



## Multi-Blended Learning Model For Remote Area Schools In Pandemic Covid-19 Situation\*

<sup>1</sup>Saidna Zulfiqar bin Tahir\*\*, <sup>2</sup>Mutmainnah, <sup>3</sup>Nuril Mufidah

<sup>1-3</sup>Lembaga Penelitian dan Pengabdian Masyarakat (LPPM) Universitas Iqra Buru,  
Maluku, Indonesia

saidnazulfiqar@gmail.com\*\*, mutmainnah09@gmail.com, mufidah\_nuril@gmail.com

Article Info	Abstract
<p><b>Keywords:</b> Multi-blended Learning Model Remote Area</p> <p><b>History:</b> Received: May 19, 2022 Accepted: May 19, 2022 Published: May 31, 2022</p> <p>*Research article</p> <p>**Correspondence author</p> <p><b>How to cite (APA):</b> Bin Tahir, S, Z., Mutmainnah, Mufidah, Nurul. (2022). Multi-blended learning model for remote area schools in pandemic Covid-19 situation. <i>Journal of Teaching and Education for Scholars (JOTES)</i>, 1(1), 38-46.</p>	<p>The Covid-19 pandemic has swept across the world and affected all sectors. Likewise, this forces educators to innovate in supporting teaching and learning activities in education, especially in remote areas. Therefore, this study attempted to design a learning model based on a needs and situation analysis for schools located in remote regions of Maluku. This study employed the Research and Development (R&amp;D) method using the 4D model (define, design, develop, and disseminate), which in this article only presents two stages, namely define and design. The research sample consisted of 170 subjects from five high schools in Buru Regency, Maluku. The data collected used a situational and needs analysis questionnaire, which was analyzed descriptively. The analysis results are used to design appropriate learning models for schools in remote areas. This study found that a learning model suitable for remote areas is a multi-blended learning model. This model is expected to contribute proportionally to the government and schools implementing learning in remote areas.</p>

### Introduction

Currently, the Coronavirus outbreak 2019 (COVID-19) is no longer being ignored by the public because of boredom and a long wait for the vaccine. Since WHO declared this outbreak a global pandemic on March 11, 2020, several countries have established policies to impose lockdowns to prevent the spread of the coronavirus (Juniansyah & Muh Ardiansyah Makmur, 2021). In Indonesia, a large-scale social restriction policy was implemented to suppress the reach of this virus (Misnawati, 2021a). So that all activities carried out outside the home must be stopped until this pandemic has subsided (Misnawati, 2021b).

Several local governments in Indonesia have decided to stop learning activities in schools and implement online learning methods or e-learning (Arfan et al., 2021). The government policy will affect several provinces on Monday, March 16, 2020, followed by other provinces. However, this does not apply to several schools in every region, especially in remote areas or 3T areas (Prahmana et al., 2021). These schools are not ready for the online learning system initiated by the government because of the need for learning media such as internet networks, cellphones, laptops, or computers.

Problems with the learning media system and the availability of the internet or internet quota require high costs for students and teachers to facilitate online learning (Almpanis & Joseph-Richard, 2022). The allocation of the expenses for internet needs increases, and many parents cannot increase their income budget by providing internet networks. It is also a fundamental issue for students, what time they have to study and what internet they have, while their parents are low-income or middle to lower (underprivileged) class. As a result, this kind of thing is borne by the parents of students who want their children to continue to take part in online learning.

Online learning cannot be separated from the internet network (Wang et al., 2022). An Internet network connection is one of the obstacles to students face whose homes have difficulty accessing the internet, mainly because they live in rural, remote, and underdeveloped areas. Even if someone uses a cellular network, sometimes the network is unstable because of the geographical location that is still far from the cellular signal coverage. It is also a problem that often occurs in students who take online learning that is not optimal in its implementation.

Several research results on learning during the Covid-19 period recommend transforming teaching media so that learning activities can take place effectively (Atsani, 2020). Ayuni et al. (2020) analyzed the absence of teacher readiness in facing learning during the Covid-19 pandemic (Ayuni et al., 2020). In addition, Astini (2020) suggests using information technology in education (Astini, 2020). Meanwhile, Allo (2020) still doubts online learning to be applied, even though the results of his research show an increase in learning outcomes (Allo, n.d.).

