Acceleration of Strengthening Digital Literacy in the Era of Society 5.0

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Abstract

The geographical location of schools in coastal areas is certainly very influential on the development of digital literacy in the learning process. This is caused by various obstacles, both material constraints, human resources, and social constraints, which then have an impact on the inhibition of the digital-based learning process. The purpose of this study has three objectives, as follows: To determine the extent to which the use of digital literacy has implications for learning, to find out the obstacles and challenges in the application of digital literacy, and to optimize the application of digital literacy in learning activities. Qualitative analysis was used in this study. The average result of implementing digital literacy in coastal areas has only reached 45% in the learning process. There are also obstacles in its implementation due to limited Human Resources (HR) for both educators and students, lack of facilities and infrastructure, the location of school demographics, management of digital literacy applications that have not been maximized by schools and teachers who drive digital literacy. It can be concluded that the application of digital literacy is still not optimal.

1. INTRODUCTION

Technology plays an essential role in the progress of the teaching and learning process. Technological developments have had a significant impact on all fields, including changes in education (Bayles et al., 2021; Li, Wang, & Wu, 2019). Technological progress can synergize in the teaching and learning process because it can change conventional learning methods into modern learning. Obtaining information is very easy; digital media makes it easy for every user to share information (Cloonan, Cloonan, Schlitzkus, & Fingeret, 2020; Kurtz, Tsimerman, & Steiner, 2014). Sources of information can come from anywhere, and anyone can easily use them well. Currently, digital media must become mandatory in schools because digital media will increase their knowledge. Social media is present as part of the development of the internet. Its presence offers a new and easy way to interact, communicate, and socialize with the support of exciting features. Teenagers dominate the number of social media users in Indonesia, so it is trendy and felt by teenagers (Dewi, 2020; Fitriani, 2017; Hosen et al., 2021; Lai & Tai, 2021).

This challenge will be even more challenging if the development of the industrial revolution era in education will be applied to areas whose geographical location is less likely to implement digital-based learning (Fitriyadi, 2013; Nurkholis, 2013; Warsita, 2017). Like a school located in the coastal area of Tanggamus, Lampung Province. The parenting style adopted by most parents has the same thought, namely assuming that education is not a priority for the residents of Tanggamus. The culture of the coastal community of Tanggamus educates their children to be more concerned with making money than getting an education. In addition, the background conditions of the people who depend on natural conditions make

it difficult for them to change their lives. This situation is very burdensome for parents and schools in the area (Maufur & Puadah, 2015; Pranata, 2014). The obstacles experienced by schools, especially at the high school level, have a high level of complexity including inadequate internet access, very minimal human resources, diverse community characteristics, and many others. This is not comparable to the constraints experienced by urban areas (Taufik, 2019).

There are several ways that the world of education in Indonesia can do to deal with these problems, namely the first is seen from the infrastructure, the government must try to increase the distribution of development and expand internet connections to all parts of Indonesia because as we know, not all parts of Indonesia can be connected with a connection. internet (Mufaziah & Fauziah, 2020; Rigianti, 2020). Second, in terms of human resources, which act as teachers, they must have skills in the digital field and think creatively (Kasiyan & Sulistyo, 2020; Nurhidayati, 2017; Nurkholis, 2013). The existence of society 5.0 poses its challenges in various fields of life, one of which is education, including learning. In this regard, the Lampung Provincial Government has launched a learning application, "Sekolah Cerdas Lampung Berjaya," which aims to improve the quality of education in Lampung Province. This application hopes that it can improve teacher competence in digital learning. Therefore, all teachers and educational institutions, especially high school education (SMA/SMK), must be responsive not to be left behind. Teachers must understand and master 21st-century literacy which emphasizes knowledge, technology, and data-based humanism.

