



Analysis of Lecturers' Understanding of the Application of the MBKM Program in the Mechanical Engineering Cluster of FT UNJ

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ABSTRACT

The Merdeka Belajar Kampus Merdeka curriculum was created to raise the standard of Indonesian university graduates. The UNJ Mechanical Engineering Group participated in the Independent Learning-Independent Campus (MBKM) learning activity during the 2021–2022 academic year through several programs, including MBKM Field Work Practice (PKL), MBKM Teaching Skills Practice (PKM), Student Exchange, and Certified Independent Internship and Study (MSIB). The reality of the MBKM program's present execution in the field continues to elicit strong opinions. As a result, research is required to ascertain the instructors' level of application understanding. This research is crucial and needs to be done right now as part of the ongoing endeavor to gradually increase the quality of MBKM implementation in a methodical and long-lasting manner. A descriptive study with a quantitative approach is the research methodology used. Interviews, the distribution of questionnaires, and documentation to all lecturers in the UNJ Mechanical Engineering Group were used to collect the data. According to the findings, up to 80% of professors are aware of the MBKM program and up to 70% of them are willing to help students execute it. Additionally, up to 60% of professors believe that the MBKM program might help students develop their hard and soft skills.

Keywords: MBKM, Mechanical Engineering, UNJ.

1. INTRODUCTION

The Merdeka Belajar Kampus Merdeka (MBKM) initiative is the result of the government's efforts, in this case, those of the Ministry of Education, Culture, Research, and Technology (Kemendikbudristek), to advance Indonesian education. This MBKM curriculum is anticipated to be able to address the difficulties of colleges in producing graduates who can keep up with the advancement of science and technology as well as the demands of the commercial and industrial worlds [1]. The MBKM Program is also used to address social, cultural, economic, and political issues, among other things [2].

A flexible and self-paced higher education learning model called MBKM was developed to foster a vibrant, unrestrictive learning community that satisfies student demands [3]. Implementing the eight key performance indicators (IKU) set by the Minister of Education and

Culture's Decree No. 754/P/2020 is a crucial tool for its execution [4].

The Permendikbud No. 3 of 2020 or SN Dikti mandate is accommodated by the Minister of Education and Culture's (MBKM) policy [5]. The rule here can be applied to the academic process, such as lectures at universities, where students select eight independent learning programs provided by the Ministry. In these programs, they are permitted to attend lectures outside of their study program for one semester, which is equal to 20 credits, at the same university [6].

According to Sri Hartati Dewi Reksoputro, there are several general requirements that students and universities must fulfill to implement the Merdeka Belajar - Kampus Merdeka policy, the "right to study three semesters outside the study program" program. These include the following: Students come from accredited study programs; Active students registered with PD Dikti; Students are registered

in the current academic year; Students have accompanying lecturers in participating in the program. To assist MBKM activities, the study has partners [5].

Additionally, collaboration between various parties is necessary for the implementation of the MBKM program. The success of executing this MBKM program is heavily influenced by the participation of roles between associated parties, including Faculties, Study Programs (Prodi), Educators (Tendik), Students, and Partners [7]. Numerous scientific research on the use of MBKM has been carried out, although they often only pay attention to its application [8]. Descriptive and quantitative methodologies were used in this investigation. The distribution of questionnaires, interviews, and documentation was used to obtain the data [9].

In prior studies, it was examined how lecturers and students were seen as participants in the application of MBKM [10], wherever one of the talents or skills is comprehending the concept [11]. Changes in the attitudes of students, instructors, and staff about learning and adopting the other three pillars of higher education are undoubtedly necessary to promote the successful implementation of independent learning [12].

Based on the justification provided, it is also required to undertake research into how the professors in the FT UNJ mechanical engineering cluster perceive the MBKM program, which aims to: (1) knowing the lecturers' comprehension of the use of MBKM in the FT UNJ Mechanical Engineering Family; (2) finding out what professors think about the implementation that has been made in the FT UNJ Mechanical Engineering Group; and (3) Knowing the challenges or GAPS that arise when implementing MBKM in the FT UNJ Mechanical Engineering Cluster.

