Aims & Scope (Education)
Article

THE IMPLEMENTATION PROCESS AND ITS RESULTS ON BLENDED LEARNING IN PGRI SEMARANG UNIVERSITY

Suyoto,

Universitas PGRI Semarang, Indonesia https://orcid.org/0009-0003-1686-0988

Arisul Ulumuddin,

Universitas PGRI Semarang, Indonesia https://orcid.org/0000-0002-2089-8298

Husnul Hadi,

Universitas PGRI Semarang, Indonesia https://orcid.org/0000-0003-4077-1865

Received: 24 January 2024; Accepted: 29 January 2024; Published: 30 January 2024

Abstract. Online lecturing during Covid-19 pandemic is the most appropriate method to carry out the learning process for colleges. This lecture activity able to be carried out through various learning applications such as WA Group, Google Classroom, Zoom, Google Meet etc. from time to time due to the pandemic transition status to PPKM 1, the policy of implementing online learning is entering the transition stage to offline learning, by applying mixed method. It is done by combining both of quantitative and qualitative research methods. This is based on the results of online learning is less than optimal when compared to the process carried out face-to-face at university. Blended learning in PGRI University Semarang has been carried out long after the pandemic status was at the PPKM level 1. Therefore, it is necessary to monitor and evaluate the implementation of blended learning in PGRI University Semarang through online and offline learning guideline mechanisms by the Quality Assurance Institute. This study aims to analyze lecturing both of process and results through the blended learning method.

Keywords: blended learning, PGRI University, learning application, Covid-19 Pandemic.

Citation: Suyoto; Arisul Ulumuddin; Husnul Hadi. (2024). THE IMPLEMENTATION PROCESS AND ITS RESULTS ON BLENDED LEARNING IN PGRI SEMARANG UNIVERSITY. *Conferencii*, (8) 1. http://doi.org/10.51586/Conferencii 8 1 2024

Introduction

According to the regulation from (Pendidikan, 2020) concerning the Prevention of Covid-19 pandemic in Education Units as an anticipation of the Corona virus separation at those schools and colleges. The Central Java Provincial Government has established the emergency response status for the Corona Virus Disease (Covid-19) disaster. This was determined in Semarang by the Governor of Central Java named Ganjar Pranowo, in the Decree of the Governor of Central Java Number 360/3/Year 2020 and regarding the study from (Sisilia et al., 2022) concerning the Determination of the Emergency Response Status of the Corona Virus outbreak (Covid-19) Disaster in Central Java Province, dated March 27, 2020. Thus, the implementation of academic activities during the emergency period of Covid 19 separation in PGRI Semarang University eliminated face-to-face learning activities and replaced them by working from home (WFH) and learning from home (LFH) through online learning along with various media. This is in line with the Rector's Circular Letter No. 033/R/UPGRIS/III/2020 concerning Basic Protection, Early Detection of Health and Appeals for Foreign Travel to Face the Corona Virus Outbreak (COVID-19). Those activities are implemented due to prevent and avoid the Covid-19 separation which is currently spreading in several countries, including Indonesia. Working from home (WFH) and learning from home (LFH),

physical distancing and spending time in crowded place are considered as the best ways to break the chain of its separation.

Through online learning, students able to study as usual and are not going to left behind lecturing materials, as well as more flexible time. However, online learning is not entirely welcomed by students, because there are some students who consider online learning more difficult than common learning, not to mention that internet quota has to be available and it becomes the biggest difficulty experienced by students, network constraints, availability of learning devices such as laptops, the level understanding of the material that is felt better if doing face-to-face lecturing, in addition both of lecturers and students haven't been ready to operate the online learning system quickly, including preparing lecturing materials digitally. Online lecturing during the Covid-19 pandemic becomes the most appropriate method to carry out the learning process for students. The activity able to be done through various learning applications such as WA Group, Google Classroom, Zoom, Google Meet etc.

