



Education Quarterly Reviews

Hariz, N. A., Permana, A. D., Boesoirie, S. F., Wijana, & Ratunanda, S. S. (2025). Students' Perception on the Application of Blended Learning within Clinical Rotation during the Covid-19 Pandemic at the Faculty of Medicine, Universitas Padjadjaran in 2021. *Education Quarterly Reviews*, 8(1), 1-7.

ISSN 2621-5799

DOI: 10.31014/aior.1993.08.01.547

The online version of this article can be found at:

<https://www.asianinstituteofresearch.org/>

Published by:
The Asian Institute of Research

The *Education Quarterly Reviews* is an Open Access publication. It may be read, copied, and distributed free of charge according to the conditions of the Creative Commons Attribution 4.0 International license.

The Asian Institute of Research *Education Quarterly Reviews* is a peer-reviewed International Journal. The journal covers scholarly articles in the fields of education, linguistics, literature, educational theory, research, and methodologies, curriculum, elementary and secondary education, higher education, foreign language education, teaching and learning, teacher education, education of special groups, and other fields of study related to education. As the journal is Open Access, it ensures high visibility and the increase of citations for all research articles published. The *Education Quarterly Reviews* aims to facilitate scholarly work on recent theoretical and practical aspects of education.



ASIAN INSTITUTE OF RESEARCH
Connecting Scholars Worldwide

Students' Perception on the Application of Blended Learning within Clinical Rotation during the Covid-19 Pandemic at the Faculty of Medicine, Universitas Padjadjaran in 2021

Naufan Alpha Hariz¹, Agung Dinasti Permana², Shinta Fitri Boesoerie³, Wijana⁴, Sinta Sari Ratunanda⁵

¹ Medical Degree, Faculty of Medicine Universitas Padjadjaran, Hasan Sadikin Hospital Bandung West Java, Indonesia

² Division of Oncology Head and Neck Surgery, Department of Otorhinolaryngology, Faculty of Medicine Universitas Padjadjaran, Hasan Sadikin Hospital Bandung West Java, Indonesia

³ Division of Rhinology, Department of Otorhinolaryngology, Faculty of Medicine Universitas Padjadjaran, Hasan Sadikin Hospital Bandung West Java, Indonesia

⁴ Division of Vestibular Audiology, Department of Otorhinolaryngology, Faculty of Medicine Universitas Padjadjaran, Hasan Sadikin Hospital Bandung West Java, Indonesia

⁵ Department of Ophthalmology, Cicendo Eye Hospital, Padjadjaran University, Bandung, Indonesia

Correspondence: Naufan Alpha Hariz. Email: sonson_tht@yahoo.com

Abstract

The government of Indonesia has shifted face-to-face teaching and learning activities to online learning to prevent COVID-19 transmission. Still, clinical rotation and skills practice in hospitals are compulsory for medical students. Therefore, blended learning is applied. This new system is applied in the Medical Profession Study Program, Faculty of Medicine, Universitas Padjadjaran, and limited studies describe this learning within clinical rotation. The purpose of this study was to describe the implementation of blended learning during the COVID-19 pandemic based on students' perceptions. Active students of Medical Profession Study Program from class of 2020-2021 (n=261) were invited to participate in this study. Participants were requested to respond to 21 "yes/no" questionnaire. This study was conducted from December 2021 to January 2022. Students who did not take part in the blended learning system were excluded from the study. The findings showed that most students were aware of the adoption of blended learning (yes > 50%). The highest percentage of "yes" answers was the question about students' awareness of virtual face-to-face learning activities (Virtual Synchronous) (98.95%). Meanwhile, the lowest percentage of "yes" answers was the question about the student's perceptions regarding the application of a structured schedule (during working hours) (38.31%). Blended learning during the COVID-19 pandemic from the student's point of view is already per the decree and guidebooks. The structured schedule experienced by the students was not fully implemented during working hours.

