroska, 2017: 462). The real conditions in schools should be a benchmark for the government to make educational policies, especially on learning with technology. To find the root of the problem in schools in general, then find a solution and try to implement new policies under the supervision of related agencies. This is felt to be effective compared to issuing new policies that are not based on real problems in schools which in the end will only be a waste of time.

b. Learning Policy During COVID-19

Due to the COVID-19 outbreak, schools are demanded to create a learning process that can include all of the growth aspects with the tools in the house. Teachers can make interesting learning by making PowerPoint presentations, interesting videos, and creative learning materials. Once again, the government recommends carrying out learning by utilizing technology as an effort to provide distance education services to students during the pandemic. Teachers are required to be professional in providing learning in every situation (Huang et al, 2020: 214).

This online learning policy with technology has also encountered several obstacles, such as teachers and students who have not been able to master in technology. Learning that was previously carried out offline in school rarely used technology. When a pandemic occurs, a learning process that is impossible to do offline must be done online. However, online learning actually causes various kinds of reactions, one of which is from parents who think that learning with technology makes it difficult for them. This is because parents and students have not mastered devices for learning purposes (Rahman, 2019: 680).

Not only the parents and students, the teacher also found it difficult to design this interesting learning activity. This is because teachers have to learn the technology used to support online learning. The technologies used include video editing applications, power point, mastery of using supporting applications such as how to upload videos on YouTube, Google Classroom, and Google Drive. The obligation to continue providing educational services to students forces teachers to be able to master these applications in a short time. Education policies cover all aspects related to learning,

such as teacher competence, student competence, environmental conditions, needs, and teacher and student health (Fossati, 2017: 195). All these components are related to one another. Improving the quality of teachers can be influenced by the level of education, activeness in participating in learning support programs, teacher sensitivity to social issues and the needs of students, and environmental support for increasing teacher competence (Canals and Al-Rawashdeh, 2019: 86).

The government in this case provides a policy by providing IT training for teachers with materials providing learning with google classroom and using zoom. Training is carried out either online or offline. Offline training is carried out by sending several teachers in one institution to attend training. Online training was carried out by video conferencing with the teacher previously being given a tutorial on how to operate a video conference. In addition, teachers also conduct joint training. This training is guided by one of the teachers who is good at using technology or by inviting appropriate informants. This activity is carried out for 2 days and further training will be carried out when needed. Training/mastery of technology can be adjusted to the learning material and teacher needs (Arfanda, 2020).

However, this IT training has not been able to solve the problem completely. The next problem is that the lack of even internet access in Indonesia has resulted in several schools being forced to conduct face-to-face learning. One of them happened in Gowa, South Sulawesi (Sulselsatu, 2020). Some schools that have inadequate internet access are forced to conduct offline learning either at school or teachers visit students' homes. In fact, this lack of even internet access does not only occur in South Sulawesi, but in Bantul and Sleman there are still some areas that have not received internet access that supports online learning. The government paid less attention to the lack of even internet access. Over time, the government received a lot of input and complaints from parents, students, or teachers, which led to a new policy regarding online learning with this technology. Evaluation of the use of technology in online learning due to COVID-19, schools in the yellow zone are allowed to apply blended learning. However, PAUD is implemented 2 months after implementation in SD, SMP, SMA is carried out. This is because the implementation of health protocols for early childhood is quite complicated (BBCNews, 2020).

In the process of implementing this online learning policy, other obstacles were encountered that came from human resources. This obstacle is the psychological factor of teachers and children that have an impact on parents. From the start, the teacher had to think hard about the lessons that would be carried out when the pandemic began. With discussions carried out together, a decision was made to provide learning with worksheets that were taken by the parents at any given time. As time goes by, teachers are required to provide interesting learning but not difficult for children. For schools that are accustomed to doing activities with worksheets, it will be a little relieved because all the teacher needs to do is make worksheets and then distribute them to students. However, for schools that rarely use worksheets, such as schools with the Montessori method or schools with the Sentra model, teachers must think hard about the activities that will be given to students. For schools that are balanced in providing activities in the form of worksheets and with existing tools in the classroom, learning becomes more interesting and varied. Teachers are accustomed to making worksheets and compiling lessons using existing tools in class and at school.