From time to time along with the transformation of pandemic status to PPKM 1, the policy implementation of online learning is entering the transition stage to offline learning. This condition is based on the results of online learning is less than optimal when compared to the process carried out face-to-face at university. Blended learning activity in PGRI University Semarang has been carried out long after the pandemic status was at the PPKM 1 level. Therefore, it is necessary to monitor and evaluate the implementation of blended learning in PGRI University Semarang through online and offline learning guideline mechanisms by Institute of Quality Assurance.

Methods

This research applies a mixed method, while this implementation is by combining quantitative and qualitative research methods. This type of mixed research uses sequential explanatory strategies. Mixed research is a procedure for collecting, analyzing, and mixing quantitative and qualitative methods in series of a study to understand research problems, (Creswell, 2018), in line with study from (R. Burke Johnson, University of South Alabama; Larry Christensen, 2014) stated that mix research is a class of research studies in which researchers mix or combine quantitative and qualitative research approaches as well as techniques in a single research study. This research is useful for describing complex phenomenon, deciding comparisons between cases, and this research is able to analyze the combined results of quantitative and qualitative research so that the data will be clearer and complementary.

This study is applying mixed research with sequential exploratory methods, namely research starting from the collection of qualitative descriptive data to describe how the process in the implementation of blended learning lectures are started from preparation, implementation of learning, evaluation, and reflection. Furthermore, quantitative data collection was carried out to determine the results and effectiveness of blended learning. The first result is used to answer the first question, and vice versa. Furthermore, those two results are combined to find out the implementation illustration of blended learning lectures intact. This type of mixed research uses sequential explanatory strategies.

The population in this study is students of PGRI Semarang University. Data collection for the blended learning lecture process was classified by using questionnaires for the implementation of blended learning lectures filled out by students through google form. The second data is student learning results / achievements downloaded from SIMEKAR UPGRIS. Data analysis techniques are carried out by using various stages such as follows: (1) descriptive analysis, (2) interactive analysis, and (3) quantitative analysis. The blended learning lecture process has been carried out in PGRI Semarang University in well condition accordance with national higher education standardizations which include: 1) graduate competency standards, 2) learning content standards, 3) learning process standards, 4) learning assessment standards, 5) lecturer and education staff standards, 6) learning facilities and infrastructure standards, 7) learning management standards, and 8) learning financing standards.

Population is the whole subject of study, both of a group of people, objects, or things. According to (Sugiyono, 2014) mentioned that population is an area or generalization consisting of objects/ subjects that have certain qualities and characteristics set by researchers to be studied and

defined conclusions. The population in this study is students of PGRI Semarang University, the sample is part of the number or representative of the population to be studied. According to (Cortini, 2014) mentioned that the sample is part of the number and characteristics possessed by the population. Data collection for the blended learning lecturing process was classified by using questionnaires as the implementation of blended learning lecturing filled out by students through google form. The second data is student learning results/achievements downloaded from SIMEKAR UPGRIS. Data analysis techniques are carried out by using such as follows: (1) descriptive analysis, (2) interactive analysis, and (3) quantitative analysis.

Results and Discussion

Referring to the research data collected through filling out online questionnaires through google form on 195 students and 63 lecturers' respondents from the Department Program. The data obtained from this study includes national standards of higher education. National standards for higher education according to (Sitorus, 2021) concerning on National Higher Education Standards, consist of as follows: 1) alumni competency standards, 2) learning subject standards, 3) learning process standards, 4) learning assessment standards, 5) lecturer and education staff standards, 6) learning facilities and infrastructure standards, 7) learning management standards, and 8) learning financing standards.

Alumnus Competency Standards

Bases on the study from (Sitorus, 2021), alumnus competency standards are minimum criterion regarding on the ability qualifications which include attitudes, knowledge, and skills stated in the formulation of graduate learning outcomes. Graduate competency standards are used as the main reference in the development of Learning content standards, learning process standards, learning assessment standards, Lecturer and Education Staff standards, learning facilities and infrastructure standards, learning management standards, and Learning financing standards. In observing the responses of students and lecturers, they have to answer such as: 1) The learning outcomes formulated in the course already cover all three aspects of the realm of attitudes, knowledge, and skills, 2) In the blended learning process carried out by lecturers able to develop attitudes and behaviors both of spiritual and social life of students, 3) it able to provide knowledge and mastery of concepts, theories, methods, and philosophies in the field of science systematically, 4) it able to provide general work skills in accordance with the type of Department Program, 5) it able to provide uncommon work skills in accordance with the scientific field of the Study Program, and 6) it able to provide work experience in the period of certain time for students.