In achieving the goal of mastering digital literacy, not only being able to apply technology but language communication literacy is also needed so that the digital learning process can be well socialized to students (Darmadi, 2015; R. S. Dewi, 2018). Language competencies must also be possessed, including linguistic literacy (grammar), sociolinguistic literacy, discourse literacy, and literacy strategies (Sartika, Dahlan, & Waspada, 2018; Sutardi & Sugiharsono, 2016). The most crucial part that educators must have in guiding their students is also by learning how to ask better questions to develop critical thinking processes (Asyari, et al., 2016; Erwiza, Kartiko, & Gimin, 2019; Lukitasari, et al., 2019). Professional teachers are tools to transmit culture and knowledge and transform cultural values into knowledge to lead to higher quality and high competitiveness (Aina & Tuti, 2020; Mudiyantun, 2019). Professional teachers are no longer a source of learning but become facilitators, dynamists, and catalysts that make students creative (Arfani & Sulistia, 2019; Butler & Shibaz, 2014; Segers, Martens, & Bossche, 2018). By mastering 21st-century competencies, educators will communicate digital learning in their respective schools, especially driving teachers who become distributors of digital/virtual classes in the Lampung Berjaya Smart School application.

The findings of previous studies also state that digital learning media is effective in increasing learning outcomes and interest (Saprudin, Liliasari, Setiawan, & Prihatmanto, 2020; Sidiq & Najuah, 2020). Other research findings also state that digital media can help students learn (Khairudin et al., 2019; Lohr et al., 2021; Sibaweihi et al., 2021). Motivating teachers are teachers sent by their respective schools to participate in a digital literacy training program organized by the Lampung Provincial Education and Culture Office to socialize the Lampung Berjaya Smart School digital class to teachers and students' schools. The training includes account creation, the mechanism for running digital classes, from uploading materials to the evaluation process. The material submitted or uploaded to the Lampung Berjaya Smart School application is previously the result of the Subject Teacher Consultation (MGMP). These materials will later be distributed to each subject teacher's digital/virtual classrooms, likewise with driving teachers and school study teachers in the Coastal area of Tanggamus Regency. They also contributed to the success of the Lampung Provincial government program. With the driving teacher, it is hoped that the digital-based

learning process in all public high schools in coastal areas can run and succeed the Lampung Provincial Government program, namely SmartSchool Lampung Berjaya. Therefore, this study aims to analyze the benefits of digital literacy applied by schools in coastal areas and their challenges and obstacles.

2. MATERIALS AND METHODS

The research used is qualitative with descriptive research methods. This study aims to describe, disclose, and present objectively and factually about the implementation of digital literacy in public high schools in the coastal area of Tanggamus Regency, Lampung Province, which consists of SMA Negeri 1 Cukuh Balak, SMA Negeri 1 Limau, SMA Negeri 1 Kelumbayan, SMA Negeri 1 Semaka and SMA Negeri 1 Pematang Sawa. The instrument in this research is the researcher himself. Qualitative researchers as human instruments that function to determine the focus of research, select information as a data source, collect data, assess data quality, analyze data, and draw conclusions. Primary data in this study is data obtained by researchers directly from the data source. The primary data source in this study was a public high school located in the coastal area of Tanggamus Regency, Lampung Province. In this case, it is the Head of the State Senior High School and the Driving Teacher of the State Senior High School in Pesisir Tanggamus. Secondary data in this study is a questionnaire that has been filled out by all educators and students of public high schools in the Tanggamus Coastal area. Implementation in the learning process at coastal high schools uses digital literacy. The data collected in this study used documentation and interview study techniques. The data collection tools used are interview guides and documentation tools, including data archives for digital literacy-based learning. At the same time, the validity of the data used includes follow-up observations to increase persistence and triangulation.