In the meantime, children begin to find boredom in studying at home. Lack of interaction with children of his age coupled with assignments from school that easily bore children affects the child's psychology. Children become discouraged, easily moody, and tend to get emotional easily. Parents who usually give responsibility to the school eventually inevitably become teachers at home. Lack of knowledge and experience in handling children's learning makes psychological

changes to parents as well. Parents easily give up when teaching children to learn which results in protests against schools. In responding to the demands of parents, schools are unable to optimally solve problems. Using zoom meetings at first can solve the problem, but a new problem arises again because children turn out to get bored easily when attending online schools.

Another policy taken by the school is a plan to hold a home visit or limited learning at school with attention to environmental health and cleanliness. However, the policy of the school supervisor does not permit schools to start learning at school. The teacher again has to think hard about this problem. The school superintendent insisted on prohibiting schools from starting learning again but did not provide a solution to the problem. Teachers as practitioners who directly meet the educational problems directly seem helpless. Based on the evaluation of learning, it was felt necessary to open learning directly, but on the other hand, regional education policymakers insisted not to open schools. This problem continues until now and has not yet found a clear point.

Table 1. The Degree of Comparison E-Learning Policy

Factors	Before COVID-19	During COVID-19
Policy	There is a policy from the government but it is more directed towards appeals. The school has not fully implemented it.	Government policies that must be implemented. schools have implemented but not all. Several schools and parents who have experienced difficulties in online learning.
Percentage of usage	Rarely use leads to never using e-learning.	Use e-learning every day. However, it is not implemented in certain schools. Caused by not having gadgets or uneven internet signal.
Tools	Video, youtube.	Power point, google classroom, zoom meeting, google meeting, video, youtube, google drive.
Teacher's ability	Teachers are not yet capable and lack the willingness to study technology as learning support.	Teachers are able and continue to learn to use technology in the learning process.
Student's ability	Students can operate gadgets, but not to support the learning process.	Students can operate gadgets to support the learning process.

Source: Author (Interview).

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Furthermore, the government through related agencies also issued policies regarding blended learning. Combining online and offline learning will help children to understand learning better. This is because learning that is combined not only with technology or classical will result in balanced and ideal learning (Blanchard, 2016). However, the blended learning policy is not applied in all schools. The government provides a blended learning policy in schools that enter the green and yellow zone.

4. CONCLUSION

In fact, government policies regarding the use of technology in the learning process have not been implemented properly. Teachers' lack of understanding of technology is one of the obstacles. As a solution to this problem, the government through its related agencies conducts ICT training for teachers, especially at the kindergarten level. One of the reasons for this lack of understanding is the lack of habituation to the use of technology during the learning process. However, this did not show satisfactory results. Teachers still feel unfamiliar with the use of technology in the learning process.

When the Covid-19 pandemic occurred, the government again strengthened the call to use technology in the learning process. This policy was issued as an effort to provide distance education services. It is at this time that teachers are "forced" to master technology in a short time. The provision of ICT training was carried out in a short but intense time. This ultimately shows an increase in teachers' understanding and mastery of using technology. However, the use of this technology is not followed by new policies that provide solutions for all parties. The government issues an online learning policy but does not pay attention to conditions that are not the same as one another. Lack of even internet access, which is not given enough attention, causes teachers to be forced to continue learning offline both at school and with teachers visiting students' homes. The emergency period that never ends also makes students and teachers start to lose their enthusiasm during this learning process. Like some cases in kindergartens in Bantul where many students resigned because their parents found it difficult to guide online learning. On the other hand, education policy providers still prohibit face-to-face learning.

The education policy issued should indeed be based on the problems of education actors. This is carried out so that educational policies issued can be implemented by all components of education. Policies regarding the use of technology ultimately show an increase in teachers' mastery of technology, even though this is the result of teachers being "forced" due to circumstances. However, in other cases, the teacher is still unable to apply it due to environmental conditions that do not allow it. In the end, researchers hope that the effects of education policy can be felt by all education actors. Especially educational policies related to the use of technology in the learning process.

REFERENCES

Morris, D. (2010). Are teachers technophobes? Investigating professional competency in the use of ICT to support teaching and learning. Procedia-Social and Behavioral Sciences, 2(2), 4010-4015.

Mooij, T. (2007). Design of educational and ICT conditions to integrate

differences in learning: Contextual learning theory and a first transformation step in early education. Computers in Human Behavior, 23(3), 1499-1530.

Sánchez, A. B., Marcos, J. J. M., González, M. A., & GuanLin, H. (2012). In service teachers' attitudes towards the use of ICT in the classroom. Procedia-Social and Behavioral Sciences, 46, 1358-1364.

Parette, H., & Blum, C. (2013). Instructional technology in early childhood: Teaching in the digital age. Baltimore, MD: Brookes.

