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Needs Analysis for Blended Learning Models and Project-Based Learning to Increase Student Creativity and Productivity in Writing Scientific Papers

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ABSTRACT

The era of the COVID-19 pandemic is the gateway to the famous online learning system. With the rapid development of educational technology and the familiarity of lecturers and students with this system, this method will become permanent in the future. Blended learning will be a possibility by utilizing diverse learning mediums. However, not all instructors are capable of designing courses in this manner. One of them is studying scientific paper writing. Since it was able to optimize this learning based on scientific studies, the project-based learning model was chosen to be paired with blended learning. To get a learning model that suits your needs requires a needs analysis. The purpose of this research was to gather information about students' needs to design blended learning models mixed with project-based learning to boost student creativity and productivity in writing. Scientific papers at the Indonesian Language Education Study Program. A survey method was used in this investigation. A questionnaire was utilized to obtain the data. The sample for this study was collected on purpose. There were 172 students in the research sample. The data analysis methodologies employed were qualitative and quantitative. The study's findings indicate that students require blended learning and project-based learning structures.

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1. INTRODUCTION

The COVID-19 pandemic has ushered in significant transformations in the field of education, both globally and in Indonesia. The Covid 19 pandemic initiated a paradigm shift in the realm of education, leading to a widespread use of digital technologies and methodologies (Adedoyin & Soykan, 2020). Dhawan (2020) argues that this global catastrophe has demonstrated the beneficial effects of technology-driven education. The use of digital technology has been prevalent in all areas of higher education over the past twenty years (Chen, Lambert, & Guidry, 2010), and this trend has been further accelerated by the COVID-19 pandemic (Jones & Sharma, 2020). Innovative methods have been devised to combine traditional teaching methods with technology-based techniques in order to cater to a wide range of learners. (So & Lee, 2013); (Namaziandost, Homayouni, & Rahmani, 2020). One of them is the

use of blended learning. Various studies have been conducted to see its effectiveness (Asdar & Talib, 2021), (Aminah, 2021), Al-Ayed and A(Al-Ayed & Al-Tit, 2021). Many other academic reports claim the beneficial impact of blended learning on teaching and learning (Alipour, 2020).

Blended learning is a learning method that harmoniously combines the advantages of face-to-face learning (offline) with the advantages of online learning to achieve graduate learning outcomes (CPL). Blended learning has become one of the promising approaches to teaching and learning. This approach aims to integrate traditional learning with technology, such as e-learning and mobile learning, to create a new learning environment that enhances learning effectiveness and enriches experiential learning. Blended learning has been used in several ways in a range of educational contexts for more than a decade. The Indonesian Online Learning System (SPADA) was launched on October 15, 2014, by the Vice President of the Republic of Indonesia to provide access to excellent higher education to tackle the difficulties of today's education environment. Until now, hardly many universities have used SPADA to develop blended learning. This is motivated by a variety of causes. This methodology has been implemented at Sriwijaya University, even though lecturers do not prefer it. This is because online learning is not very familiar to them and their ability to implement it is not yet maximal.

However, when the COVID-19 pandemic occurred, online learning became an option to save the world of education. Lecturers are required to be flexible and adaptable in dealing with unexpected situations and to have multidisciplinary skills during the COVID-19 pandemic (Yang, 2020); (Kalloo, Mitchell, & Kamalodeen, 2020). Educators must be technology literate. Over time, online learning has been enjoyed by lecturers and students. This short-term change will become permanent in the future due to the rapid development of technology (Yang, 2020). A blended learning model can be an option. However, not all instructors are capable of designing courses in this manner. One of them is studying scientific paper writing. Since it was able to optimize this learning based on scientific studies, the project-based learning model was chosen to be paired with blended learning. To get a learning model that suits your needs requires a needs analysis

Because of its qualities, writing scientific papers is one of the subjects that fit the blended learning paradigm. Furthermore, the adoption of project-based learning models helps maximize the growth of this model. This is because the course's result is a written product, which is consistent with the characteristics of the project-based learning approach. Several research has found the project-based learning paradigm to be reliable (Miller, Severance, & Krajcik, 2021);(Maros, Korenkova, Fila, Levicky, & Schoberova, 2021); (Yuliansyah & Mutiara Ayu, 2021); (Sakran, 2021)]. The use of MODDLE e-learning by applying workshop features ideal for writing learning, the use of diverse ICT-based learning resources, and the use of technology-based evaluations are the novelties of this research.