2. METHODS

A descriptive research method with a quantitative approach was applied in this study. Descriptive research is an investigation of a topic through observation, interview, or questionnaire [1]. Alternatively, Sugiyono defines quantitative methods as positivist-based research methods that examine particular populations or samples, gather data using research tools, and evaluate quantitative or statistical data to create and test prepared hypotheses [13].

The three (three) stages of this research's methodology include data collection, processing, and analysis. From April to June 2023, the three procedures will be completed. The technique for gathering data makes use of a Google Form-based digital questionnaire and continues with data processing from responders in the Google Form. Analysis of the data is the final phase.

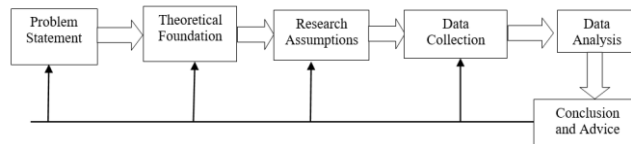


Figure 1. Quantitative research design [1].

Due to the researcher's desire to describe the issue in light of the circumstances, this approach was adopted [14]. The 40 lecturers in the Mechanical Engineering Family who make up the study's subjects are all lecturers.

This research's initial phase is to ascertain how the problem is formulated by the research strategy. However, this action is chosen after locating the issue. Several theories are employed to resolve the formulation of the problem [15]. Then follows the premise that research is transient and must nevertheless be empirically supported by information gleaned from the field [16]. Data collected from the field is used to compile data, which is then analyzed to provide answers to the issue statement's questions [17]. The data analysis findings are then given along with a discussion [18]. Following that, conclusions can be taken, and the researcher offers solutions as a way to address the issue so that future studies can be improved [19].

3. RESULT AND DISCUSSION

The following information was generated based on interviews, questionnaires sent out, and documents gathered and processed:

3.1. Lecturers' Knowledge of the Use of MBKM in the Mechanical Engineering Family

Based on Figure 2, only 19% of lecturers are knowledgeable of the implementation processes for the MBKM program, and only 19% of lecturers are familiar with the reference teaching materials based on the most recent curriculum.

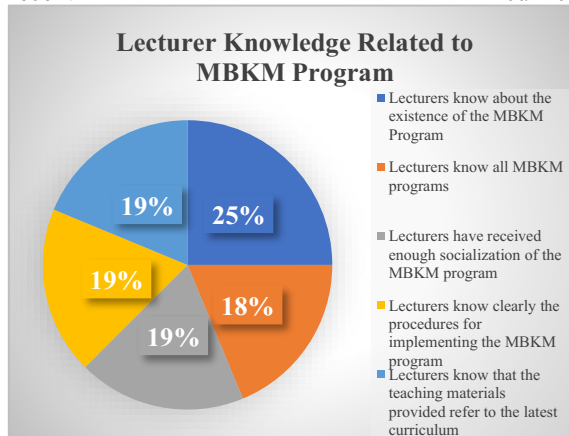


Figure 2. The MBKM program knowledge graph of the lecturers.

Only 25% of lecturers at the Mechanical Engineering Group at FT UNJ are aware of the existence of the MBKM program, and only 18% of lecturers are aware of the whole MBKM program, demonstrating that the lecturers still do not fully understand the MBKM program.

Only 19% of lecturers feel that they have received enough information about the MBKM program from the Ministry of Education and Culture website and the UNJ website, which is one of the reasons why lecturers do not fully understand the MBKM program. This is crucial due to the lecturer's initial comprehension, which will serve as the cornerstone for the successful implementation of the MBKM Program in the Mechanical Engineering Cluster.

The findings presented above diverge from those of previous studies conducted on campuses. Whereas on other campuses, lecturers participate in the MBKM program to a greater extent—between 79 and 95 percent—in terms of socializing, CPL preparation, reading MBKM guidebooks, and taking on supervisory roles.

One of the key reasons is the role of universities, faculties, and study programs. 32% of lecturers are invited to join the team that prepares the MBKM program, and 58% of lecturers participate in talks, meetings, and workshops about how to put MBKM into practice.

This demonstrates that the Mechanical Engineering Cluster of FT UNJ has not made the most of the MBKM Program's implementation.