Keywords: Adaption, Learning, COVID-19, Student

1. Introduction

Coronavirus disease-2019 (COVID -19) by SARS-Corona Virus 2 (SARS-CoV2) emerged in China at the end of 2019. In Indonesia, the number of COVID-19 cases reached 4,343,185 as of January 30, 2022, with a death toll of

144,303 people (Reid et al., 2022; WHO, 2022), and becomes one of the highest numbers of COVID-19 cases in Southeast Asia. Based on the Circular from the Minister of Education and Culture Number: 36962/MPK.A/HK/2020 dated March 17, 2020, regarding Online Learning from The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia has shifted teaching and learning activities to online to prevent COVID-19 transmission (The Minister of Educational and Culture, 2020). However, other studies state that online teaching and learning systems also have negative impacts by causing confusion and dissatisfaction for students, which leads students to experience stress and lack of motivation in learning (Aji, 2020; Argaheni, 2020, Dowd et al., 2021).

The Rector of Universitas Padjadjaran, similar to other universities (Dowd et al., 2021; Haris et al., 2021; Unpad, 2020) issued a recommendation through the Decree of the Rector of the Universitas Padjadjaran No.1990/UN6.RKT/Kep/HK/2020 concerning the guidelines for organizing educational, research, and student activities during the COVID-19 pandemic (Haris et al., 2021). Based on this decree, clinical skills practice in hospitals was compulsory. Therefore, medical, health professionals, specialists, and sub-specialist education activities did not apply the online teaching and learning system 100% and blended learning was applied.

Study reports that students have higher levels of interest and motivation when participating in blended learning classes (reference). Hence, the implementation of blended learning has its advantages and ought to be further enhanced for its ability to draw students' interest and motivation in their learning (Osman and Mohd, 2020). Somehow, blended learning faced obstacles, so good collaboration between teachers, students, and parents is needed. Teachers are required to be creative in providing a learning platform, students are required to be active, and parents are required to accompany students during learning (Noervadila et al., 2021). In Medical Profession Study Program, Faculty of Medicine, Universitas Padjadjaran (Program Studi Profesi Dokter Fakultas Kedokteran Universitas Padjadjaran, PSPD FKUP), blended learning system is a new thing and there is no research that describes it. Therefore, this study aimed to describe the adaptation of blended learning during the COVID-19 pandemic from the perspective of PSPD FKUP students.

2. Method

The prepared questionnaire aims to see the adaptation of blended learning based on the student's perspective. This study used a closed questionnaire with a choice of answers "yes/no" or verification questions. This questionnaire question is pragmatically valid to seek confirmation without bias in the expectations of positive or negative responses (Latifah et al., 2022). The study was conducted at PSPD FKUP from December 2021 to January 2022. The research population was ± 500 students of PSPD FKUP for the period 2020 and 2021 who were the object of the application of blended learning. The sample size was estimated using the Slovin formula, with a minimum of 223 students (Magmood, 2014). The questionnaire was distributed to the samples randomly (simple random sampling).

This study received approval from The Unpad Research Ethics Commission (Number 112/UN6.KEP/EC/2021 ethics). The questionnaire was prepared based on the Decree of the Chancellor of the University of Padjadjaran No.1990/UN6.RKT/Kep/HK/2020, the Guidebook for Implementing Blended Learning at the Universitas Padjadjaran, and the Guidebook for Adaptation of Medical and Health Profession Education in the Era of the COVID-19 Pandemic (Haris et al., 2021; Unpad, 2020; Findyartini et al., 2020).

Twenty-one question items were distributed to respondents online through free survey administration software from Google Docs based on a web application, namely Google Forms. The collected questionnaire data was then processed quantitatively using percentages (Adelia et al., 2021).

"Yes/no" questions are unbiased and clearly describe positive or negative answers (Magmood, 2014). So, there is no further analysis that follows the percentage analyses. The result is determined based on the Majority Rule where the answer (choice) receiving more than 50% of the votes is the winner (Burgman et al., 2013). The majority (>50%) of the "yes" answers from the respondents described that PSPD FKUP was adapting the question items.

On the other hand, the majority (>50%) of the "no" answers from respondents describe that PSPD FKUP did not adapt the question items since the respondents did not feel it directly (student of PSPD FKUP).

3. Results

Data of the 261 respondents to the questionnaire are shown in the following table. The majority of respondents answered yes (> 50%) to the questionnaire, except for question item number 18 (eighteen) about the structured schedule of blended learning.