The initial stage in developing the model is to examine student needs. The needs analysis is a critical (Parnawati, Tantry & ulinuha, 2019; Rahyasih, Hartini, & Syarifah, 2020). Needs analysis is the process of finding and accumulating information about students' language learning needs in the form of conditions that exist between what students receive, what students expect, and what students should receive in language (Asrifan, Vargheese, Syamsu, & Amir, 2020; Hutta & et.al, 2013; Pranoto, Indonesia, Suprayogi, & Indonesia, 2020). According to much research, the greatest needs analysis maximizes the development of a learning product (Ernalida, Oktarina, & Turama, 2021);(Juniarti, Subadiyono, & Alwi, 2021)(Yundayani, Emzir, & Rafli, 2017). Thus, the purpose of this study is to provide an analysis of the demands of study program students. Language and Literature Education towards the development of blended learning models combined with project-based learning in scientific writing courses.

2. METHODS

This research is part of research and development, namely in the preliminary stage (Gall, Gall& Borg, 2007). The method used at this stage is a survey. The sample in this study consists of 172 Indonesian Language Education Study Program students, with 154 (89.5%) women and 20 women

(11.6%). The sampling technique was used on purpose to acquire comprehensive data. Data collection techniques were carried out through questionnaires. The questionnaire presented had a requirements analysis component, which included lacks and wants (Macalister & Nation, 2019). Question items for needs are made up of learning model components such as learning structures, reaction principles, social systems, and supporting factors (Joyce, Weil & Calhoun, 2009). There are 36 total question questions, which include learning frameworks (16 items), reaction principles (5 items), and reaction systems (4 items). Questions for each item, namely multiple-choice questions with the options: very need, need, need less, and don't need. In addition, open-ended questions about each component's proposals were asked. The data analysis approaches employed were qualitative and quantitative. The following are the requirements criteria that were employed.

Table 1. Criteria of need

Average of Percentage	Category
3.25 - 4.00	Strongly Needed (SN)
2.49 - 3.24	Needed (N)
1.73 - 2.48	Less Needed (LN)
1.00 - 1.72	Not Needed (NN)

3. FINDINGS AND DISCUSSION

Needs are classified into three categories: necessities lacks, and wants (Macalister and Nation, 2019). These three components are a set of techniques required to examine students' needs when studying a target language. To put it another way, these three components are utilized to identify student needs for blended learning models mixed with project-based learning that students require when writing scientific papers. The first is the necessities. Students must master or require the necessities to use language. The second issue is a lack of. Lacks refer to deficiencies in current language learning. The third is wants. What do you want to learn? Students have their own opinion about what they feel is useful for them. Information about what students want will be very useful for designing blended learning models combined with project-based learning that students need in writing scientific papers.

3.1 Necessities

In learning to write scientifically using a blended learning model combined with project-based learning, students must have the skills so that the learning process can take place optimally. The situation factor of the use of this model is also an indicator of success. The requirements for implementing this model are as follows. First, students and lecturers can implement the principles of learning to write. The principles of learning to write are the practice of writing efficiently, related to the writing approach (process and outcome approach), the writing learning process pays attention to the background of the reader, the writing learning process combines all language skills, the process of writing learning to write is authentic, the learning process is related to the writing process, how to respond and correct student writing, and writing conventions (Brown, 2011). Second, students and lecturers must be able to implement the principles of electronic learning (E-Learning), namely interactivity, independence, accessibility, and enrichment (Darwis & G, 2021). These two principles are imperative in the development of blended learning models combined with project-based learning.