3. RESULTS AND DISCUSSION

Results

Learning activities carried out at SMA Negeri 1 Cukuh Balak give assignments and summarize material with a percentage of student responses of 33.3% and three other teachers using the google classroom application with learning activities giving assignments and summarizing material with a percentage of 16%. Based on the results of student responses and questionnaires, there are several obstacles in implementing digital learning in the form of some students not having smartphones and lack of coordination between the school and educators so that the implementation of digital classes is hampered. Berjaya) which was launched by the Lampung Provincial Government. The obstacle experienced by the driving teacher is the lack of Human Resources (HR), in this case, the ability of educators to use and run digital classroom applications, namely Smart School Lampung Berjaya. In addition, the lack of coordination and the limitations of supporting facilities and infrastructure such as smartphones, as well as the limited internet quota

The results of observations made at SMA Negeri 1 Kelumbayan found that the school did not have internet access. Based on the results of the data obtained through a questionnaire, all teachers carry out learning using the literacy type of the WhatsApp application as a means of digital learning. Learning activities carried out to students include giving assignments and summarizing the material with a percentage of student responses of 33.3%. In distributing the materials, each educator has to go to a neighboring village to get a signal. When facing the national exam, the school rents a tower to get internet access and expedite the exam process. Based on the results of student responses from the questionnaire, there are several obstacles in the implementation of digital learning in the form of 85% of

students do not have smartphones and lack of coordination between the school and educators, which results in the implementation of digital learning in the classroom being hampered. SMA Negeri 1 Kelumbayan has not used the application (Sekolah Cerdas Lampung Berjaya) which was launched by the Lampung Provincial Government. There are also obstacles experienced by the driving teacher, namely the absence of an internet signal, the lack of Human Resources (HR), and the ability of educators to use and run digital classroom applications, namely the Lampung Berjaya Smart School. In addition, the lack of coordination and limited supporting facilities and infrastructure, such as the absence of smartphones and the effectiveness of funds and time.

The results of observations made at SMA Negeri 1 Limau found that all teachers carried out learning using digital literacy with the Lampung Berjaya Smart School application. Learning activities carried out to students have followed the implementation in Smart Schools, with the percentage of student responses being 47%. Based on the results of student responses from the questionnaire, there were several obstacles in implementing digital learning in some students not having smartphones, and the implementation time on the Smart School foam plate was felt to be very fast. So, some students do not take digital classes. Another factor that also hinders the implementation of digital classes at SMA Negeri 1 Limau is the mindset of the students' parents, who are not yet open to technological advances. This is motivated by parents' level of education, so it does not motivate children both psychologically and materially. Even so, SMA Negeri 1 Limau has 100% used the application (Sekolah Cerdas Lampung Berjaya) which was launched by the Lampung Provincial Government. There are also obstacles experienced by driving teachers, namely the lack of facilities and infrastructure (surprise) provided by the school to advise running digital classes, namely Lampung Berjaya Smart School, both facilities intended for educators and students. It can be concluded that SMA Negeri 1 Limau is still limited in supporting digital classroom infrastructure and the lack of socialization to parents about the importance of digital literacy.

The results of observations in SMA Negeri 1 were obtained through a questionnaire as many as 13 teachers carried out learning using digital classes with the Smart School Lampung Berjaya application type with learning activities carried out to students according to the application with a percentage of student responses as much as 20%. In comparison, the other 34 teachers carried out classroom learning activities 35% of students use digital media using WhatsApp groups, and 10% use telephone media. Based on the results of student responses through questionnaires, there are several obstacles in the implementation of digital learning in the form of some students not having smartphones, lack of student response in doing assignments, difficulty getting a network or signal (in specific locations), lack of coordination between driving teachers which includes less than optimal assignments. The primary teachers are driving to turn on the digital classroom that has been proclaimed by the Lampung Provincial Government and the weak ability of educators to operate digital classes. With these obstacles, the implementation of digital classes is hampered. In this case, the Lampung Berjaya Smart School and educators choose to use WhatsApp as a learning medium.

The results of observations at SMA Negeri 1 Pematang Sawa were obtained through a questionnaire that all teachers did not carry out learning using digital-based learning. It should be noted that in the distribution of materials manually. Because this school is not yet accredited, implementing the computer-based national exam at SMA Negeri 1 Pematang Sawa must join the nearest regional primary school with an internet network. Based on the results of a questionnaire for educators at public high schools, the obstacles experienced by the school are very complex, including the location of school access which cannot be passed by land but by sea. The lack of crossing facilities, the absence of electricity make this school

even more left behind in various aspects. With these obstacles, the driving teacher at SMA Negeri 1 Pematang Sawa cannot carry out their duties as other driving teachers.

