

Impacts of Implementing the Learning Policy on Vocational Higher Education in Post Covid-19 Pandemic

Romy Hermawan¹, M.Daniel Septian², Hayat³

¹ Faculty of Vocational Studies, Brawijaya University, Indonesia; e-mail: romy@ub.ac.id

² Faculty of Vocational Studies, Brawijaya University, Indonesia; e-mail: mdanielseptian@ub.ac.id

³ Universitas Islam Malang, Indonesia; e-mail: hayat@unisma.ac.id

ARTICLE INFO

Keywords:

Learning Policy;
Post Covid-19 Pandemic;
Vocational Higher-Education.

Article history:

Received 2022-02-06

Revised 2022-02-28

Accepted 2022-03-28

ABSTRACT

This study aimed to describe the influences of learning policies within the period of vocational higher education after the Covid-19 pandemic. The field research design applied the quantitative approach. The research population, 5.915 respondents, came from elements of the academic community at the Vocational Education Program, Brawijaya University, Malang, and the Vocational Faculty, Airlangga University, Surabaya. Then, the sampling technique determined 98 samples based on the Stratified Random Sampling approach. Data collection techniques were supported by questionnaires, documentation, and interviews. In order to facilitate the analysis, we used parametric inference statistical analysis techniques to test the validity and reliability. The results of the validity test through correlation (Pearson Correlation Coefficient) and the reliability test with the Cronbach Alpha method (Cronbach's Alpha) showed that all question items had been proven to be valid based on the sig value < 0.05 . From 18 items, the Cronbach alpha value was 0.785. As it was more than 0.6, the questionnaire was valid. Also, the reliability test of 16 items obtained from Cronbach's alpha value was 0.838. It was more than 0.6, meaning that the questionnaire was valid. The correlation value between items 1-18 had a fairly high correlation, and the view of the question value sig. 2 tailed overall was < 0.05 , meaning that each question item was valid. The findings from this study indicated that the existence of learning policies has a significant influence on the vocational learning process during the Covid-19 pandemic. This study recommends that in the post-Covid-19 pandemic, educational policies in higher education units of vocational type are more adaptive to digital-based learning by strengthening health principles and protocols.

This is an open access article under the [CC BY-NC-SA](https://creativecommons.org/licenses/by-nc-sa/4.0/) license.



Corresponding Author:

Romy Hermawan

Faculty of Vocational Studies, Brawijaya University, Indonesia; e-mail: romy@ub.ac.id

1. INTRODUCTION

Policy implementation is an important part of a policy process. Basically, the implementation of policies is defined by Nugroho (2017, p. 728) as the way to achieve the goals of a policy. One of the policies in education is the learning policy as an instrument to achieve educational goals. Students' learning activities during the Covid-19 Pandemic under learning from home (BDR) scheme through the application of Distance Learning (distance learning) require the teaching and learning process to continue even though the adjustment process is not easy. In addition, Bappenas (2021) stated that a policy adaptation in response to the Covid-19 pandemic is very necessary since it affects school reopening in the initial implementation.

The Indonesian government, represented by the Minister of Education and Culture (Mendikbud), issued Circular Letter Number 4 of 2020 concerning the Implementation of Educational Policies regarding the spread of coronavirus in an emergency. They recommend closing the transmission chain of this virus by conducting learning activities in schools and carrying out online learning. However, we also realize that there is an inconsistency in the online learning term, as stated by Moore, J. L., et al. (2011) in understanding distance learning, e-Learning, and online learning specifically. Meanwhile, Megahed, N., & Hassan, A. (2022) stated that the blended learning (BL) strategy, which combines online learning and face-to-face learning (offline) and has been implemented during this pandemic period, still requires realignment. The post-Covid-19 education and BL strategies holistically support theoretical and instructional models to become a blended learning model design in accordance with the new environment and situation (post-Covid-19 pandemic).

The consequences of this policy are also contained in other implementing regulations by emphasizing the application of the substance of social distancing and physical distancing policies. This certainly impacts how the process of classical learning interaction between educators (lecturers) and students requires a change in the pattern of education administration from basic education to higher education (Simatupang & Yuhertiana, 2021; Sinaga, 2020). While, specifically on the impact on vocational higher education, it was stated that learning policies during the COVID-19 pandemic had an impact on the aspects of developing students' hard skills and soft skills in vocational education where obstacles, difficulties, and shortcomings and ineffectiveness in the learning process were encountered (Mukarromah & Wijayanti, 2021). Therefore, further efforts are needed to understand the influence of policies in compiling more comprehensive learning through studies and improvement of policy models that become learning references so that they become better post-pandemic (Joko & Relisa, 2021; Noori, 2021).