3.2 Lack

Lacks are the second component of the requirements analysis. Lacks in prior scientific writing lessons in the Indonesian Language and Literature Education Study Program are referred to in this study. Data was collected from students via questionnaires with open-ended questions. The outcome is as follows. First, online or face-to-face learning is deemed inadequate for this subject. The issues they face are a lack of knowledge of the topic, a demand for direct feedback, and frequent internet

disruptions. Several studies that show the same thing corroborate this circumstance (Suwardi, 2021); (Atqia, Hendrawanto, & Alimastussa'diyah, 2021); (Ernalida et al., 2021). Second, do not understand how to find references on the internet. The third is a lack of learning motivation. Sixth, the learning media used in this course is less than optimal. In online learning, learning media are needed by students to make learning easier and more effective (Rosalinda, Hamamah, & Degeng, 2022); (Oktarina, Indrawati, & Slamet, 2022)(Parnawati, Tantry & ulinuha, 2019).

3. 3 Wants

The third component is wanted. Wants are defined as what is needed in scientific writing learning by using a blended learning model combined with project-based learning to be developed. Each student has their own opinion about the ideal learning they want. Based on the results of the study obtained the following data.

Table 2. Learning Structure

No.	Statement	Score	Category
1.	MK Scientific Writing is carried out by combining face-to-face or virtual learning with online learning	3.38	SN
2.	Learning is done face-to-face and online learning (via the website)	3.38	SN
3.	Learning is done face-to-face and online learning (via the website)	3.13	N
4.	In face-to-face / virtual face-to-face learning, the lecturer provides direction and introduction to the implementation of lectures	3.80	SN
5.	In face-to-face learning / virtual face-to-face, students make presentations and discuss the framework of scientific works designed.	3.41	SN
6.	In face-to-face / virtual face-to-face learning, students make presentations and discuss scientific papers.	3.42	SN
7.	In online learning, students learn the complete material on the website that is used.	3.60	SN
8.	In online learning, students learn and extract information from YouTube and websites independently	3.35	SN
9.	In online learning, students apply concepts and practical examples obtained based on the material provided by the lecturer.	3.48	SN
10.	Students in online learning read library resources from Google Scholar, prayer, the web of science, and others.	3.56	SN
11.	In online learning, students conduct discussions in the discussion forum provided on the MOODLE/SPADA website	3.06	N
12.	In online learning, students produce scientific papers and submit them to features on the MOODLE/SPADA website	3.27	SN
13.	In online learning, students conduct self-assessment, and peer assessments on the features provided in MOODLE/SPADA	2.93	N
14.	In online learning, lecturers give assessments to students on the MOODLE/SPADA website.	3.37	SN
15.	In online learning, students finalize scientific papers and submit them to MOODLE/SPADA	3.24	N
	Total	3.35	SN

According to the table above, students with a total average score of 3.35 require the learning activities provided by integrating blended learning and project-based learning models. The category of urgently needed dominated the assessment of the 15 statement items. There are 11 statement items classified as urgently needed, and 4 statement items rated as needed. Based on the results of the questionnaire, it is clear that students require a shift in the learning system from traditional to technology-based learning. The required learning system can be tailored to the post-covid-19 pandemic environment. Furthermore, students seek product-based learning in this course with complete stages beginning with pre-writing, writing, and post-writing, with the system utilizing learning technologies.

As can be observed, technology can help students overcome learning difficulties, particularly in writing (So & Lee, 2013); (Chen et al., 2010); (Oktarina et al., 2022). Furthermore, students require a blend of synchronous and asynchronous learning technologies.

From the questionnaire in the form of open-ended questions, information on the learning structure that students want for the development of this model is also obtained. First, students want a maximum explanation of the theories of writing scientific papers. Second, in this course, hands-on writing practice is very much needed. Third, there is an assessment of scientific work carried out by colleagues and lecturers. Fourth, they need examples of scientific papers that can be used as references in writing. Fifth, learning should be packaged attractively by combining face-to-face and virtual learning.