Lestari (2020) has also conducted a survey to find out about online learning at one of the leading universities in Indonesia. The survey results showed that 40.3 percent of UPI Campus students in Cibiru agreed with online learning as an alternative to academic activities during the Covid-19 pandemic (Lestari, 2020). According to students, they can study as usual, not miss lecture materials, and have more flexible time through online learning. Although not new, students' online learning was also not entirely accepted because 53.7 percent of students gave differences of opinion. As many as 82.4 percent of students think online learning is more complicated than regular learning. As many as 50.9 percent of students stated that the availability of internet quota was the most significant difficulty experienced by students, not only network difficulties. The availability of learning devices (one of which was a laptop), the level of understanding of the material, the atmosphere of the home, and the environment that was not supportive also helped determine the effectiveness of online learning at home. Some are pretty interesting. The friends' existence for the learning enthusiasm is missed since the implementation of academic activities during the spread of Covid-19.

Some of these previous studies have tried to provide solutions for learning during the Covid-19 pandemic. Unfortunately, they have not seen how learning in remote areas that do not have an internet network or have access causes connection problems. They also have not analyzed how students do not have internet access, cell phones or androids, and laptops. Therefore, this paper tries to analyze the needs of students and teachers and school conditions. Researchers designed the appropriate learning model to be applied in schools located in remote areas from this analysis.

## ***Learning Model***

The definition above aligns with Suprihatiningrum's (2013) opinion, which states that the learning model is a conceptual framework that describes a systematic learning procedure for managing student learning experiences to achieve specific desired learning goals (Suprihatiningrum, 2013). The learning model is a framework that provides a systematic overview for carrying out learning to help students learn within a clear goal to be achieved. The learning model is a general description but still focuses on specific goals.

The learning model is a design that describes a detailed process of creating environmental situations that allow learning interactions to change or develop students (Sukmadinata & Syaodih, 2012). According to Trianto (2010), the learning model is a plan or pattern used as a guide in carrying out classroom learning or learning in tutorials (Trianto 2010). Joyce & Weil (in Rusman, 2014) suggest that the learning model is a plan or pattern that can even be used to form a curriculum (long-term learning plans), design learning materials, and guide learning in a classroom in another learning environment (Rusman, 2014).

Based on some of the experts' opinions above, it can be seen that there are similarities in special features that cover all notions of the learning model. This particular characteristic is the existence of a systematic pattern or plan. To ensure the presence of these characteristics, here are the aspects or features of a learning model compared with science and other learning designs.

After the Covid-19 outbreak in the hemisphere, the education system began to look for innovations in teaching and learning. Several methods recommended by the government can be used in learning during a pandemic, including Circular no. 4/2020 from the Minister of Education and Culture suggests that all educational institutions maintain a distance. All material shipments will be sent to their respective homes.

1. This project-based learning was initiated as an implication of the Minister of Education and Culture Circular Number 4 of 2020. This project-based learning has the primary objective of providing training to students to be more able to collaborate, work together, and have empathy with other people.
2. The online method utilizes online networks and can make students creative using existing facilities, such as creating content using items around the house or carrying out all learning activities through the online system. This method is perfect for students in the red zone.
3. The offline method is a learning model carried out outside the network. In that sense, this one lesson is carried out face-to-face by paying attention to the zoning and applicable health protocols. This method is especially suitable for students in yellow or green zones, especially with the new strict standard protocol.
4. Home visits are an option in the learning method during this pandemic. This method is similar to the teaching and learning activities delivered during homeschooling. So, the teacher visits students' homes for a particular time. Thus the material given to students can be conveyed well because the subject matter and assignments are carried out properly under the teacher's guidance.
5. Blended learning is a method that uses two approaches at once. This method uses an online system and face-to-face via video conferencing in a certain sense. So, even

though students and teachers do distance learning, they can still interact with each other. This method helps improve students' cognitive abilities.