Based on the results of interviews with principals and driving teachers, the implementation of the learning process using digital literacy is still quite alarming. The questionnaire results for public high schools located in the coastal area of Tanggamus, on average, only 45% of digital literacy can be done in learning. Mobilizing teachers and study area teachers in coastal areas certainly have different obstacles in implementing digital literacy into learning. These obstacles cannot be separated from the readiness of each school in implementing local government programs. Digital literacy used in learning varies, depending on the ability of schools to coordinate with each other. In addition, the school's location, weak Human Resources (HR), inadequate facilities and infrastructure, lack of internet access trigger state high schools located in coastal areas to face the era of the industrial revolution 5.0 or also called the digital era. Literacy. Based on these constraints, the applications used in learning in each school are different, including Lampung Berjaya Smart School, Google Classroom, Whatsapp Group, short messages, and telephone. However, the implementation of learning through digital/virtual classes continues.

Discussion

Based on the research results, education in coastal areas in Tanggamus Regency is strongly influenced by several factors. The main factor that becomes a problem is the community's economy because most of the coastal residents of Tanggamus work as fishermen and farmers. Further factors such as culture or local culture can also affect education progress in the surrounding environment. The economy of coastal communities generally works as fishermen and only utilizes marine products, which makes coastal communities synonymous with poverty (Subagiana & Wijayati, 2018; Yeni & Naufal, 2018). In general, coastal communities in Indonesia have the same problems, namely the low level of education and inadequate socio-economic life (Triwindiyanti, Tertius, & Mahmudiono, 2018; Ulfa, 2018). With the low educational background of parents, the lower the parents' insight towards the development of children's education.

The main obstacle to progress in literacy learning is the need for assistance in implementing programs supported by the government and the surrounding community so that literacy culture can improve (Mardliyah, Siahaan, & Budirahayu, 2020; Salma & Mudzanatun, 2019). Through formal education (schools) can provide positive experiences in shaping the character of students. Moreover, they can develop these habit patterns in everyday life to improve children's literacy (Izati, Wahyudi, & Sugiyarti, 2018; Tryanasari, Aprilia, & Cahya, 2017). Previous research stated that 91.7 percent of teenagers on the coast of Madura were exposed to pornographic content when accessing the internet, and as many as 50 percent of teens accessed it intentionally (Sheva, 2019). The need for internet access is a vital part of today's digital literacy era. Of course, the internet has both positive and negative impacts on its users (Abidah et al., 2020; Azizah, Khuzaemah, & Rosdiana, 2017). Therefore, the public and students must be competent in using the internet and not be abused. Internet abuse is also related to the user's educational background. It is evident from the results of Sheva's research that adolescents in the coastal area of Madura are exposed to pornographic content when accessing the internet

From all the explanations that have been explained, the application of digital literacy in the coastal area of Tanggamus Regency is influenced by the location of the region and the local community's environment. The application of digital literacy has been able to run even though not all schools carry out digital learning. Most of the Tanggamus Coastal Areas already have internet network access, although it is not evenly distributed, such as SMA Negeri 1 Pematang Sawa, which until now does not have electricity and internet access

because the location of the area cannot be accessed by land. When compared with previous studies, which were both located in coastal areas, the Tanggamus Coastal Area is widely far from industrial areas, so that the mindset and knowledge of most people are pretty good. In addition, access to this city is still very affordable. It is just that socialization and government participation is needed in realizing digital literacy learning in the Tanggamus Coastal area. For this reason, based on the analysis results, the use of digital literacy in schools in coastal areas has only reached 40% in the implementation process.