Table 3. Principle of Reaction

No.	Statement	Score	Category
1.	Lecturer takes role as facilitator	3.71	SN
2.	Lecturer takes role as motivator	3.88	SN
3.	Lecturer takes role as manager	3.47	SN
4.	Lecturer takes role as evaluator	3.73	SN
	Total	3.69	SN

It is known that the questions presented in the questionnaire are responded to by students in the category of urgently needed for the second component, namely the principle of reaction. The total worth of all goods is 3.69. According to the chart above, students want their professors to serve as facilitators, motivators, managers, and evaluators. These four responsibilities play an important role in maximizing the quality of scientific writing learning, both process and results.

Table 4. Reaction System

No.	Statement	Score	Category
1.	There is the interaction between lecturers and students in learning, both face-to-face and online (website)	3.80	SN
2.	There is the interaction between lecturers and student groups in learning, both face-to-face and online (website)	3.77	SN
3.	There is the interaction between student groups and student groups in learning, both face-to-face and online (website)	3.68	SN
	Total	3.75	SN

In the third component, namely the reaction system, it is known that students want to learn with multiple interactions, both in face-to-face and online learning. The interaction between lecturers and students in this model is rated very high by students, namely 3.80. From the questionnaire, it is clear that students need a discussion method that bridges the interaction between student groups and lecturers and interactions between student groups. Overall, the reaction system in the model development offered is very much needed by students with an average score of 3.75.

Table 5. Support System

No.	Statement	Score	Category
1.	The use of MOODEL/SPADA in learning	3.27	SN
2.	Learning materials are provided in the form of learning videos using various applications	3.44	SN
3.	Learning materials are provided in the form of a YouTube link	3.24	N
4.	Learning materials are provided in the form of links to journal websites, books, and proceedings.	3.57	SN
5.	Learning materials are provided in the form of e-books.	3.48	SN
6.	There is a workshop feature as a means of evaluating scientific papers online at MOODLE/SPADA.	3.33	SN
7.	The use of the ZOOM MEETING / G-MEET application in virtual face-to-face learning activities.	3.68	SN
8.	The use of LCD for face-to-face learning activities	3.58	SN
9.	The use of a stable internet network	3.90	SN
	Total	3.49	SN

The last component in the development of this learning model is the support system. Students evaluated eight of the nine items on the questionnaire as extremely important and one as necessary. However, the products given were regarded as extremely needed on average (3.49). Based on the findings of this study, particularly the components of the support system, it is possible to conclude that children require technology-based learning. Students' choices in building this model include e-learning, YouTube, e-books, zoom meetings, websites, and others. Because students have already tasted the benefits of the learning method, the transformation is already obvious (Adedoyin & Soykan, 2020); (Dhawan, 2020). In addition, various studies have also proven technology-based learning is able to motivate students in learning (Zhang & Chen, 2022);(Asdar & Talib, 2021);(Oktarina, 2021);(Balqis, Purnomo, & Oktarina, 2021).

Overall, the study's findings indicate that students in scientific writing learning require a blended learning approach mixed with project-based learning. Learning has a favorable impact on the dependence on learning technology during the COVID-19 pandemic (Adedoyin & Soykan, 2020); (Chen et al., 2010). As science and technology grow, this is a breath of fresh air for the field of education to improve the learning system. This is due to the benefits of embracing technological learning, such as convenience, speed, and staying current, among other things. When combined with a product-based project-based learning model, this strategy becomes more compelling. This is consistent with the qualities of a scientific writing course, the result of which is a scientific study. The efficacy of the project-based learning methodology has also been evaluated (Miller, Reigh, Berland, & Krajcik, 2021); (Maros et al., 2021); (Sakran, 2021).