Bases on 195 students and 63 lecturers' respondents from several faculties in PGRI University Semarang able to collect the data classified in the following table below.

No.	Alumnus Competency Standards	Lecturers (%)	Students (%)
1	Very Inappropriate	0,5	0,9
2	Inappropriate	1,6	3,4
3	Quite Appropriate	18,3	20,7
4	Appropriate	50,8	55,0
5	Fits Perfectly	28,8	20,0
	Total	100,0	100,0

Table 1. Alumnus Competency Standards

Learning Subject Standards

They have minimum criterion for the level of depth and breadth of learning material that refers to alumnus learning (Kementerian Pendidikan, 2020). In finding out the responses of students and lecturers, they have to answer such as follows: 1) The depth of the material presented in lectures is in accordance with the learning outcomes formulated, 2) The material presented in lectures are able to equip student knowledge, 3) The material presented in lectures able to equip student skills, 4) The material presented in lectures is structured, 5) The scope of the breadth of material presented in lectures is in accordance with the achievements Formulated learning, 6) The

scope of material presented in lectures able to lead students to achieve competence in certain fields both of knowledge and skills in general and theoretical concepts of special parts in the field of knowledge as well as skills widely.

Bases on the research results that has been carried out on respondents are amount 195 student and 63 lecturer respondents from several Faculties in PGRI Semarang University, able to collect the data classified in the following Table 2 below.

No.	Learning Subject Standards	Lecturers (%)	Students (%)
1	Very Inappropriate	0,5	0,9
2	Inappropriate	1,3	2,6
3	Quite Appropriate	7,4	17,2
4	Appropriate	45,8	55,3
5	Fits Perfectly	45,0	24,0
	Total	100,0	100,0

Table 2. Learning Subject Standards

Learning Process Standards

Bases on (Kementerian Pendidikan, 2020) stated that learning process standards are minimum criterion regarding the implementation of learning in study programs to obtain alumnus learning outcomes. Learning process standards include the characteristics of the learning process, learning process planning, implementing the learning process, and student learning load.

In finding out the responses of students and lecturers, they have to answer such as follows:

1) The blended learning process is carried out interactively between lecturers and students, 2) The learning materials provided by lecturers able to instill the values of excellence both of local and national wisdom, 3) The material presented in lectures able to equip students to be able to solve problems through an interdisciplinary or multidisciplinary approaches, 4) Blended learning process carried out in lectures able to realize a conducive academic environment based on religious and national values, 5) The scope of material in the blended learning process is presented in accordance with the demands and developments of science, 6) The scope of material presented in lectures able to provide students with provisions in analyzing factual problems through a transdisciplinary approach, 7) Blended learning process is carried out effectively in accordance with a predetermined time, 8) Blended learning process involves interaction between lecturers and students in order able to develop attitudes, knowledge, and skills in accordance with learning outcomes, 9) Blended learning process provides opportunities of students to develop creativity, independence in observing and finding knowledge.

Bases on the research results that has been carried out on respondents are amount 195 student and 63 lecturer respondents from several Faculties in PGRI Semarang University, able to collect the data classified in the following Table 3 below.

No.	Learning Process Standards	Lecturers (%)	Students (%)
1	Very Inappropriate	0,0	0,7
2	Inappropriate	1,6	2,0
3	Quite Appropriate	14,6	17,8
4	Appropriate	51,3	57,8
5	Fits Perfectly	32,5	21,7
	Total	100,0	100,0

Table 3. Learning Process Standards

Learning Assessment Standards

Bases on (Kementerian Pendidikan, 2020) stated that Learning assessment standards are minimum criterion regarding the assessment of student learning processes and outcomes in order to fulfill alumnus learning outcomes.