Post-pandemic learning policies are closely related to the adjustment of learning methods. There is encouragement and optimization of digital-based learning (online) in education (Selvaraj et al., 2021; Watkinson, 2021). The uniqueness of learning possessed by vocational higher education has also experienced challenges and, at the same time, adjustments to Covid-19 policies. This means that universities providing vocational education must remain an important component in realizing link & match to industry, business, and work in any situation. Vocational education in higher education requires the expectation of a learning policy model that emphasizes the ability of soft skills and hard skills as well as an attitude that also continues to grow (Ruiz Estrada & Park, 2018). This is because vocational education graduates are expected to be productive and professional in the industry, business, and work.

Learning plays a vital role in the continuity and sustainability of education. The connection between components that make up a system is defined as learning (Oktavia, 2020). Kaplan (2016, p. 441) stated that the practice of online-based distance learning is in the form of delivering pedagogic material to students. It is separated (physically) by a distance which allows unlimited participation with all planning and preparation in the educational "landscape". The interaction of educators (lecturers) and students in higher education's education and learning process is required to be in line with the Adaptation of New Habits (IMR) policies after the Covid-19 pandemic. The study explained the

influence of learning policies on the learning period of vocational higher education during and after the Covid-19 pandemic.

2. METHOD

This study used a field research design with a quantitative approach. Its population was elements of the academic community in the Vocational Education Program, Brawijaya University, Malang, and the Vocational Faculty, Airlangga University, Surabaya. The two-state universities are providers of vocational higher education located in two metropolises of East Java Province. The total population in this study from the two research loci was 5.915: Lecturers, students, alumni, educators/staff, business, and Industry partners. Meanwhile, using the series of sampling techniques resulted in 98 samples by a Stratified Random Sampling approach. The following is the calculation of determining the number of samples (probability sampling) with the Slovin formula:

$$n = \frac{5.915}{1 + 5.915 (0,1)^2} \qquad n = \frac{5.915}{60,15} \qquad n = 98,3 \approx \mathbf{98}$$

Data collection techniques were supported by questionnaires (Likert scale coding), documentation, and interviews. Then, to facilitate the analysis, we applied the statistical analysis technique of parametric inference. To facilitate the process of correlation testing, validity testing and reliability testing, this study used the IBM SPSS Statistics V21 application. A correlation test is a process to test the independent and dependent variables to find out the closeness level of the relationship between them. Validity testing is performed by correlating the score of each question with the total score and then looking at the sig value. If it is less than 0.05, then the item will be valid and vice versa. When the reliability test uses Cronbach's alpha statistical value, and the Cronbach's alpha value is more than 0.6, then the questionnaire is reliable.

3. FINDING AND DISCUSSION

Government Regulation 46/2019 states that the level of program education at tertiary institutions is one of the formal education pathways in higher education with a type of vocational education that prepares graduates who can work with certain applied skills. It was recorded that in 2021, the Vocational Education Program is one of the educational units providing vocational education at Brawijaya University (UB), Malang. There are five study programs, including Diploma III and IV programs. The study programs are Hospitality Management (D IV); Graphic Design (D IV); Business Administration (D III); Finance and Banking (D III); and Information Technology (D III). Meanwhile, the Vocational Faculty is the only faculty at Airlangga University, Surabaya, as the Diploma Program Manager. The data in 2021 stated that there are 19 study programs in the Vocational Faculty of Airlangga University (UNAIR). The study program includes Tourism/Tourism Development (D3); Imaging Radiology Technology (D4); Medical Laboratory Technology (D3); Occupational Health and Safety (D3); Dental Engineering (D3); Information Systems (D3); Instrumentation System Automation (D3); Traditional Medicine (D4); Traditional Medicine (D3); English (D3); Nursing (D3); Taxation (D3); Marketing Management (D3); Banking Management (D3); Accounting (D3); Office Administration (D3); Physiotherapy (D4); Libraries (D3); Veterinary Paramedics (D3).