In further depth, when we look at the components of the learning model built from the research findings, we can see that numerous things are known. First, in terms of learning structure components, it can be determined that the learning structure in scientific writing courses is desired according to the stages of the writing process, namely pre-writing, writing, and post-writing. This is one of the features of a product-based project-based learning paradigm including all stages (Soleh, 2021); (Yuliansyah & Mutiara Ayu, 2021). This necessitates the use of both blended learning and project-based learning paradigms. Using learning technology, these stages are carried out optimally. Second, in terms of the second component, the reaction principle. Students require lecturers who can act as facilitators, motivators, managers, and evaluators of learning. These four functions are expected to be played to the greatest extent possible by lecturers since they will have an impact on the high quality of the process and the outcomes of this learning (Suhaida & Azwar, 2018). The social system is the third component. The findings revealed that students desired group-based multidirectional engagement. Furthermore, it is well known that significant interaction between professors and students is required. They wish to talk about theories or notions they don't grasp. The support system is the final component. In this

component, students want a variety of learning technologies to be used in this course, either in the material or in the evaluation of learning. The blended learning model can accommodate this (Aminah, 2021); (Alipour, 2020). However, in its implementation, many challenges must be faced (Alebaikan & Troudi, 2010). This requires professional lecturers to handle it and good advice and infrastructure.

4. CONCLUSION

Based on the findings of the study, it is feasible to conclude that to learn to write scientifically, children require a blended learning model that integrates project-based learning. They strive to make the best use of learning technologies in their instruction. The research results are as follows, based on the theory of the nation's needs analysis and Macalister. To begin with, learning to write scientifically must adhere to both the principles of writing and the principles of electronic learning. Second, it was discovered that previous scientific writing learning had not been optimized due to a lack of understanding of the material, that the learning structure had not been maximized, that the medium was insufficient, and that the incentive to study was lacking. Finally, in terms of demands, the study's findings indicate that students require blended learning and project-based learning structures. Students also want professors to play the most important role in teaching them how to write scientifically. In the development of this model, two-way and multi-way interactions should be designed. Furthermore, the enabling variables for this learning must be readily available. The limitation of this study is that it only uses a questionnaire to obtain needs analysis data. In the future, it is better to use interviews or focus group discussions in collecting data for needs analysis.

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REFERENCES

Adedoyin, O. B., & Soykan, E. (2020). Covid-19 pandemic and online learning: the challenges and opportunities. *Interactive Learning Environments*, *0*(0), 1–13. https://doi.org/10.1080/10494820.2020.1813180

Al-Ayed, S. I., & Al-Tit, A. A. (2021). Factors affecting the adoption of blended learning strategy. *International Journal of Data and Network Science*, *5*(3), 267–274. https://doi.org/10.5267/j.ijdns.2021.6.007

Alebaikan, R., & Troudi, S. (2010). Blended learning in Saudi universities: Challenges and perspectives. *ALT-J: Research in Learning Technology*, *18*(1), 49–59. https://doi.org/10.1080/09687761003657614

Alipour, P. (2020). A Comparative Study of Online Vs. Blended Learning on Vocabulary Development Among Intermediate EFL Learners. *Cogent Education*, *7*(1). https://doi.org/10.1080/2331186X.2020.1857489

Aminah, M. (2021). English Learning using Blended Learning and Missing Pieces Activities Methods. *Jurnal Scientia*, *10*(1), 150–157. Retrieved from http://infor.seaninstitute.org/index.php/pendidikan/article/view/274

Asdar, A., & Talib, J. (2021). Blended Learning Berbasis Quipper School Dalam Pembelajaran Bahasa Indonesia Di Sman 1 Bantaeng. *PeTeKa*, *4*, 1–13. Retrieved from http://jurnal.um-tapsel.ac.id/index.php/ptk/article/view/2375

Asrifan, A., Vargheese, K. J., Syamsu, T., & Amir, M. (2020). *ESP Course Design : The Need Analysis On Tourism Department In Indonesia Vocational High Schools*. *3*(2), 69–77.

Atqia, W., Hendrawanto, Y., & Alimastussa'diyah. (2021). Persepsi Dosen Dan Mahasiswa Terhadap Pembelajaran Daring Bahasa Indonesia Pada Masa Pandemi COVID 19 Abstract : Lecturer and Student Perceptions of Indonesian Language Online Learning. *INDONESIA :Jurnal Pmebelajaran Bahasa Dan Sastra Indonesia*, *2*(2), 92–105.