6. Learning via radio was a learning innovation during the Covid-19 pandemic.

Given that the Covid-19 outbreak is not yet known when it will end, the government has suggested that the learning method above is an option for students, teachers, and schools to continue teaching and learning activities. This method will be used as a basis in this paper to analyze the situation and needs of students in remote areas. Therefore, this study was conducted to answer the research questions as follows:

1. What is the design of a multi-blended learning model based on a needs and situation analysis for schools located in remote regions of Maluku?

## **Method**

This study employed a 4D research and development (R&D) model. This model is used to develop learning tools (Thiagarajan et al., 1974). As the name implies, the 4D model consists of 4 main stages: Define, Design, Develop, and Disseminate. This study only focuses on two steps, namely defining and designing.

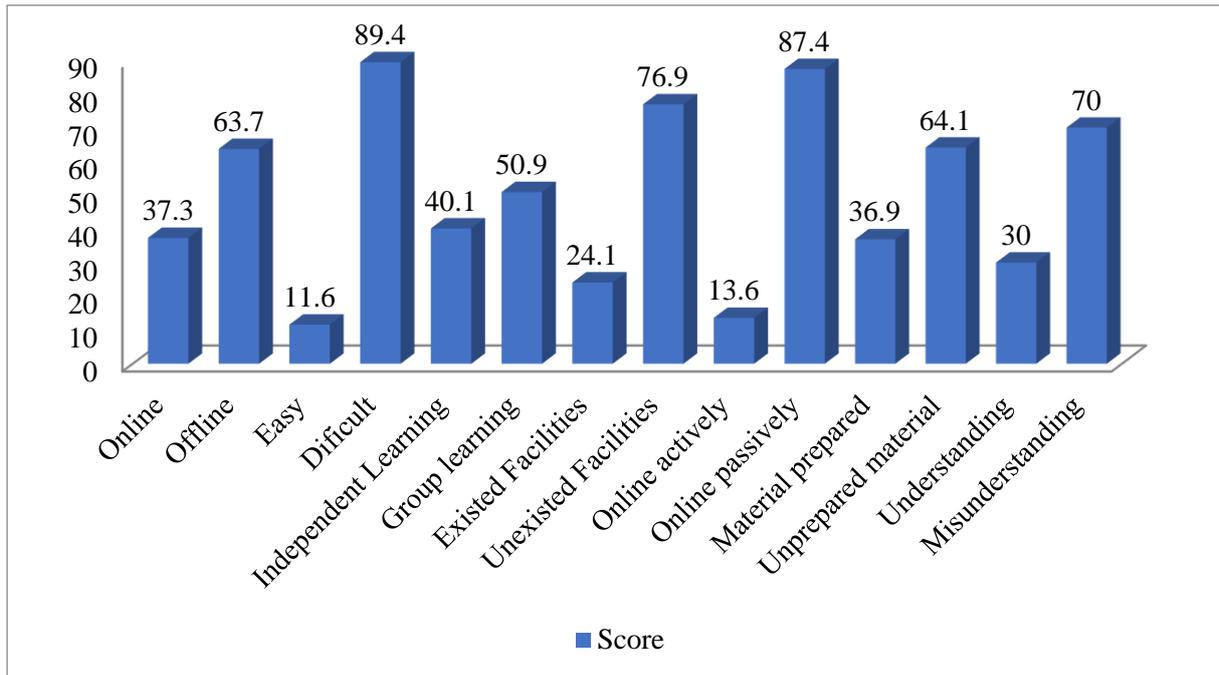
The stage determined is the needs analysis stage. In product development, the developer needs to refer to the development requirements and analyze and collect information on how development needs to be carried out. The second stage in the 4D model was designed. 4 steps must be followed at this stage, namely compiling tests that refer to criteria, media selection, format selection, and initial design (Thiagarajan et al., 1974).

This research was conducted in Buru Regency, Maluku, with 170 participants as research subjects consisting of five senior high schools located in remote areas. The data in this study were obtained through a needs and situation analysis questionnaire to determine the needs of students, teachers, and school and student conditions or facilities. Needs analysis is a process to obtain information, models, and specifications that software users or students want (Bin-Tahir et al., 2019; Bin Tahir, 2017). Both the client and the software maker are actively involved in this stage. Information obtained from clients/users is what a reference in doing software design becomes.