In finding out the responses of students and lecturers, they have to answer such as follows:

1) Lecturers in conducting assessments complete the principles of good assessment, 2) Assessments are carried out by lecturers aim to improve planning and learning methods, as well as achieve alumnus learning outcomes, 3) Assessments are carried out by lecturers are oriented to a continuous process and outcomes learnings that reflect student abilities during the learning process, 4) The assessment are carried out by the lecturer is based on standards agreed upon with students freed from the influence of subjectivity, 5) The assessment is carried out by the lecturer is in accordance with clear procedures and criterion, agreed at the beginning of the lecture, and understood by students, 6) The procedures and results of the assessment carried out by lecturers able to be accessed by all stakeholders, 7) The lecturer's assessment technique is a combination of observation, participation, performance, written, and oral tests, 8) Lecturer applies process assessment in the form of rubrics and assessment results in the form of portfolio or design work, 9) Lecturer assesses student affection / attitude in learning.

Bases on the research results that has been carried out on respondents are amount 195 student and 63 lecturer respondents from several Faculties in PGRI Semarang University, able to collect the data classified in the following Table 4 below.

No.	Learning Assessment Standards	Lectures (%)	Students (%)
1	Very Inappropriate	0,0	0,8
2	Inappropriate	0,7	2,4
3	Quite Appropriate	6,3	18,4
4	Appropriate	46,5	55,1
5	Fits Perfectly	46,5	23,3
	Total	100	100,0

Table 4. Learning Assessment Standards

Lecturer And Education Staff Standards

Lecturer and Education Staff Standards are minimum criterion regarding the qualifications and competencies of Lecturers and Education Staff to organize education in order to fulfill alumnus learning outcomes (Kementerian Pendidikan, 2020).

No.	Lecturer And Education Staff Standards	Lecturer (%)	Students (%)
1	Very Inappropriate	1,2	0,9
2	Inappropriate	1,2	1,8
3	Quite Appropriate	7,2	15,2
4	Appropriate	42,2	54,1
5	Fits Perfectly	48,2	28,0
	Total	100,0	100,0

Table 5. Learning Assessment Standards

After the research had been conducted on respondents with the following questions: 1) In the blended learning process, the fields/courses taught by lecturers in accordance with their educational qualifications, 2) In the blended learning process, lecturers have to prepare learning materials arranged, 3) In the blended learning process, lecturers are mastering the learning material well, 4) In blended learning, lecturers able to apply learning media appropriately, 5) In the blended learning process, lecturers able to utilize learning strategies/models that are relevant to the teaching material, 6) In the blended learning process, lecturers able to utilize appropriate assessment tools in accordance with the material taught, 7) Education Staffs (other than Administrative Staffs) should have minimum academic qualifications background of diploma 3 (three) program stated with an attest document in accordance with the qualifications of their main duties and functions, 8) Administration Staffs should have minimum academic qualifications background at least from Senior High School or equivalent, 9) Education Staffs who require special skills have a certificate of competence in accordance with their field of duty and its expertise.

Bases on the questions above, researchers conducted research in PGRI Semarang University with respondents from several faculties in PGRI Semarang University obtained the following data (Table 5).

Learning Facilities and Infrastructure Standards

The standard of facilities and infrastructure according to (Kementerian Pendidikan, 2020) mentioned that minimum criterion regarding facilities and infrastructure in accordance with the content and learning process necessity in order to reach alumnus learning outcomes.

After conducting research on respondents with the following questions; 1) Blended learning lecture media used by lecturers are easily accessible to students, 2) Internet facilities (bandwidth) are sufficient for blended learning lectures, 3) The available E-Learning software is suitable to support blended learning lectures, 4) The available of E-Learning software is easily accessible to students, 5) The E-Library is easily accessible to students, 7) Laboratory materials, equipment, and facilities are sufficient to support lecture's practicum, 8) Materials, equipment, and laboratory facilities are easily accessible to students.

Bases on the questions above, researchers conducted research in PGRI Semarang University with respondents from several faculties in PGRI Semarang University obtained the following data (Table 6).