The description of respondents from two research loci—both UB Vocational Education Program and UNAIR Vocational Faculty, has been classified based on types of work, gender and profession. Based on the work type of respondents, it was found that the number of student respondents was 92.1%, alumni respondents were 7.9% and user stakeholder respondents were 0%. Vocational higher education students became the most dominant respondents in this research activity. Student respondents were in 4th/5th semester with an internship/PKL program in an intended agency or company. On the other hand, alumni respondents were graduates of vocational higher education students both at Airlangga and Brawijaya Universities who were ready to work and had a career outside the campus later. Meanwhile, the gender of female respondents was 51.5% more than male respondents, with a total of 48.5%. It showed that female participation was more dominant than male

participation in accordance with their respective positions and professions in the vocational higher education environment. From grouping based on university origin, it was found that the largest group of respondents came from the Vocational Faculty of Airlangga University, 63.4%, while the smallest group came from respondents from the Vocational Education Program at Brawijaya University by 36.6%. A large percentage of Vocational Faculty, Airlangga University, was due to a larger number of sample respondents than those from the Vocational Education Program of Brawijaya University.

The method used in this study was the process of correlation testing, where the validity testing and reliability testing were carried out by SPSS software. A correlation test is a process to test the independent and dependent variables to find out the level of closeness between two relationships. Validity testing could be done by correlating the score of each question with the total score and then looking at the sig value. If it is less than 0.05, then the item will be valid and vice versa. The correlation test results through SPSS software support are presented in Table 1.

Table 1 SPSS Correlation Test Results of Original Questionnaire Version

Q1	Pearson Correlation	.603**	Q7	Pearson Correlation	.722**	Q13	Pearson Correlation	.666**
	Sig. (2-tailed)	0.000		Sig. (2-tailed)	0.000		Sig. (2-tailed)	0.000
	N	101		N	101		N	101
Q2	Pearson Correlation	.581**	Q8	Pearson Correlation	.644**	Q14	Pearson Correlation	.588**
	Sig. (2-tailed)	0.000		Sig. (2-tailed)	0.000		Sig. (2-tailed)	0.000
	N	101		N	101		N	101
Q3	Pearson Correlation	.624**	Q9	Pearson Correlation	.409**	Q15	Pearson Correlation	.553**
	Sig. (2-tailed)	0.000		Sig. (2-tailed)	0.000		Sig. (2-tailed)	0.000
	N	101		N	101		N	101
Q4	Pearson Correlation	.584**	Q10	Pearson Correlation	.563**	Q16	Pearson Correlation	.594**
	Sig. (2-tailed)	0.000		Sig. (2-tailed)	0.000		Sig. (2-tailed)	0.000
	N	101		N	101		N	101
Q5	Pearson Correlation	0.030	Q11	Pearson Correlation	.356**	Q17	Pearson Correlation	.605**
	Sig. (2-tailed)	0.768		Sig. (2-tailed)	0.000		Sig. (2-tailed)	0.000
	N	101		N	101		N	101
Q6	Pearson Correlation	.650**	Q12	Pearson Correlation	.268**	Q18	Pearson Correlation	0.186
	Sig. (2-tailed)	0.000		Sig. (2-tailed)	0.007		Sig. (2-tailed)	0.063
	N	101		N	101		N	101

Source: SPSS Results, 2021

Based on the validity test, it was found that there were two invalid question items, namely Q5 and Q18, so they needed to be removed from the next calculation. The next correlation test results from SPSS software support are presented in Table 2.

Table 2 SPSS Correlation Test Results Deleting 2 Invalid Question Items

Q1	Pearson Correlation	.603**	Q10	Pearson Correlation	.563**
	Sig. (2-tailed)	0.000		Sig. (2-tailed)	0.000
	N	101		N	101
Q2	Pearson Correlation	.581**	Q11	Pearson Correlation	.356**
	Sig. (2-tailed)	0.000		Sig. (2-tailed)	0.000
	N	101		N	101
Q3	Pearson Correlation	.624**	Q12	Pearson Correlation	.268**
	Sig. (2-tailed)	0.000		Sig. (2-tailed)	0.007
	N	101		N	101
Q4	Pearson Correlation	.584**	Q13	Pearson Correlation	.666**
	Sig. (2-tailed)	0.000		Sig. (2-tailed)	0.000
	N	101		N	101
Q6	Pearson Correlation	.650**	Q14	Pearson Correlation	.588**
	Sig. (2-tailed)	0.000		Sig. (2-tailed)	0.000
	N	101		N	101
Q7	Pearson Correlation	.722**	Q15	Pearson Correlation	.553**
	Sig. (2-tailed)	0.000		Sig. (2-tailed)	0.000
	N	101		N	101
Q8	Pearson Correlation	.644**	Q16	Pearson Correlation	.594**
	Sig. (2-tailed)	0.000		Sig. (2-tailed)	0.000
	N	101		N	101
Q9	Pearson Correlation	.409**	Q17	Pearson Correlation	.605**
	Sig. (2-tailed)	0.000		Sig. (2-tailed)	0.000
	N	101		N	101