Table 1: The number of responses and percentage of answers to the questionnaire

Question	Yes		No	
	Total (n)	Percentage (%)	Total (n)	Percentage (%)
1. Are you currently undergoing a blended learning system? Blended learning is a combination of face-to-face meetings in traditional classrooms (traditional learning) and digital classrooms (e-learning) online (in a network).	191	73.18	70	26.82
2. Do you experience Direct Synchronous (face-to-face) learning?	177	67.82	84	32.18
3. Do you experience Virtual Synchronous learning (online)?	258	98.85	3	1.51
4. Do you experience Individual Asynchronous learning? (Learning is done individually and carried out wherever and whenever according to the conditions, speed, and interest of each student in learning).	225	86.21	36	13.79
5. Do you experience Asynchronous Collaborative learning? (Learning activities are carried out in groups and collaboratively using appropriate learning technology. For example, writing essays in Google docs).	244	93.49	17	6.51
6. Do lecturers provide online course learning materials that are in line with the learning outcomes of graduates and study programs?	251	96.17	10	3.83
7. Do the teaching materials vary in one Online Course? Consists of at least three forms (textual, image, audio, simulation, animation, multimedia, and others).	212	81.23	49	18.77
8. Do Online Course teaching materials integrate the results of research and/or community service that are used as illustrations or examples of course materials?	198	75.86	63	24.14
9. Are Online Course teaching materials contextual and up-to-date (following the development of science)?	252	96.55	9	3.45
10. Are the online course teaching materials mostly the original work of the course teaching team, or are they using other people's work with copyright?	243	93.10	18	6.90
11. Do courses that use blended learning have the characteristics of interactive, holistic, integrative, scientific, contextual, thematic, effective, and student-centered?	219	83.91	42	16.09
12. Do courses that use blended learning have a map of learning stages, semester lesson plans, a list of	221	84.67	40	15.33

Question	Yes		No	
	Total (n)	Percentage (%)	Total (n)	Percentage (%)
teaching materials, study activity plans, lecture implementation rules, assessments, and assessment criteria?				
13. Do courses that use blended learning combine synchronous learning (at the same time) and asynchronous learning (at different times)?	221	84.67	40	15.33
14. Do courses that use blended learning use a variety of media and learning technologies?	222	85.06	39	14.94
15. Do courses that use blended learning provide opportunities for interaction between students?	248	95.02	13	4.98
16. Do courses that use blended learning provide opportunities for interaction between students and lecturers?	251	96.17	10	3.83
17. Do courses that use blended learning provide you with information, assignments, and work time that you can follow?	244	93.49	17	6.51
18. Do courses that use blended learning have a structured schedule during working hours?	100	38.31	161	61.69
19. Are the competencies or learning outcomes written at the beginning of each learning activity?	172	65.90	89	34.10
20. Is the grading system delivered in the learning contract at the beginning of the semester? (Regulations for Evaluation of Learning Outcomes, assessment, and weighting)	188	72.03	73	27.97
21. Is current learning able to provide opportunities for students to improve learning outcomes?	218	83.52	43	16.48

4. Discussion

In this study, the results of question number 1 showed that majority of the students are aware that the blended learning system has been implemented in PSPD FKUP. Therefore, PSPD FKUP students have self-awareness of this blended learning system. Several studies have stated that self-awareness in students has a positive impact and can significantly increase reading interest and discipline (Maharani and Mustika, 2016; Fransisca, 2022). These results can certainly improve learning outcomes which supports the results of questionnaire number 21 (Is current learning able to provide opportunities for students to improve learning outcomes? Yes 83.52%).

The questions number 2 to 5 show that students feel that there is Direct Synchronous, Virtual Synchronous, Individual Asynchronous, and Collaborative Asynchronous learning in this adaptation. Based on the results of the adaptation analysis of learning activities, it can be described that from the point of view of PSPD FKUP students, blended learning adaptation during the COVID-19 pandemic at PSPD FKUP has followed the guide book "Adaptation of Medical Education and Health Professions in the Era of the COVID-19 Pandemic", in where blended learning is expected to emphasize flexibility, engagement, student-centered, high interaction (between teaching staff, teaching staff-students, between students), collaboration, and communication; both synchronously (directly at the same time) or asynchronously (Findyartini, 2020).