Data was also obtained through interviews with several teachers, students, principals, and parents of students. All data obtained were analyzed descriptively to see the percentage and classification. The data that has been studied is used to design a suitable learning model for schools in remote areas of Buru Regency.

## **Results and Discussion**

Based on the results of data analysis collected through a questionnaire to analyze the needs of high school students in remote areas in Buru Regency can be presented in the graph below:



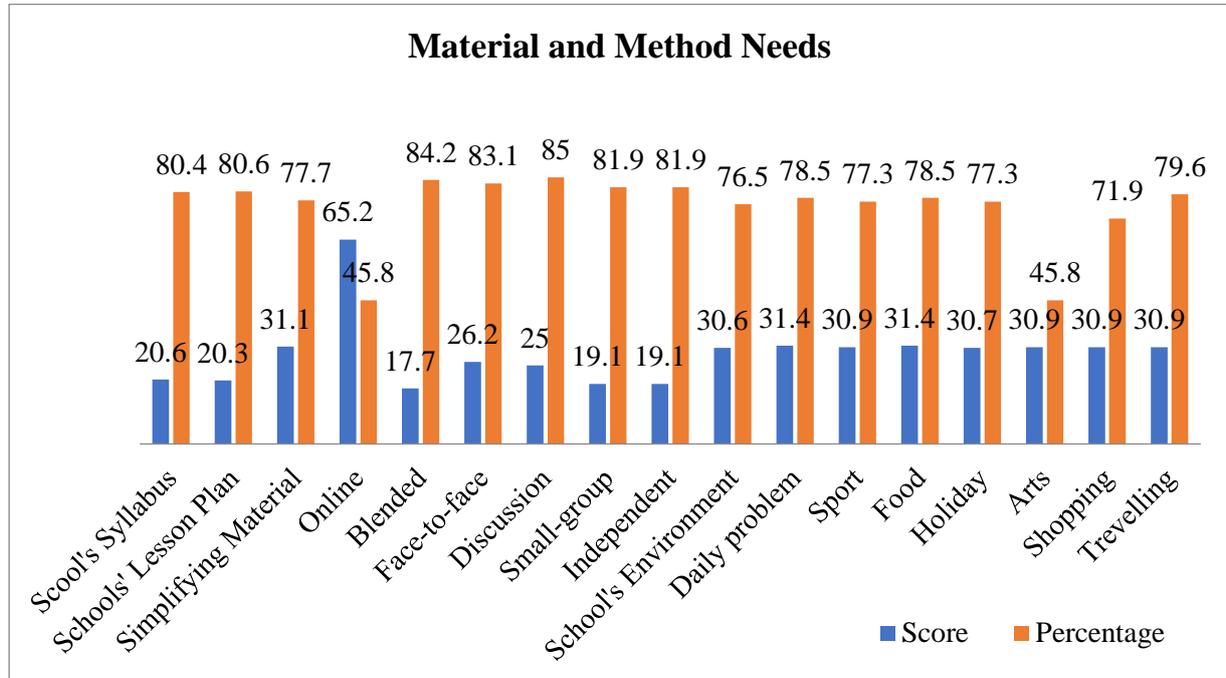
**Figure 1.** Student Needs in Online Learning

Figure 1 shows that 63.7 percent want offline learning, and 37.3 percent want online learning. Most students have difficulty learning online (89 percent), and they want to study in groups. There are no facilities provided by schools or facilities owned by students (76.9 percent), and they are very passive in surfing online. There are no materials or textbooks prepared by teachers or schools (64.1 percent), and they do not understand how to do it online (70 percent). Successful teachers must know what students need to learn and understand subjects well (Murphy, 2015). It shows that schools in remote areas are not ready to organize online learning for their students. Although forced to do online education, it will not improve student learning outcomes.

The data above also shows that teachers in remote areas are not ready to learn. This can be seen in the absence of teachers for online learning materials during the Covid-19 pandemic. Some schools admit that online learning is not as effective as conventional (face-to-face) learning activities because some material must be explained directly and thoroughly. In addition, the material presented online may not be understood by all students. Based on the online teaching experience, this system is only effective for assigning assignments. The possibility of doing the work is given when students enter, so it is likely to accumulate.