4. CONCLUSION

Results Based on the exploration of digital learning at SMA Negeri Pesisir, Tanggamus Regency, it has not been implemented optimally due to several internal and external constraints. Internal factors are the lack of Human Resources (HR), lack of adequate facilities (smartphones and internet quota). External factors in the form of difficulty in getting a stable place. Signals, local community culture, religion, economy, and community educational background are also significant obstacles in building a digital literacy civilization. Student parenting in the coastal environment of Tanggamus then impacts the quality of learning in schools.

5. REFERENCES

Abidah, A., Hidaayatullaah, H. N., Simamora, R. M., Fehabutar, D., & Mutakinati, L. (2020). The Impact of Covid-19 to Indonesian Education and Its Relation to the Philosophy of "Merdeka Belajar." *Studies in Philosophy of Science and Education*, *1*(1), 38–49. https://doi.org/https://doi.org/10.46627/sipose.v1i1.9.

Aina, & Tuti. (2020). Improving Teacher Performance In Classroom Learning Process Through Collaborative Educational Supervisions In Elementary Schools. *Primary Jurnal Pendidikan Guru Sekolah Dasar*, *9*(2). https://doi.org/http://dx.doi.org/10.33578/jpfkip.v9i2.7894.

Arfani, S., & Sulistia, A. (2019). Teaching Speaking Using A "Snake And Ladder" Board Game: A Teacher Story. *Research and Innovation in Language Learning*, *2*(1). https://doi.org/https://doi.org/10.33603/rill.v2i1.1642.

Asyari, M., Henie, M., Muhdhar, I. Al, & Ibrahim, H. S. (2016). Improving critical thinking skills through the integration of problem-based learning and group investigation. *International Journal for Lesson and Learning Studies*, *5*(1), 36–44. https://doi.org/http://dx.doi.org/10.1108/IJLLS-10-2014-0042.

Azizah, S., Khuzaemah, E., & Rosdiana, I. (2017). Penggunaan Media Internet eXe-Learning Berbasis Masalah pada Materi Perubahan Lingkungan untuk Meningkatkan Hasil Belajar Siswa dalam kehidupan sehari-harinya dan juga psikomotor (keterampilan) siswa . Proses belajar dapat materi dan bahan belajar yang. *Scientiae Educatia: Jurnal Pendidikan Sains*, (2005), 197–213. http://dx.doi.org/10.24235/sc.educatia.v6i2.1957.

Bayles, J., Peterson, A. D., Pitts, S. J., Bian, H., Burkholder, S., Hegde, A. V., & Stage, V. C. (2021). Food-Based Science, Technology, Engineering, Arts, and Mathematics (STEAM) Learning Activities May Reduce Decline in Preschoolers' Skin Carotenoid Status. *Journal of Nutrition Education and Behavior*, *53*(4). https://doi.org/https://doi.org/10.1016/j.jneb.2020.10.017.

Butler, R., & Shibaz, L. (2014). Striving to connect and striving to learn: Influences of relational and mastery goals for teaching on teacher behaviors and student interest and help-seeking. *International Journal of Educational Research*, *65*. https://doi.org/https://doi.org/10.1016/j.ijer.2013.09.006.

Cloonan, M. R., Cloonan, D. J., Schlitzkus, L. L., & Fingeret, A. L. (2020). Learners with Experience in Surgical Scrub Benefit from Additional Education with an Interactive E-Learning Module. *Journal of the American College of Surgeons*, *4*(2). https://doi.org/https://doi.org/10.1016/j.jamcollsurg.2020.08.521.

Darmadi. (2015). Peran, Kompetensi, Dan Tanggung Jawab Menjadi Guru Profesional. *Jurnal Pendidikan*, *13*(1), 161–174. https://doi.org/http://dx.doi.org/10.31571/edukasi.v13i2.113.

Dewi, R. S. (2018). Kemampuan Profesional Guru Dan Motivasi Kerja Terhadap Kinerja Mengajar Guru Sekolah Dasar. *Jurnal Administrasi Pendidikan*, *25*(1), 150–158. https://doi.org/https://doi.org/10.17509/jap.v25i1.11581.