In the blended learning system, teachers are expected to be creative to achieve successful and effective learning even though learning is carried out remotely (Pratama and Mulyati, 2020; Diva et al., 2021). The creativity of teachers can be seen through the variations in teaching materials, teaching styles, media used, and patterns of interaction during learning (Le et al., 2022). Based on questions number 6 to 10, lecturers at PSPD FKUP provide online course learning materials that line with the learning outcomes of the graduates and study programs. They

provide variety to the teaching materials and integrate the illustrations or examples of research and community services in online course teaching materials. The materials are contextual and up-to-date, and are the original work of the course teaching team, or are using other people's work with copyright. In this case, PSPD FKUP students have felt the lecturers' creativity in providing a learning platform. Research results by Zurida et al. stated that teaching variation significantly affects students' motivation in learning (Zurida et al., 2023). This variety of teaching materials will make it easier for students and teachers in the learning process, both face-to-face and virtual (Costado et al., 2021). This adaptation helps overcome obstacles in implementing blended learning which requires good collaboration between teachers, students, and parents (Magmood, 2014).

Based on the results of questions number 11 to 17, the blended learning adaptation at PSPD FKUP is running according to the standard decrees and guidebooks (Unpad, 2020; Haris et al., 2021; Findyartini et al., 2020). It is because students felt the courses that adapt the blended learning process at PSPD FKUP are: (1) have the characteristics of interactive, holistic, integrative, scientific, contextual, thematic, effective, and student-centered; (2) have a map of learning stages, semester lesson plans, a list of teaching materials, study activity plans, lecture implementation rules, assessments, and assessment criteria; (3) combine synchronous learning (at the same time) and asynchronous learning (at different times); (4) use a variety of media and learning technologies; (5) provide opportunities for interaction between students; (6) provide opportunities for interaction between students and lecturers; and (7) provide information, assignments, and work time that students can follow.

However, in terms of a structured schedule, students felt that this blended learning system is not only done during working hours. The result of (question number 18 is the question with the smallest "yes" answer percentage of the entire questionnaire (21 questions) and is the only item with the majority answer being "no" (161 out of 261, 61.69%).

The good students submit exercises during the daytime while students who fail the final examination learn very early in the morning or very late in the evening. However, learning time is not the main determinant. It is the total amount of learning that has a high impact on students' success (Mulenga et al., 2016). The absence of learning restrictions in working hours creates flexibility in time management or management, both for teachers and students. Flexibility is needed in learning, especially asynchronous learning, to encourage the emergence of independent learning and student motivation to be more active (Firman and Rahman, 2020). This flexibility allows students to access the learning environment when they are ready and mentally present, thus growing a learning culture that is innovative, unfettered, and tailored to student needs (Candra et al., 2022). Daroedono et al. (2020) found that time flexibility could support distance learning as in blended learning (Daroedono et al., 2020). Therefore, learning outside of working hours supports distance learning by providing flexibility in learning.

On questions about learning assessment, questions number 19-21, PSPD FKUP students feel that the current learning has written down the competencies or learning outcomes that are intended, has explained the assessment system, has explained the grading system, and they have felt that blended learning provide opportunities for students to improve learning achievement. These results are consistent with other studies which state that the use of blended learning methods can significantly improve learning outcomes (Sewang and Aswad, 2021; Rachman et al., 2019).

The definite answer to the "yes/no" question provides a picture of the perceived adaptation of blended learning at PSPD FKUP. This study is inseparable from limitations. Since this study uses a closed questionnaire, the limitations of respondents in providing detailed answers that could reflect the true feelings that they felt regarding the topics asked in the question items. We did not compare the length of time students experienced the blended learning system with their answers. We have also not been able to conduct further research on the effectiveness of blended learning on their learning outcomes. Therefore, we strongly support further research to describe the blended learning adaptation based on respondent's characteristics and its effectiveness.

In conclusion, blended learning during the COVID-19 pandemic from the student's point of view is already per the decree and guidebooks. Most students take part in blended learning adaptations and there is high awareness of

students about face-to-face virtual (Virtual Synchronous) learning activities. The structured schedule experienced by the students was not fully implemented during working hours.

Author Contributions: Conceptualization, N.A.H and S.S.R; Methodology, S.F.B.; Investigation, N.A.H and A.D.P; Data Curation, W; Writing – Original Draft Preparation, N.A.H; Writing – Review & Editing, W and S.S.R; Visualization, S.F.B; Supervision, S.S.R; Project Administration, N.A.H; Funding Acquisition, N.A.H

Funding: The authors declare that no external funding was received for this research

Conflicts of Interest: The authors declare no conflict of interest

Informed Consent Statement/Ethics approval: Not applicable.