Source: SPSS Results, 2021

Based on the validity test, it was found that all question items were valid, as confirmed by the sig value. < 0.05 . Reliability testing can use the statistical value of Cronbach alpha. If the value of Cronbach alpha is more than 0.6, then the questionnaire will be reliable. Results of the reliability test are presented in Table 3.

Table 3 SPSS Reliability Test Results of Original Questionnaire Version

Reliability Statistics	
Cronbach's Alpha	N of Items
.785	18

Source: SPSS Results, 2021

From 18 items, the Cronbach alpha value was 0.785, which was more than 0.6, meaning that the questionnaire was valid. On the other hand, the above reliability test removed two invalid question items as in the validity test. It is presented in Table 4 for the reliability test as follows.

Table 4 SPSS Reliability Test Results Deleting 2 Invalid Question Items

Reliability Statistics	
Cronbach's Alpha	N of Items
.838	16

Source: SPSS Results, 2021

From 16 items, Cronbach's alpha value was 0.838, in which it was more than 0.6, meaning that the questionnaire was valid. Validity testing could be done by calculating the correlation value between each item with the total number of questions. The table above shows that the correlation value between questions 1-18 had a fairly high correlation from the sig. value 2 tailed overall < 0.05 , meaning that each question item was valid. The findings from this study showed the existence of learning policies that had a significant influence on the learning process in vocational higher education during the Covid-19 pandemic.

Another result of on-site research was that the Faculty of Vocational Studies UNAIR had conducted offline learning while maintaining health protocols provided that students have undergone stage-two vaccinations. The space limitation was also implemented by reducing to 30 students per class from 60 students previously. Meanwhile, students of internship programs from the fifth semester and the sixth semester have been conducting offline activities since early 2021 according to the guidelines for the New Activity Adaptation (AKB) norms with health protocol standards (Prokes) based on the Chancellor's circular letter number 69/UN3/PK /2021. The implementation of practicum/work practice could be carried out online, offline, blended and/or hybrid according to the direction of lecturers/advisors.

As for the Vocational Education Program of Brawijaya University, the learning process is still performed online, so the offline learning process has not yet been implemented. Lecturing activities include teaching and learning processes, advisory, community service program/on-site practice, internships, final project exams, and/or other forms of learning activities by online for the 2021/2022 academic year. This is in accordance with the rector's circular letter number 6237/UN10/TU/2021.

The offline learning policy will affect the risk of transmitting COVID-19 if you do not comply with the implementation of health protocols. However, transmission can be avoided by maintaining distance and dividing class shifts. From a survey of 98 respondents, the number of respondents agreeing with offline learning was $> 50\%$. This showed that offline learning was still applied while maintaining health protocols. In other words, the division of course hours was applied under an alternate or shift system in order to keep a distance according to the implementation of health protocols. Teaching and Learning Policy in each study program expertise/skills require offline and online application with the Blended scheme in the learning process of each subject and Hybrid in each session. It is necessary to improve

the quality of digital-based learning models. From 98 respondents, we could notice several necessary things to combine the learning system from being online and then entering the post-pandemic. Thus, it needs certain readiness and skills in organizing an education system that gives students rights and authority in determining the learning system after the Covid-19 pandemic. The learning approach in vocational education leads to (1) learner-centered learning, (2) work-centered learning, and (3) learning which focuses on developing skill attributes (attribute-focused learning) (Chappell et al., 2003). This study showed that learning policies significantly influenced the vocational higher education learning process during the Covid-19 pandemic, strengthened by existing data and analysis.