Dewi, S. L. A. (2020). Perilaku Generasi X Dan Generasi Millenial Dalam Penggunaan Media Sosial. *Jurnal Inovasi*, *14*(1). https://doi.org/https://doi.org/10.33557/jurnalinovasi.v14i1.946.

Erwiza, Kartiko, S., & Gimin. (2019). Factors Affecting the Concentration of Learning and Critical Thinking on Student Learning Achievement in Economic Subject. *Journal of Educational Sciences*, *3*(2), 205–215. https://doi.org/https://doi.org/10.31258/jes.3.2.p.205-215.

Fitriani, Y. (2017). Analisis Pemanfaatan Berbagai Media Sosial Sebagai Sarana Penyebaran Informasi Bagi Masyarakat. *Jurnal Paradigma*, *19*(2), 148–152. https://doi.org/https://doi.org/10.31294/p.v19i2.2120.

Fitriyadi, H. (2013). Integrasi Teknologi Informasi Komunikasi Dalam Pendidikan: Potensi Manfaat, Masyarakat Berbasis Pengetahuan, Pendidikan Nilai, Strategi Implementasi Dan Pengembangan Professional. *Jurnal Pendidikan Teknologi Dan Kejuruan*, *21*(3). https://doi.org/https://doi.org/10.21831/jptk.v21i3.3255.

Hosen, M., Ogbeibu, S., Giridharan, B., Cham, T.-H., Lim, W. M., & Paul, J. (2021). Individual motivation and social media influence on student knowledge sharing and learning performance: Evidence from an emerging economy. *Computers & Education*, *172*. https://doi.org/https://doi.org/10.1016/j.compedu.2021.104262.

Izati, Wahyudi, & Sugiyarti, M. (2018). Project Based Learning Berbasis Literasi untuk Meningkatkan Hasil Belajar Tematik. *Jurnal Pendidikan*, *3*(9), 1122–1127. https://doi.org/http://dx.doi.org/10.17977/jptpp.v3i9.11508.

Kasiyan, & Sulistyo. (2020). Pengintegrasian Pendidikan Karakter Berbasis Budaya Lokal Dalam Pembelajaran Kriya Kayu Pada Siswa Tunagrahita. *Jurnal Pendidikan Karakter*, *2*(1). https://doi.org/https://doi.org/10.21831/jpk.v10i2.35032.

Khairudin, Triatmaja, Istanto, & Azman. (2019). Mobile Virtual Reality to Develop a Virtual Laboratorium for the Subject of Digital Engineering. *International Journal of Interactive Mobile Technologies*, *13*(4). https://doi.org/https://doi.org/10.3991/ijim.v13i04.10522.

Kurtz, G., Tsimerman, A., & Steiner, O. (2014). The Flipped Classroom Answer to Future Learning? *European Journal of Open, Distance and E-Learning*, *17*(2). https://doi.org/https://doi.org/10.2478/eurodl-2014-0027.

Lai, C., & Tai, C.-P. (2021). Types of social media activities and Hong Kong South and Southeast Asians Youth's Chinese language learning motivation. *System*, *97*. https://doi.org/https://doi.org/10.1016/j.system.2020.102432.

Li, G., Wang, X., & Wu, J. (2019). How scientific researchers form green innovation behavior: An empirical analysis of China's enterprises. *Technology in Society*, *56*. https://doi.org/https://doi.org/10.1016/j.techsoc.2018.09.012.

Lohr, A., Stadler, M., Schultz-Pernice, F., Chernikova, O., Sailer, M., Fischer, F., & Sailer, M. (2021). On powerpoints, clickers, and digital pros: Investigating the initiation of

digital learning activities by teachers in higher education. *Computers in Human Behavior*, *119*. https://doi.org/https://doi.org/10.1016/j.chb.2021.106715.

Lukitasari, Purnamasari, Utami, & Sukri. (2019). Blended-Problem-Based Learning: How its impact on students' critical thingking skills? *Jurnal Pendidikan Biologi Indonesia*, *5*(3), 425–434. https://doi.org/https://doi.org/10.22219/jpbi.v5i3.10048.