References

- Adelia, A., Miftahurrahmah, M., Nurpathonah, N., Zaindanu, Y., & Ihsan, M. T. (2021). *The Role of Google Form As An Assessment Tool in ELT: Critical Review of The Literature*. ETDC: Indonesian Journal of Research and Educational Review, 1(1), 58-66. <https://doi.org/10.51574/ijrer.v1i1.49>
- Aji, R.H.S. (2020). *The Impact of COVID-19 on Education in Indonesia: Schools, Skills, and Learning Processes*. J Sos Budaya Syar-i FSH UIN Syarif Hidayatullah Jakarta, 7(5), 395–402. 10.15408/sjsbs.v7i5.15314
- Argaheni, N.B. (2020). *Systematic Review: The Impact of Online Lectures during the COVID-19 Pandemic on Indonesian Students*. PLACENTUM J Med and Apl, 8(2), 99-108. <https://doi.org/10.20961/placentum.v8i2.43008>
- Burgman, M.A., Hemem, M.R., Lynn, A.M., Mark, C., James, J., Tara, G.M, et al. (2013). *Voting Systems for Environmental Decisions*. Conservation Biology, 28(2), 322–332. 10.1111/cobi.12209
- Candra, O., Dony, N., Putra, J., Yasdinul, H., and Irdayanti, M.N. (2022). *Learning Flexibility and Innovation in the Post-Covid-19 Pandemic Era*. Journal of Higher Education Theory and Practice, 22(8), 37-50. 10.33423/jhetp.v22i8.5314
- Daroedono, E., Erwin, F., Alfarabi, M., Cing, J., Arodes, E.S, Sirait, R., et al. (2020). *The impact of COVID-19 on medical education: our students' perception on the practice of long distances learning*. Int J Community Med Public Health, 7(7), 2790-2795. <https://doi.org/10.18203/2394-6040.ijcmph20202545>
- Dios, M.T.C., Charlo, J.C.P. (2021). *Face-to-Face vs. E-Learning Models in the COVID-19 Era: Survey Research in a Spanish University*. Educ. Sci. 11(6), 293. <https://doi.org/10.3390/educsci11060293>
- Diva, A.S., Chairunnisa, A., Mufidah, T.H. (2021). *Online Learning During the COVID-19 Pandemic*. Current Research in Education: Conference Series Journal, 1(1), 1-10.
- Dowd, B., McKenney, M., Elkbuli, A. (2021). *The impact of COVID-19 pandemic on medical school admissions: challenges and solutions*. J Surg Res, 258, 213–215. 10.1016/j.jss.2020.08.072.
- Findyartini, A., Soemantri, D., Greviana, N., Hidayah, R.N., Glaramita, M. (2020). *Guidebook for Adapting Medical and Health Professional Education in the Era of the COVID-19 Pandemic*. 1st ed. Jakarta: UI Publishing.
- Fransisca, A. (2022). *The Relationship Between Self-Concept with Learning Discipline and Student Learning Motivation in MTS NU Gondanglegi Malang Regency*. Journal of World science, 1(2), 67-72. <https://doi.org/10.58344/jws.v1i2.9>
- Firman and Rahman, S.R. (2020). *Online Learning Amid the COVID-19 Pandemic*. Indonesian Journal of Educational Science (IJES), 2(2), 81-89. 10.31605/ijes.v2i2.659
- Haris, I., Afdaliah, A and Haris, M.I. (2021). *Response of Indonesian universities to the COVID-19 pandemic – between strategy and implementation*. Journal of Public Health Research, 10(4), 2066. 10.4081/jphr.2021.2066.
- Latifah, I., Murniyati, S. (2022). *School Adaptation in Implementing Blended Learning Strategies during the COVID-19 Pandemic in Playgroups Al-Lubawi Salatiga*. Journal of Early Childhood Islamic Education, 5(2), 129-140. <http://dx.doi.org/10.29300/ja.v5i2.4371>
- Le, V.T., Nguyen, N.H., Tran, T.L.G., Nguyen, L.T., Nguyen, T.A., Nguyen, M.T. (2022). *The interaction patterns of pandemic-initiated online teaching: How teachers adapted*. System, 105, 102755, 1-12. <https://doi.org/10.1016/j.system.2022.102755>