No.	Learning Facilities and Infrastructure Standards	Lecturers (%)	Students (%)
1	Very Inappropriate	0,4	1,0
2	Inappropriate	2,3	3,4
3	Quite Appropriate	10,9	23,9
4	Appropriate	48,8	50,4
5	Fits Perfectly	37,6	21,3
	Total	100,0	100,0

Table 6. Learning Facilities and Infrastructure Standards

Learning Management Standards

Bases on (Kementerian Pendidikan, 2020), mentioned that the definition of learning management standards is a minimum criterion regarding planning, implementing, controlling, monitoring and evaluating, and reporting Learning activities at the Department Program level.

After conducting research on respondents with the following questions; 1) do your courses that you teach are equipped with learning tools (Syllabus/RPS)?, 2) does the course material that you test is in accordance with the course material taught?, 3) have lecturing academic atmosphere been achieved well?, 4) have the curricula in UPGRIS always been updated?, 5) is the Semester Lecture Plan (RPS) is available in the Lecture Information System (SIP)?, 6) are you being objective in providing course values?, 7) does the learning management in UPGRIS manage well?

Bases on the questions above, researchers conducted research in PGRI Semarang University with respondents from several faculties in PGRI Semarang University obtained the following data:

No.	Learning Management Standards	Lecturers (%)	Students (%)
1	Very Inappropriate	0,7	0,5
2	Inappropriate	0,5	2,0
3	Quite Appropriate	5,9	16,3
4	Appropriate	42,1	55,7
5	Fits Perfectly	50,8	25,5
	Total	100,0	100,0

Table 7. Learning Facilities and Infrastructure Standards

Learning Financing Standards

According to (Kementerian Pendidikan, 2020), mentioned that the definition of learning financing standards is a minimum criterion regarding the components and amount of investment as well as operational costs prepared in order to fulfill alumnus learning outcomes.

After conducting research on respondents with the following questions; 1) does University provide adequate IT access for blended learning? 2) does University invest budget for E-Learning / blended learning purposes, 3) has the operational costs being allocated by universities for blended learning are sufficient? 4) has University operational costs being fulfilled the adequacy ratio for blended learning?

Bases on the questions above, researchers conducted research in PGRI Semarang University with respondents from several faculties in PGRI Semarang University obtained the following data:

No.	Learning Financing Standards	Lecturer (%)	Students (%)
1	Very Inappropriate	0,0	1,1
2	Very Inappropriate	1,2	3,4
3	Quite Appropriate	15,9	24,1
4	Appropriate	57,9	54,2
5	Fits Perfectly	25,0	17,2
	Total	100,0	100,0

Table 8. Learning Financing Standards

Conclusion

Bases on the research results that has been carried out shows that the competency standards of alumnus in the blended learning lecturing process in PGRI Semarang University show several indicators as follows: The learning outcomes formulated in each subject already include aspects of student attitudes, knowledge, and skills; The blended learning process carried out by lecturers able to be categorized into the following findings: being able to cultivate attitudes and behaviors in the spiritual and social life of students; Providing knowledge and mastery of concepts, theories, methods, as well as philosophies in accordance with the field of science systematically; Providing general employability tailored to each study program; Providing special work skills in accordance with the scientific field of the study program; Providing work experience to students for a certain period of time.

In addition, referring to the study from (Shamsuddin & Kaur, 2020) mentioned that the elaboration of learning content standards in the blended learning lecture process in PGRI Semarang University is as follows: The depth of material provided by lecturers during lectures has been adjusted to the learning outcomes that have been formulated. The material presented in blended learning lectures able to be a reference for students which includes the following: providing student knowledge; Being able to equip student skills; the elaboration of the material is arranged in a structured manner; The breadth of the material is sufficient to be presented in lectures in accordance with the learning outcomes of blended learning; The scope of material is appropriate to be presented in blended learning lectures that able to lead students achieving competence in certain areas of knowledge and skills both in general and theoretical concepts of special parts in the field of knowledge and skills considerable.