Drigas, A. S., & Kokkalia, G. K. (2014). ICTs in kindergarten. International Journal of Emerging Technologies in Learning, 9(2), 52–58. doi:10.3991/ijet.v9i2.3278.

Liu, Y., & Yu, F. (2019). Supporting active learning and formative evaluation via teaching-by-questioning in classrooms: Design, development, and preliminary evaluation of an online learning system. Interactive Learning Environments, 27(5-6), 841-855. doi:http://dx.doi.org/10.1080/10494820.2018.1489858.

Instefjord, E., & Munthe, E. (2016). Preparing pre-service teachers to integrate technology: An analysis of the emphasis on digital competence in teacher education curricula: ATEE journal. European Journal of Teacher Education, 39(1), 77-93. doi:http://dx.doi.org/10.1080/02619768.2015.1100602.

Marthese, S., & Chang Rundgren Shu-Nu. (2020). Literature review on the factors affecting primary teachers' use of digital technology. Technology, Knowledge and Learning, 25(1), 115-128. doi:http://dx.doi.org/10.1007/s10758-018-9376-x.

Vitoulisi, M. (2017). The formation of pre-service early childhood educators' perceptions about ICT use in early.

Safitry, T. S., Mantoro, T., Ayu, M. A., Mayumi, I., Dewanti, R., & Azmeela, S. (2015). Teachers' perspectives and practices in applying technology to enhance learning in the classroom. International Journal of Emerging Technologies in Learning, 10(3), 10–15. doi:10.3991/ijet.v10i3.4356.

Hsin, C. T., Li, M. C., & Tsai, C. C. (2014). The influence of young children's use of technology on their learning: A review. Educational Technology & Society, 17(4), 85–99.

Magen-Nagar, N., & Shamir, T. (2017). Evaluating the contribution of the national ICT plan to promote the work of teachers. Dapim, 64, 78–110. Hebrew.

Blackwell, C. K., Lauricella, A. R., & Wartella, E. (2014). Factors influencing digital technology use in early childhood education. Computers & Education, 77, 82–90. doi:10.1016/j.compedu.2014.04.013.

Fenty, N. S., & Anderson, E. M. (2014). Examining educators' knowledge, beliefs, and practices about using technology with young children. Journal of Early Childhood Teacher Education, 35(1), 114–134. doi:10.1080/ 10901027.2014.905808.

Mariyana, dkk. (2013). Pengelolaan Lingkungan Belajar. Jakarta: Penerbit Kencana Prenada Media Group.

Menon, D., Chandrasekhar, M., Kosztin, D., & Steinhoff, D. C. (2020). Impact of mobile technology-based physics curriculum on preservice elementary teachers' technology self-efficacy. Science Education, 104(2), 252-289. doi:http://dx.doi.org/10.1002/sce.21554.

Fahriyadi. (2020). Ini Panduan Penyelenggaraan Pembelajaran Tahun Ajaran 2020/2021 Di masa Covid-19. Retrived https://nasional.kontan.co.id/news/ini-panduan-penyelenggaraan-pembelajaran-tahun-ajaran-20202021-di-masa-covid-19.

Caner Bakır. (2017). Policy learning and policy change: Learning from research citations. Policy Sciences, 50(4), 585-597. doi:http://dx.doi.org/10.1007/s11077-017-9299-8 childhood education after an experiential approach. European Journal of Education Studies, 3(5), 22–37.

Fossati, D. (2017). From periphery to centre: Local government and the emergence of universal healthcare in indonesia. Contemporary Southeast Asia, 39(1), 178-203. doi:http://dx.doi.org/10.1355/cs39-1f.

Bakker, S., Contreras, K. D., Kappiantari, M., Nguyen, A. T., Guillen, M. D., Gunthawong, G., VanMaarseveen, M. (2017). Low-carbon transport policy in four ASEAN countries: Developments in indonesia, the philippines, thailand and vietnam. Sustainability, 9(7), 1217. doi:http://dx.doi.org/10.3390/su9071217.

Hill, D. T. (2016). Language as "soft power" in bilateral relations: The case of indonesian language in australia. Asia Pacific Journal of Education, 36(3), 364. Retrieved from https://search.proquest.com/docview/1797865828?accountid=31324.

Canals, L., & Al-Rawashdeh, A. (2019). Teacher training and teachers' attitudes towards educational technology in the deployment of online english language courses in jordan. Computer Assisted Language Learning.