Looking at the experiences of some of these teachers, they must also be ready to use technology under the times. Teachers must be able to create learning models and strategies to follow students' character in their schools. The use of several applications in online learning is beneficial for teachers in this learning process. Teachers must be accustomed to teaching by utilizing complex online media, packaged effectively, easily accessible, and understood by students. Therefore, teachers must design and design online learning that is lightweight and effective by utilizing the right online tools or media and following the material being taught. Although online learning will provide wider opportunities to explore the material to be taught, teachers must select and limit the extent to which the material is covered and the application of appropriate learning materials and methods.

The simplest thing a teacher can do is to use WhatsApp Groups. The WhatsApp application is suitable for beginner online students because it is simple and easily accessible to students. Meanwhile, online teachers who are more enthusiastic can improve their abilities by using various online learning applications. With the readiness of teachers to carry out online learning and adequate learning facilities, the learning objectives will be achieved. Students' needs for learning materials and methods during the Covid-19 pandemic can be presented in the figure below:



**Figure 2.** Material and Methods Needs by Students

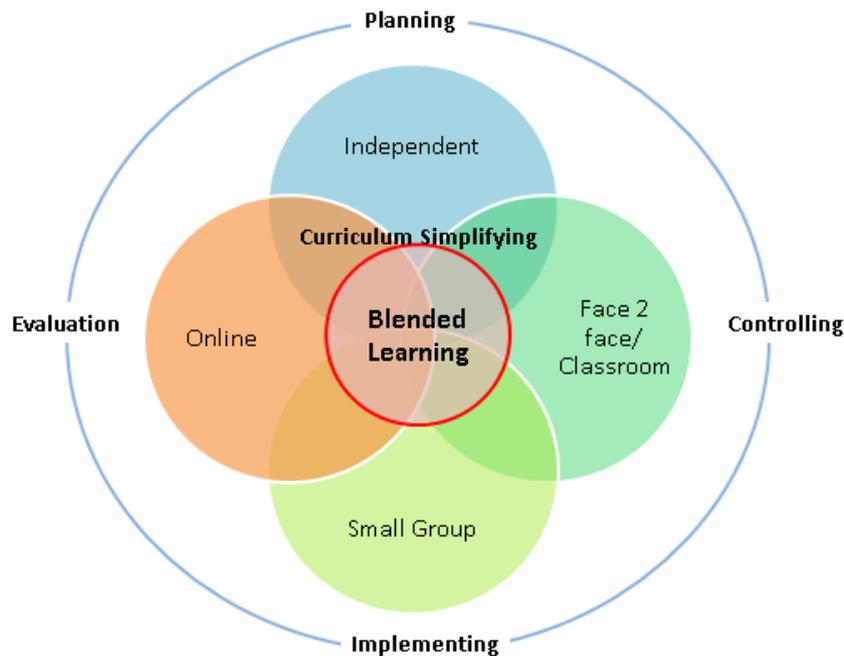
Figure 2 above shows that most students want the syllabus and lesson plans to be adjusted to the syllabus and lesson plans that apply in schools (80.4 percent) by simplifying the curriculum based on core materials that are important to be taught to students (77.7 percent). Most students want offline learning, but many students also want mixed learning (84.2 percent). In addition, students also want face-to-face learning (83.1 percent), discussion methods (85 percent), small groups (81.9 percent), and independent learning (81.9 percent). Learning materials and themes must be adapted to the student environment. Learning themes are arranged to start from the school environment, daily problems experienced by students, sports, food, drinks, spending time off, and taking walks. In line with Bin Tahir et al. (2019), the learning material must follow students' needs and environment (Bin-Tahir et al., 2019).

Not all online learning applications can be applied in other locations and schools. However, it must be considered the teachers' and students' needs. Also, the suitability of the material and the limitations of equipment infrastructure is, such as networks. It is very ineffective if the teacher teaches using the zoom meeting application, but the network or signal in the student area is not good. But again, choose methods and approaches that suit the needs of the teacher and the students themselves.