Referring to the study from (Suartama et al., 2019) mentioned the technology information has a crucial role regarding to this blended learning process as a technology information utilization. The research results that have been carried out show that learning process standards in the blended learning lecture process in PGRI University Semarang is classified into as follows: The blended learning process has been carried out interactively between lecturers and students; The blended learning materials provided by lecturers are sufficient to instill the values of excellence both of local and national wisdoms; The material presented in blended learning lectures able to equip students to be able to solve problems through an interdisciplinary or multidisciplinary approaches. The blended learning process carried out in lectures able to create a conducive academic environment based on

religious and national values; The scoop up material in the blended learning process is well to be presented with the demands and developments of science.

According to the study from (Rabiu et al., 2023) mentioned that the material presented in lecturing activity is sufficient to equip students in analyzing factual problems through a transdisciplinary approach; The blended learning process carried out is effective in accordance with the predetermined time. The blended learning process carried out is efficient in accordance with the predetermined time. The blended learning process has provided opportunities for students to develop creativity, independency in observing and finding knowledge; Lecturers have prepared blended learning materials very well; The lecture able to mastering blended learning activity, Lecturers are very familiar with the lecture material. During the blended learning lecture process, Lecturers able to apply learning media appropriately; in the blended learning process, Lecturers able to utilize learning strategies / models that are relevant to the teaching material.

Referring to the study from (Kristanto et al., 2017) showed the development in E-Learning become a global issues due to the online study condition affected by covid 19 pandemic, therefore learning assessment standards in the blended learning lecture process in PGRI Semarang University are classified into follows: Lecturers in conducting assessments fulfill the principles of good assessment; The assessment carried out by lecturers has aimed to improve planning and learning methods, as well as to achieve graduate learning outcomes; The assessment carried out by lecturers is oriented towards a continuous learning process and learning outcomes that reflect student abilities during the learning process; The assessment carried out by lecturers is based on standards agreed upon with students and being neutral from the influence of subjectivity.

The assessment carried out by lecturers is in accordance with obvious procedures and criteria, agreed at the beginning of the lecture, and understood by students; The procedures and results of assessments carried out by lecturers able to be accessed by all stakeholders; The assessment techniques used by lecturers are a combination of observation, participation, performance, written and oral tests; Lecturers simply apply process assessment in the form of rubrics as well as assessment results in the form of portfolios or design works; Lecturers have assessed students' affection/attitudes in learning; In the blended learning process, Lecturers able to utilize appropriate assessment tools in accordance with the material subjected.

According to the study from (Gleadow et al., 2015) mentioned that the development of subject material has to create according to the environmental standards in order able to increase the lecture presentation and student's understanding in face- to face class. The standards of lecturers and educational staff in PGRI Semarang University are classified into the following stages: Lecturers have educational qualifications in accordance with the field of study/course in the blended learning process; Education Staffs (other than Administration Staffs) in PGRI Semarang University already has minimum graduated academic qualifications of diploma 3 (three) programs stated with attest document in accordance with the qualifications of their main duties and functions; Administration staff in PGRI Semarang University already have academic qualifications at least graduated from Senior High School or equivalent; Education staffs who require special skills already have a certificate of competence in accordance with their field of duty and expertise.

In the blended learning process, standard facilities and infrastructure are needed in order able to support the process of these activities, in addition in PGRI Semarang University has several criterion as follows: The blended learning lecture media used by lecturers is very accessible to students; The internet (bandwidth) facilities in PGRI Semarang University campus are good to support blended learning lectures; The E-Learning software available in PGRI Semarang University is fulfilled to support blended learning courses and being easily accessible to students; The E-Library in PGRI Semarang University is easily accessible to students; Materials, equipment, and laboratory facilities in PGRI Semarang University are sufficient to support practicum lectures as well as is easily accessible to students.

According to the research results that has been carried out, it shows that the standards for learning management within PGRI Semarang University are as follows: All courses in blended learning are equipped with learning tools; The lecture material taught by lecturers during blended learning is in accordance with what was tested; The academic atmosphere in PGRI Semarang

University is good; The curricula in PGRI Semarang University is always updated according to the needs of the times; The Semester Lecture Plan (RPS) for each course is available in the Lecture Information System (SIP); The assessment carried out by lecturers in blended learning is objective; Learning management in PGRI Semarang University has been well managed; PGRI Semarang University has provided access to adequate Information Technology services for blended learning.