Li, Y., Garza, V., Keicher, A., & Popov, V. (2019). Predicting high school teacher use of technology: Pedagogical beliefs, technological beliefs and attitudes, and teacher training. Technology, Knowledge and Learning, 24(3), 501-518. doi:http://dx.doi.org/10.1007/s10758-018-9355-2.

O'Donovan, K. (2017). Policy failure and policy learning: Examining the conditions of learning after disaster. Review of Policy Research, 34(4), 537-558. doi:http://dx.doi.org/10.1111/ropr.12239.

Kurniawati, S., Suryadarma, D., Bima, L., & Yusrina, A. (2018). Education in indonesia: A white elephant? Journal of Southeast Asian Economies, 35(2), 185-199. doi:http://dx.doi.org/10.1355/ae35-2e.

Dachlan, D. M., Thaha, A. R., Sugihantono, A., & Izwardy, D. (2017). Evidence-Base Learning Alternative Education

Collaboration Synergy Education - Policy-Implementing Program (Case Study In Department Of Nutrition Science, Hasanuddin Of University, Indonesia). Annals of Nutrition & Metabolism, 71, 1251. Retrieved from https://search.proquest.com/docview/2061895300?accountid=31324.

Lee, S., Hwang, C., & Moon, M. J. (2020). Policy learning and crisis policy-making: Quadruple-loop learning and COVID-19 responses in south korea. Policy and Society, Retrieved from https://search.proquest.com/docview/2417896455?accountid=31324.

McFadgen, B., & Huitema, D. (2017). Stimulating learning through policy experimentation: A multi-case analysis of how design influences policy learning outcomes in experiments for climate adaptation. Water, 9(9), 648. doi:http://dx.doi.org/10.3390/w9090648.

Derrington, M.L., Brandon, J (Ed). (2019). Differentiated Teacher Evaluation and Proffesional Learning: Policies and Practices for Promoting Career Growth. Switzerland: Springer Nature.

Mitchell, A. (2019). Second-order Learning in Developmental Evaluation: New Methods for Complex Conditions. Switzerland: Palgrave.

Kopcha, T. J., Neumann, K. L., Ottenbreit-Leftwich Anne, & Pitman, E. (2020). Process over product: The next evolution of our quest for technology integration. Educational Technology, Research and Development, 68(2), 729-749. doi:http://dx.doi.org/10.1007/s11423-020-09735-y.

Davidson-Shivers, G., Rasmussen, K.L., Lowenthal, P.R. (2018). Web-Based Learning: Design, Implementation and Evaluation 2nd Edition. Switzerland: Springer International Publishing.

Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. Administrative science quarterly, 128-152.

Méro, K., & Piroska, D. (2017). Policy diffusion, policy learning and local politics: Macroprudential policy in hungary and slovakia. Europe - Asia Studies, 69(3), 458-482. doi:http://dx.doi.org/10.1080/09668136.2017.1318827.

Huang, A. Y. Q., Lu, O. H. T., Huang, J. C. H., Yin, C. J., & Yang, S. J. H. (2020). Predicting students' academic performance by using educational big data and learning analytics: Evaluation of classification methods and learning logs. Interactive Learning Environments, 28(2), 206-230. doi:http://dx.doi.org/10.1080/10494820.2019.1636086.

Rahman, A. (2019). Restrictive versus facilitative teacher professional development: A case from three public schools in indonesia. Asia Pacific Education Review, 20(4), 673-686. doi:http://dx.doi.org/10.1007/s12564-019-09585-1.

Arfanda Siregar. (August 10th 2020). Mengolok Olok Guru. Retrieved from

https://news.detik.com/kolom/d-5126978/mengolok-olok-guru.

Dinçer, S. (2018). Are preservice teachers really literate enough to integrate technology in their classroom practice? determining the technology literacy level of preservice teachers. Education and Information Technologies, 23(6), 2699-2718. doi:http://dx.doi.org/10.1007/s10639-018-9737-z.

Sulselsatu. (September 3rd 2020). Jaringan Belum Jangkau Semua Wilayah, Gowa Terapkan Pembelajaran Daring dan Luring. Retrieved from https://www.sulselsatu.com/2020/09/03/sulsel/gowatamapan/jaringan-belum-jangkau-semua-wilayah-gowa-terapkan-pembelajaran-daring-dan-luring.html.

BBCNews. (August 7th 2020). Kurikulum darurat Covid-19 dan 'membuka sekolah' di zona kuning, kebijakan terbaru Kemendikbud di tengah pandemic. Retrieved from https://www.bbc.com/indonesia/indonesia-53691985.