Balqis, K., Purnomo, M. E., & Oktarina, S. (2021). Learning Media for Writing Fantasy Story Text Based on Scientific Plus Using Adobe Flash. *Jurnal Ilmiah Sekolah Dasar*, *5*(3), 387.

https://doi.org/10.23887/jisd.v5i3.35635

Brown, H. D. (2011). *Prinsip Pembelajaran dan Pengajaran Bahasa*. Jakarta: Kedutaan Besar Amerika Serikat di Jakarta.

Chen, P. S. D., Lambert, A. D., & Guidry, K. R. (2010). Engaging online learners: The impact of Web-based learning technology on college student engagement. *Computers and Education*, *54*(4), 1222–1232. https://doi.org/10.1016/j.compedu.2009.11.008

Darwis, M., & G, M. T. (2021). Belajar Mandiri dan Pembelajaran Berbasis Daring di Perguruan Tinggi. *Journal of Educational Technology, Curriculum, Learning, and Communication*, *1*, 28–34.

Dhawan, S. (2020). Online Learning: A Panacea in the Time of COVID-19 Crisis. *Journal of Educational Technology Systems*, *49*(1), 5–22. https://doi.org/10.1177/0047239520934018

Ernalida, E., Oktarina, S., & Turama, R. (2021). Analysis of Teacher Needs Related To E-Learning Schoology Content in Creative Writing in Middle Schools Throughout …. *English Review: Journal of …*, *9*(2), 277–284.

Gall, Meedith D, Gall, Joice P. & Borg, W. E. (2007). *Educational Research (Introduction)*. USA: Pearson Education, Inc.

Hutta, M., & et.al. (2013). *Needs Analysis for Language Course Design: A Holistic Approach to ESP*. United Kingdom: Cambridge University Press.

Jones, K., & Sharma, R. S. (2020). On Reimagining a Future for Online Learning in the Post-COVID Era. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3578310

Joyce, B, Weil,M & Calhoun, E. (2009). *Model of Teaching*. Boston: Pearson Education, Inc.

Juniarti, Y., Subadiyono, S., & Alwi, Z. (2021). the Need Analysis of Writing Module With Edmodo. *English Review: Journal of English Education*, *9*(2), 419–426. Retrieved from https://journal.uniku.ac.id/index.php/ERJEE/article/view/4457

Kalloo, R. C., Mitchell, B., & Kamalodeen, V. J. (2020). Responding to the COVID-19 pandemic in Trinidad and Tobago: challenges and opportunities for teacher education. *Journal of Education for Teaching*, *46*(4), 452–462. https://doi.org/10.1080/02607476.2020.1800407

Macalister, John & Nation, I. (2019). *Language Currulum Design*. New York: Routledge.

Maros, M., Korenkova, M., Fila, M., Levicky, M., & Schoberova, M. (2021). Project-based learning and its effectiveness: evidence from Slovakia. *Interactive Learning Environments*, *0*(0), 1–9. https://doi.org/10.1080/10494820.2021.1954036

Miller, E. C., Reigh, E., Berland, L., & Krajcik, J. (2021). Supporting Equity in Virtual Science Instruction Through Project-Based Learning: Opportunities and Challenges in the Era of COVID-19. *Journal of Science Teacher Education*, *32*(6), 642–663. https://doi.org/10.1080/1046560X.2021.1873549

Miller, E. C., Severance, S., & Krajcik, J. (2021). Motivating Teaching, Sustaining Change in Practice: Design Principles for Teacher Learning in Project-Based Learning Contexts. *Journal of Science Teacher Education*, *32*(7), 757–779. https://doi.org/10.1080/1046560X.2020.1864099

Namaziandost, E., Homayouni, M., & Rahmani, P. (2020). The impact of cooperative learning approach on the development of EFL learners' speaking fluency. *Cogent Arts and Humanities*, *7*(1). https://doi.org/10.1080/23311983.2020.1780811

Oktarina, S. (2021). Students' responses towards e-learning schoology content on creative writing learning during the covid-19 pandemic. *English Review: Journal of English Education*, *10*(1), 195–198. Retrieved from https://journal.uniku.ac.id/index.php/ERJEE

Oktarina, S., Indrawati, S., & Slamet, A. (2022). *Students ' and Lecturers ' Perceptions toward Interactive Multimedia in Teaching Academic Writing*. *6*(2), 377–384.