Mardliyah, S., Siahaan, H., & Budirahayu, T. (2020). Pengembangan Literasi Dini melalui Kerjasama Keluarga dan Sekolah di Taman Anak Sanggar Anak Alam Yogyakarta. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, *4*(2). https://doi.org/https://doi.org/10.31004/obsesi.v4i2.476.

Maufur, S., & Puadah, A. (2015). Pengaruh Bimbingan Orang Tua Terhadap Kemampuan Membaca Siswa Kelas Rendah Di Sd Negeri Cimohong 02 Kecamatan Bulakamba Kabupaten Breb. *Al Ibtida: Jurnal Pendidikan Guru Mi*, *6*(1). https://doi.org/https://doi.org/10.24235/al.ibtida.snj.v2i1.178.

Mudiyantun, Y. (2019). The Investigation Of Situational Leadership, And Work Motivation On Kindergarden Teacher Performance. *Jurnal Kepemimpinan Pendidikan*, *2*(1). https://doi.org/https://doi.org/10.22236/jkpuhamka.v2i1.3814.

Mufaziah, E., & Fauziah, P. (2020). Kendala Orang Tua dalam Mendidik Anak Usia Dini pada Saat Pandemi Covid 19. *Jurnal Obsesi*, *5*(2). https://doi.org/https://doi.org/10.31004/obsesi.v5i2.746.

Nurhidayati, E. (2017). Pedagogi Konstruktivisme dalam Praksis Pendidikan Indonesia. *Indonesian Journal Of Educational Counseling*, *1*(1), 1–14. https://doi.org/https://doi.org/10.30653/001.201711.2.

Nurkholis. (2013). Pendidikan dalam Upaya Memajukan Teknologi. *Jurnal Kependidikan*, *1*(24). https://doi.org/https://doi.org/10.24090/jk.v1i1.530.

Pranata, I. W. (2014). Hubungan Bimbingan Belajar Orang Tua Dan Konsep Diri Dengan Hasil Belajar Matematika Siswa Kelas V Sd Gugus V Tampaksiring. *Mimbar Ilmu Undiksha*, *2*(1). https://doi.org/http://dx.doi.org/10.23887/jjpgsd.v2i1.3135.

Rigianti, H. A. (2020). Kendala Pembelajaran Daring Guru Sekolah Dasar Di Banjarnegara. *Elementary School: Jurnal Pendidikan Dan Pembelajaran Ke-SD-An*, *7*(2). https://doi.org/https://doi.org/10.31316/esjurnal.v7i2.768.

Salma, & Mudzanatun. (2019). Analisis Gerakan Literasi Sekolah Terhadap Minat Baca Siswa Siswa Sekolah Dasar. *Mimbar PGSD Undiksha*, *7*(2), 122–127. https://doi.org/http://dx.doi.org/10.23887/jjpgsd.v7i2.17555.

Saprudin, S., Liliasari, L., Setiawan, A., & Prihatmanto, A. (2020). Optical Gamification (OG); Serial Versus Random Model to Improve Pre-Service Physics Teachers' Concept Mastery. *International Journal of Emerging Technologies in Learning (IJET)*, *15*(9), 39–59. https://doi.org/https://doi.org/10.3991/ijet.v15i09.11779.

Sartika, S. H., Dahlan, D., & Waspada, I. (2018). Kompetensi Guru Dan Motivasi Belajar Siswa Terhadap Hasil Belajar Melalui Kebiasaan Belajar Siswa. *Manajerial: Jurnal Manajemen Dan Sistem Informasi*, *17*(1), 39–51. https://doi.org/10.17509/manajerial.v17i1.9760.

Segers, M., Martens, R., & Bossche, P. Van den. (2018). Understanding how a case-based assessment instrument influences student teachers' learning approaches. *Teaching and Teacher Education*, *24*(7). https://doi.org/https://doi.org/10.1016/j.tate.2008.02.022.