The success of teachers in implementing online learning in the Covid-19 pandemic situation is the ability of teachers to innovate in designing and concocting materials, learning methods, and any applications that follow these materials and methods. Creativity is the key

to a teacher's success in motivating students to stay enthusiastic about learning online and not become a psychological burden.

Good cooperation between teachers, students, parents, and schools determines more effective online learning. Therefore, online learning is an effective solution for learning at home to break the chain of Covid-19 spread. Physical distance (maintaining a safe distance) is also a consideration for choosing this learning. From the results of this data analysis, the researcher designed a suitable learning model for schools in remote areas, as in the following figure.



**Figure 3.** Multi-blended Learning Model for Remote Area Schools

Figure 3 above shows several approaches and methods, called multi blended learning, suitable for schools in remote areas after curriculum simplification. The learning process begins with planning the preparation of lesson plans that follow each meeting, what materials are taught face-to-face and online, and which learning activities will be taught using small groups where students gather in small groups. Groups based on location or area of residence, the teacher will visit the house to carry out the lesson. Likewise, the teacher determines which material should be given to students for independent study at home. The teacher arranges each stage and controls what has been planned and implemented in learning.

By applying this multi blended learning, teachers can carry out diverse learning and meet the learning characteristics of different students. For example, students who are reluctant to discuss in class may be more active in discussing writing independently or with fellow students in small group learning. The results showed that blended learning was more effective than face-to-face learning and e-learning. Not everyone dares to express his opinion indirectly in public, such as in class. Some students have many ideas but are not brave enough to show them. With this blended learning, more introverted students will be more active.

In addition, learning occurs independently and conventionally, both of which have advantages that can complement each other. Learning is more effective and efficient and can improve accessibility. With blended learning, participants learn faster by accessing learning material. The teaching and learning process is conducted face-to-face and increases learning time by utilizing virtual world technology. Simplify and speed up the process of non-stop communication between teachers and students. Discussion activities occur online/offline and take place outside of class hours, and discussion activities occur between students and teachers and between students themselves. Teachers can organize and control learning carried out by students outside of student learning hours. The teacher can ask students to review the subject matter before face-to-face learning occurs by preparing supporting assignments. Teaching material achievement targets can be achieved according to predetermined targets.

## **Conclusion**

Based on the findings and discussion above, it can be concluded that the needs of students in schools located in remote areas in Buru Regency require blended learning by combining offline and online. They also need to simplify the curriculum and adapt it to the core material based on the existing syllabus in schools. Learning material should start with material that is easy and is around students. To support the success of learning in remote areas, the right design to be applied is multi blended learning by combining several methods and approaches in learning, namely face-to-face, online, independent learning, and small group starting. With careful planning by the teacher, controlling the implementation of each stage carried out and evaluating all the stages passed.

This learning model has not been tested for its effectiveness experimentally; Therefore, it is suggested to researchers researching in the following fields to try this learning model experimentally and make some improvements in the learning stages according to the results achieved in applying this model. At least, this model has provided solutions for schools in remote areas to learn within the limitations of learning objectives.

## **References**

- Allo, M. D. G. (n.d.). Is online learning good during Covid-19 Pandemic? The case of EFL learners. *2020*, 10(1), 1–10.
- Almpanis, T., & Joseph-Richard, P. (2022). Lecturing from home: Exploring academics' experiences of remote teaching during a pandemic. *International Journal of Educational Research Open*, 3, 100133. <https://doi.org/https://doi.org/10.1016/j.ijedro.2022.100133>
- Arfan, H. H., Misnawati, Sakkir, G., Puspita, N., Akbar, Z., Asriadi, & Yusriadi, Y. (2021). Student learning interest in COVID-19 pandemic age by blended e-learning (Asynchronous and synchronous). *Proceedings of the International Conference on Industrial Engineering and Operations Management*, 6330–6339. <http://ieomsociety.org/singapore2021/papers/1065.pdf>
- Astini, N. K. S. (2020). Pemanfaatan teknologi informasi dalam pembelajaran tingkat sekolah dasar pada masa pandemi covid-19. *Lampuhyang*, 11(2), 13–25.
- Atsani, K. L. G. M. Z. (2020). Transformasi media pembelajaran pada masa Pandemi COVID-19. Al-Hikmah. *Jurnal Studi Islam*, 1(1), 82–93.
- Ayuni, D., Marini, T., Fauziddin, M., & Pahrul, Y. (2020). Kesiapan Guru TK Menghadapi Pembelajaran Daring Masa Pandemi Covid-19. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 5(1), 414–421.
- Bin-Tahir, S. Z., Suriaman, A., & Rinantanti, Y. (2019). Designing English Syllabus for Multilingual Students at Pesantren Schools. *Asian EFL Journal*, 23(3.3), 5–27.