Parnawati, Tantry & ulinuha, A. (2019). English At Higher Education Level: A Need Analysis. *Journal of English Education and Applied Linguistics*, *8*(2), 214–225. Retrieved from https://fkip.ummetro.ac.id/journal/index.php/english%0ALL

Pranoto, B. E., Indonesia, U. T., Suprayogi, S., & Indonesia, U. T. (2020). *A Need Analysis of ESP for Physical Education Students in Indonesia*. (May). https://doi.org/10.24127/pj.v9i1.2274

Rahyasih, Y., Hartini, N., & Syarifah, S. (2020). *Pengembangan Keprofesian Berkelanjutan : Sebuah Analisis*

Kebutuhan Pelatihan Karya Tulis Ilmiah bagi Guru Sustainability Professional Development : A Scientific Paper Training Need Analysis for Teachers. *20*(April), 136–144.

Rosalinda, E., Hamamah, H., & Degeng, P. D. D. (2022). Students' Perception on The Use of WhatsApp for Learning Writing During Covid-19 Pandemic: A Case Study. *Jurnal Pendidikan : Riset Dan Konseptual*, *6*(3), 500. https://doi.org/10.28926/riset_konseptual.v6i3.557

Sakran. (2021). *Jurnal Edukasi Saintifik*. *1*(1), 51–59.

So, L., & Lee, C. H. (2013). A case study on the effects of an L2 writing instructional model for blended learning in higher education. *Turkish Online Journal of Educational Technology*, *12*(4), 1–10.

Soleh, D. (2021). Penggunaan Model Pembelajaran Project Based Learning melalui Google Classroom dalam Pembelajaran Menulis Teks Prosedur. *Ideguru: Jurnal Karya Ilmiah Guru*, *6*(2), 137–143. https://doi.org/10.51169/ideguru.v6i2.239

Suhaida, D., & Azwar, I. (2018). Peran Dosen Dalam Mengembangkan Karakter Mandiri pada Mahasiswa. *Sosial Horizon: Jurnal Pendidikan Sosial*, *5*(1), 1. https://doi.org/10.31571/sosial.v5i1.866

Suwardi, F. M. (2021). Faktor-faktor Kesulitan Menulis Imla Mahasiswa PBA IAIN Kudus di Masa Pandemik. *Arabia*, *13*(1), 47. https://doi.org/10.21043/arabia.v13i1.10173

Yang, R. (2020). China's higher education during the COVID-19 pandemic: some preliminary observations. *Higher Education Research and Development*, *39*(7), 1317–1321. https://doi.org/10.1080/07294360.2020.1824212

Yuliansyah, A., & Mutiara Ayu. (2021). The Implementation of Project-Based Assignment in Online Learning during Covid-19. *Journal of English Language Teaching and Learning (JELTL)*, *2*(1), 32–38. Retrieved from http://jim.teknokrat.ac.id/index.php/english-language-teaching/index

Yundayani, A., Emzir, E., & Rafli, Z. (2017). Need Analysis: the Writing Skill Instructional Material Context for Academic Purposes. *English Review: Journal of English Education*, *6*(1), 59. https://doi.org/10.25134/erjee.v6i1.771

Zhang, M., & Chen, S. (2022). Modeling dichotomous technology use among university EFL teachers in China: The roles of TPACK, affective and evaluative attitudes towards technology. *Cogent Education*, *9*(1). https://doi.org/10.1080/2331186X.2021.2013396