Sheva, D. R. (2019). Internet dan Perilaku Seksual Remaja Pesisir Madura: Study Cross Sectional Di Desa Branta. *Jurnal Dinamika Sosial Budaya*, *21*(2). https://doi.org/DOI: http://dx.doi.org/10.26623/jdsb.v21i2.1621.

Sibaweihi, N., Patel, R. G., Guevara, J. L., Gates, I. D., & Trivedi, J. J. (2021). Real-time steam allocation workflow using machine learning for digital heavy oil reservoirs.

Journal of Petroleum Science and Engineering, *199*. https://doi.org/https://doi.org/10.1016/j.petrol.2020.108168.

Sidiq, R., & Najuah. (2020). Pengembangan E-Modul Interaktif Berbasis Android Pada Mata Kuliah Strategi Belajar Mengajar. *Jurnal Pendidikan Sejarah*, *9*(1), 1–14. https://doi.org/https://doi.org/10.21009/JPS.091.01.

Subagiana, I. G. M. G. L. S. A., & Wijayati, N. L. M. (2018). Model Pemberdayaan Ekonomi Masyarakat Pesisir (PEMP) pada Tiga Perkampungan Nelayan Air Kuning, Pengambengan dan Candi Kusuma Kabupaten Jembrana Propinsi Bali (Suatu Studi Komparatif). *Jurnal Bisnis Dan Kewirausahaan*, *14*(2). https://doi.org/http://dx.doi.org/10.31940/jbk.v14i2.1042.

Sutardi, & Sugiharsono. (2016). Pengaruh Kompetensi Guru, Motivasi Belajar, Dan Lingkungan Keluarga Terhadap Hasil Belajar Mata Pelajaran Ekonomi. *Jurnal Pendidikan IPS*, *3*(2), 188–198. https://doi.org/https://doi.org/10.21831/hsjpi.v3i2.8400.

Taufik, A. (2019). Perspektif Tentang Perkembangan Sistem Pembelajaran Jarak Jauh Di Kabupaten Kutai Kartanegara Kalimantan Timur. *Jurnal Pendidikan Dan Konseptual*, *3*(2), 88–98. https://doi.org/DOI:http://doi.org/10.28926/riset_konseptual.v2i4.111.

Triwindiyanti, Q. A. F., Tertius, E. P., & Mahmudiono, T. (2018). Perbedaan Dan Pengaruh Indikator Ketahanan Pangan Terhadap Proporsi BBLR Pada Wilayah Pesisir Pulau Jawa (Kabupaten Bangkalan dan Kabupaten Tulungagung). *AMERTA NUTRITION*, *2*(1). https://doi.org/https://doi.org/10.20473/amnt.v2i1.2018.37-43.

Tryanasari, Aprilia, & Cahya. (2017). Pembelajaran Literasi di SDN Rejosari 1 Kecamatan Kawedanan Kabupaten Magetan. *Premiere Educandum*, *7*(2), 173. https://doi.org/https://doi.org/10.25273/pe.v7i2.1641.

Ulfa, M. (2018). Persepsi Masyarakat Nelayan dalam Menghadapi Perubahan Iklim (Ditinjau dalam Aspek Sosial Ekonomi). *Jurnal Pendidikan Geografi*, *23*(1). https://doi.org/http://dx.doi.org/10.17977/um017v23i12018p041.

Warsita, B. (2017). Peran dan Tantangan Profesi Pengembang Teknologi Pembelajaran Pada Pembelajaran Abad 21. *Kwangsan: Jurnal Teknologi Pendidikan*, *5*(2). https://doi.org/https://doi.org/10.31800/jtp.kw.v5n2.p77--90.

Yeni, E., & Naufal, A. (2018). Tingkat efektifitas pemberian bantuan dana pengembangan usaha mina pedesaan (PUMP) pada kelompok nelayan di Kota Banda Aceh. *Acta Aqutica*, *5*(2). https://doi.org/https://doi.org/10.29103/aa.v5i2.776.