4. CONCLUSION

Based on the research results and discussion of the Vocational Education Program Learning Policy after the Covid-19 Pandemic, several conclusions can be deduced. Educational learning policies impact the teaching and learning process in vocational colleges—the Vocational Education Program at Brawijaya University and the Vocational Faculty at Airlangga University. It can be concluded that recommended learning policies significantly influenced the learning process in Vocational Higher Education during the Covid-19 Pandemic. Applying Blended Learning has a significant influence and changes the implementation pattern of learning performed previously. Providing policy recommendations on the implementation of digital-based Vocational Higher Education learning aims to improve quality assurance and the vocational education cycle after the Covid-19 pandemic. In addition, it is necessary to create lecture program units and learning modules based on blended learning and internet protocols by implementing health protocols for vocational college academics.

REFERENCES

- Bappenas. (2021). *Studi Pembelajaran Penanganan COVID-19 di Indonesia*. Kementerian Perencanaan Pembangunan Nasional / Badan Perencanaan Pembangunan Nasional (Bappenas).
- Chappell, C., Hawke, G., Rhodes, C., & Solomon, N. (2003). *High Level Review of Training Packages: Phase 1 Report*. Australian National Training Authority.
- Joko, B. S., & Relisa. (2021). Learning Strategies Of Senior Secondary School Principals In North Sumatra Province During The Covid-19 Pandemic. *Jurnal Penelitian Kebijakan Pendidikan*, 14(1), 11–28. <https://doi.org/10.24832/jpkp.v14i1.390>
- Kaplan, A. M., & Haenlein, M. (2016). Higher education and the digital revolution: About MOOCs, SPOCs, social media, and the Cookie Monster. *Business Horizons*, 59(4), 441–450. <https://doi.org/10.1016/j.bushor.2016.03.008>
- Megahed, N., & Hassan, A. (2022). A blended learning strategy: reimagining the post-Covid-19 architectural education. *Archnet-IJAR: International Journal of Architectural Research*, 16(1), 184–202. <https://doi.org/10.1108/ARCH-04-2021-0081>
- Moore, J. L., Dickson-Deane, C., & Galyen, K. (2011). e-Learning, online learning, and distance learning environments: Are they the same? *The Internet and Higher Education*, 14(2), 129–135. <https://doi.org/10.1016/j.iheduc.2010.10.001>
- Mukarromah, U., & Wijayanti, W. (2021). Implementation of the online learning at vocational high school during Covid-19: Between obligations and barriers. *Jurnal Pendidikan Vokasi*, 11(1), 92–101. <https://doi.org/10.21831/jpv.v11i1.37110>
- Noori, A. Q. (2021). The impact of COVID-19 pandemic on students' learning in higher education in Afghanistan. *Heliyon*, 7(10), e08113. <https://doi.org/10.1016/j.heliyon.2021.e08113>
- Nugroho, R. (2017). *Public Policy*. PT. Elex Media Komputido.
- Oktavia, Y. (2020). Usaha Kepala Sekolah dalam Meningkatkan Kreativitas Guru dalam Pembelajaran di Sekolah Dasar. *Jurnal Bahana Manajemen Pendidikan*, 2(1), 808–815.
- Ruiz Estrada, M. A., & Park, D. (2018). The past, present and future of policy modeling. *Journal of Policy Modeling*, 40(1), 1–15. <https://doi.org/10.1016/j.jpolmod.2018.01.003>
- Selvaraj, A., Radhin, V., KA, N., Benson, N., & Mathew, A. J. (2021). Effect of pandemic based online education on teaching and learning system. *International Journal of Educational Development*, 85,

102444. <https://doi.org/10.1016/j.ijedudev.2021.102444>
- Simatupang, E., & Yuhertiana, I. (2021). Merdeka Belajar Kampus Merdeka terhadap Perubahan Paradigma Pembelajaran pada Pendidikan Tinggi: Sebuah Tinjauan Literatur. *Jurnal Bisnis, Manajemen, Dan Ekonomi*, 2(2), 30–38. <https://doi.org/10.47747/jbme.v2i2.230>
- Sinaga, F. S. S. (2020). Sustainability Pendidikan Musik Selama Pandemi Covid-19. *Prosiding Seminar Nasional Pascasarjana (PROSNAMPAS)*, 3(1), 980–988.
- Watkinson, C. (2021). University presses and the impact of COVID-19. *Learned Publishing*, 34(1), 17–24. <https://doi.org/10.1002/leap.1352>