In addition, the research results that have been carried out show that learning financing standards within PGRI Semarang University are categorized into the following stages: PGRI Semarang University has provided access to adequate Information Technology services for blended learning and facilitates the needs of E-Learning or blended learning; The operational costs allocated by PGRI Semarang University are sufficient for blended learning; The operational cost ratio of PGRI Semarang University has fulfilled the ratio of blended learning necessity. The blended learning lecture process carried out in PGRI Semarang University has been carried out well and in accordance with national higher education standards referring to (Kementerian Pendidikan, 2020).

Funding: This research received no external funding.

Conflicts of Interest: The authors declare that no potential conflicts of interest in publishing this work. Furthermore, the authors have witnessed ethical issues such as plagiarism, informed consent, misconduct, data fabrication, double publication or submission, and redundancy.

References

- Cortini, M. (2014). Mix-method research in applied psychology. Mediterranean Journal of Social Sciences. https://doi.org/10.5901/mjss.2014.v5n23p1900
- Creswell, J. W. & J. D. C. (2018). Research Design Qualitative, Quantitative, and Mixed Methods Approaches Fifth Edition. Sage Publications, Inc.
- Gleadow, R., Macfarlan, B., & Honeydew, M. (2015). Design for learning a case study of blended learning in a science unit. F1000Research. https://doi.org/10.12688/f1000research.7032.2
- Kementerian Pendidikan. (2020). Peraturan Menteri Pendidikan Dan Kebudayaan Republik Indonesia Nomor 3 TAHUN 2020 Tentang Standar Nasional Pendidikan Tinggi (p. 76). https://usd.ac.id/lembaga/lpmai/wp-content/uploads/2021/04/Permendikbud-Nomor-3-Tahun-2020.pdf
- Kristanto, A., Mustaji, M., & Mariono, A. (2017). The Development of Instructional Materials E-Learning Based On Blended Learning. International Education Studies. https://doi.org/10.5539/ies.v10n7p10
- Pendidikan, K. K. (2020). Mendikbud Terbitkan SE tentang Pelaksanaan Pendidikan dalam Masa Darurat Covid-19. Kemdikbud.
- R. Burke Johnson, University of South Alabama; Larry Christensen, USA. (2014). Educational Research Quantitative, Qualitative, and Mixed Approaches Fifth Edition (Fifth edit). Sage Publications, Inc. https://ismailsunny.files.wordpress.com/2017/07/educational-research_-quantitat-r-robert-burke-johnson.pdf
- Rabiu, A., Hameed Ishola, S., & Ajelabi, P. A. (2023). A Review of Blended e-Learning Materials Model Designs and its Application for Tertiary Institutions Students' Use. International Journal of Education Humanities and Social Science. https://doi.org/10.54922/ijehss.2023.0526
- Shamsuddin, N., & Kaur, J. (2020). Students' learning style and its effect on blended learning, does it matter? International Journal of Evaluation and Research in Education. https://doi.org/10.11591/ijere.v9i1.20422
- Sisilia, H. S., Astuti, R. S., Priyadi, B. P., Herawati, A. R., & Afrizal, T. (2022). Strategi Pembelajaran di Masa Pandemi Covid-19 pada Satuan Menengah di Provinsi Jawa Tengah. Perspektif. https://doi.org/10.31289/perspektif.v11i3.6275
- Sitorus, T. M. (2021). Penyelarasan ISO 21001:2018 Dengan Peraturan Standar Nasional Pendidikan Tinggi Nomor 3 Tahun 2020. JAS-PT (Jurnal Analisis Sistem Pendidikan Tinggi Indonesia). https://doi.org/10.36339/jaspt.v5i2.524
- Suartama, I. K., Setyosari, P., Sulthoni, & Ulfa, S. (2019). Development of an instructional design model for mobile blended learning in higher education. International Journal of Emerging Technologies in Learning. https://doi.org/10.3991/ijet.v14i16.10633
- Sugiyono. (2014). Metode Penelitian Kuantitatif, Kualitatif dan R&D. Alfabeta.



© 2024 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC-BY) license (http://creativecommons.org/licenses/by/4.0/).