- Bin Tahir, S. Z. (2017). Multilingual teaching and learning at Pesantren Schools in Indonesia. *Asian EFL Journal*, 89, 74–94.
- Juniansyah, & Muh Ardiansyah Makmur. (2021). In the 2019 Coronavirus disease pandemic, the community's lifestyle is increasing. *Journal of Indonesian Scholars for Social Research*, 1(1 SE-Articles), 5–8. <https://www.ojs.ycit.or.id/index.php/JISSR/article/view/3>
- Lestari, T. (2020). *Survei pembelajaran daring pada masa pandemi Covid 19 di kampus UPI Cibiru*. <https://berita.upi.edu/survei-pembelajaran-daring-pada-masa-pandemi-covid-19-di-kampus-upi-cibiru/>
- Misnawati. (2021a). Model pembelajaran di masa pandemi Covid-19: Synchronous and asynchronous (Blended e-learning). In M. C. B. Umanailo (Ed.), *Elaborasi ilmu sosial untuk Covid-19: pengajaran, pembelajaran serta eksistensi lembaga pendidikan selama pandemi Covid-19* (pp. 44–55). Yayasan Cendekiawan Indonesia Timur.
- Misnawati. (2021b). Pendidikan dan perilaku masyarakat desa di masa pandemi. In M. C. B. Umanailo (Ed.), *Elaborasi ilmu sosial untuk Covid-19: Eksistensi masyarakat desa dimasa pandemi Covid-19* (First Edit, pp. 2–12). Yayasan Cendekiawan Indonesia Timur.
- Murphy, S. L. (2015). How do we teach them to read if they can't pay attention? Change in literacy teaching practice through collaborative learning. *Language and Literacy*, 17(1), 83–105.
- Prahmana, R. C. I., Hartanto, D., Kusumaningtyas, D. A., Ali, R. M., & Muchlas. (2021). Community radio-based blended learning model: A promising learning model in remote area during pandemic era. *Heliyon*, 7(7), e07511. <https://doi.org/https://doi.org/10.1016/j.heliyon.2021.e07511>
- Rusman. (2014). *Model-model pembelajaran (Mengembangkan Profesionalisme Guru)*. Raja Grafindo Persada.
- Sukmadinata, N. ., & Syaodih, E. (2012). *Kurikulum dan Pembelajaran Kompetensi*. PT Refika Aditama.
- Suprihatiningrum, J. (2013). *Strategi Pembelajaran*. Ar-ruzz Media.
- Thiagarajan, S., Semmel, D. S., & Semmel, M. I. (1974). *Instructional Development for Training Teachers of Exceptional Children*. Leadership Training Institute/Special Education, University of Minnesota.
- Trianto. (2010). *Model Pembelajaran Terpadu*. : PT Bumi Aksara.
- Wang, Y., Cao, Y., Gong, S., Wang, Z., Li, N., & Ai, L. (2022). Interaction and learning engagement in online learning: The mediating roles of online learning self-efficacy and academic emotions. *Learning and Individual Differences*, 94, 102128. <https://doi.org/https://doi.org/10.1016/j.lindif.2022.102128>

## **Biographies**

**Saidna Zulfiqar bin Tahir, Mutmainnah, Nuril Mufidah** are lecturers at English Education Department of Universitas Iqra Buru, Indonesia, as well as take a position at Lembaga Penelitian dan Pengabdian Masyarakat (LPPM). Their areas of interest and research include teaching media, TEFL, and Linguistics. They have published some articles in TEFL, ICT in language learning, and teaching and learning.