- Maharani, L. and Mustika, M. (2016). *The Relationship Between Self-Awareness and Discipline Among Eighth Grade Students at SMP Wiyatama Bandar Lampung (A Correlational Study in Personal Counseling)*: *Konseli*, 3(1), 57-72. <http://dx.doi.org/10.24042/kons.v3i1.555>
- Mahmood, R.K. (2014). *A pragmatic analysis of yes/no questions in English with reference to press conferences*. *Procedia Soc Behav Sci*, 136, 36-40. 10.1016/j.sbspro.2014.05.283
- Mulenga, H.M., Mukuka, A. (2016). *Learning Time of Day and Students' Academic Achievement at School Certificate Level: A Case Study of Chibote Girls' Secondary School*. *Journal of Education and Practice*, 7(20), 88-93. <https://www.iiste.org/Journals/index.php/JEP/article/view/31934/32804>
- Noervadila, I., Yuliana, D., Puspitasari, Y. (2021). *Blended Learning Method in Enhancing Student Interest in Educational Psychology Courses during the COVID-19 Pandemic*. *IKA Journal PGSD UNARS*, 9(1): 2338-3860. 10.36841/pgsdunars.v9i1.1035
- Osman, N., Mohd, I.H. (2020). *Impact of Implementing Blended Learning on Students' Interest and Motivation*. *Universal Journal of Educational Research*, 8(4), 1483-1490. 10.13189/ujer.2020.080442
- Pratama, R. E., & Mulyati, S. (2020). *Online and Offline Learning During the COVID-19 Pandemic*. *Gagasan Pendidikan Indonesia*, 1(2), 49-59. 10.30870/gpi.v1i2.9405
- Rachman, A., Sukrawan, T., Rohendi, D. (2019). *The Implementation of Blended Learning Model in Improving Learning Outcomes of Drawing 2-Dimensional Objects*. *Journal of Mechanical Engineering Education*, 6(2), 145-152. <https://ejournal.upi.edu/index.php/jmee/article/view/21784/10705>
- Reid, S., Ansariadi., Alexandra, R., and Sheleigh, L. (2022). *The impacts of personal knowledge and risk perception on the effectiveness of behavioural change interventions for COVID-19 in Jakarta and South Sulawesi. Caulfield East, VIC. The Australia-Indonesia Centre*, 1-23. https://pair.australiaindonesiacentre.org/wp-content/uploads/2022/05/SRR5_Eng_220502_v2.pdf
- Sewang, A., & Aswad, M. (2021). *The Readiness of Learning Processes during the New Normal Era of the Covid-19 Pandemic*. *Indonesian Research Journal in Education IRJE*, 5(1), 279-292. <https://doi.org/10.22437/irje.v5i1.12822>
- The Minister of Education and Culture. (2020). *Circular letter Number: 36962/MPK.A/HK/2020 dated March 17, 2020*. Online Learning and Working from Home to Prevent the Spread of Covid-19. 2020.
- Universitas Padjadjaran. (2020). *Decision of the Rector of Padjadjaran University Number: 1190/UN6.RKT/Kep/HK/2020 on Guidelines for Conducting Education, Research, and Student Activities during the COVID-19 Pandemic for the Even Semester of 2020/2021 within the University*. Universitas Padjadjaran. Sumedang: Unpad Press; 2020.
- Universitas Padjadjaran. (2020). *Guidelines for Implementing Blended Learning at Universitas Padjadjaran*. Sumedang: Unpad Press; 2020.
- World Health Organization. (2022). *COVID-19 Situation by Region, Country, Territory & Area*. Geneva: WHO coronavirus (COVID-19) dashboard; 2022.
- Zurida, U., Efendi, Z. (2023). *The Influence of Teacher Teaching Variations and Learning Environment on Student Learning Motivation at SMP Negeri 1 Jeumpa*. *Journal of Education Method and Learning Strategy*, 1(2), 69-82. Universitas Sebelas Maret. 2013; 2(2): 1-8. <https://doi.org/10.59653/jemls.v1i02.88>