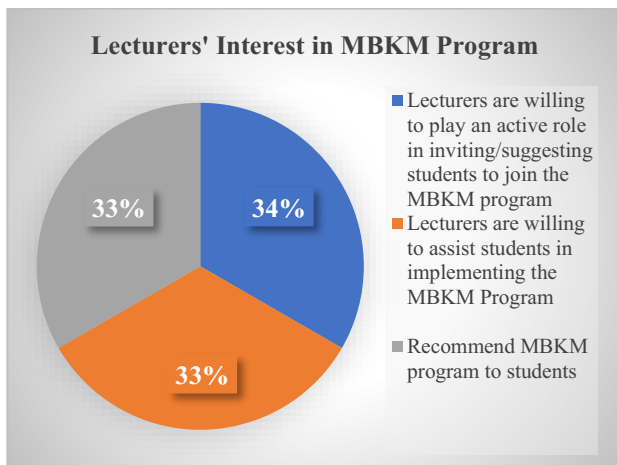


Figure 3. Lecturers' interest in the MBKM program graph.

Additionally, as shown in Figure 3 above just 34% of lecturers are completely willing to propose the MBKM program to their students, and only 33% are willing to help students run the program.

It is one of the less ideal applications of the curriculum in the FT UNJ Mechanical Engineering Cluster due to the professors' lack of understanding of the MBKM program.

3.2. Obstacles or GAPS that Occur Regarding the Implementation of MBKM in the Mechanical Engineering Cluster of FT UNJ

The MBKM program's regulations are the area that receives the most suggestions for change, as shown in Figure 4 by the fact that 60% of lecturers believe that the regulations might be better used. This is one of the key elements in applying for the MBKM Program at UNJ's other faculties as well as the Mechanical Engineering Cluster of FT UNJ.

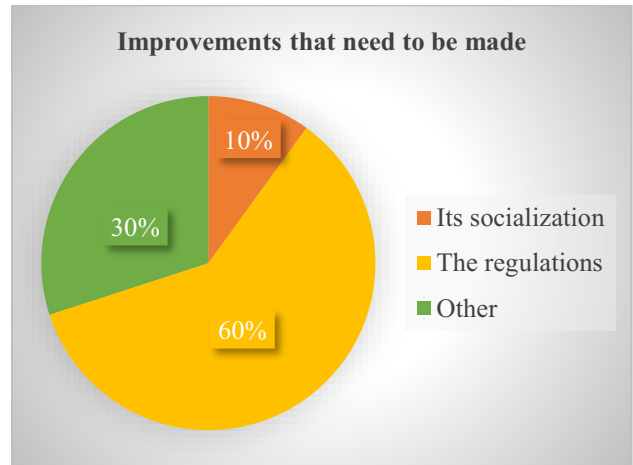


Figure 4. Graph of required improvements.

Up to 30% of lecturers believe that more socializing for this MBKM curriculum is necessary. This socialization can be accomplished by counseling, publications in digital form, or distribution of posters. More socialization is anticipated to be able to improve lecturers' current comprehension.

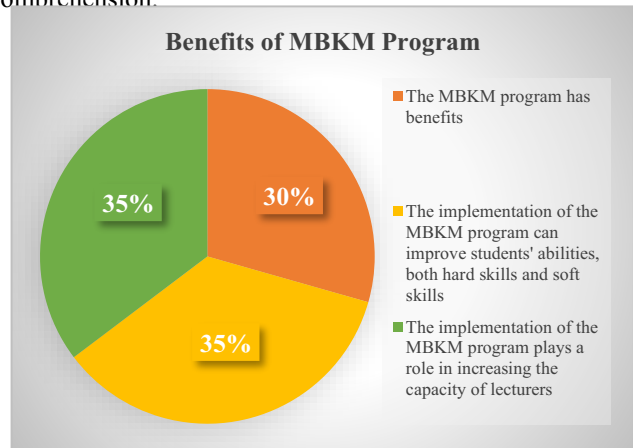


Figure 5. Benefits of the MBKM program in graph.

Aside from that, as demonstrated in Figure 5 above, practically all lecturers believe that this MBKM program has favorable values.

Up to 35% of professors believe that MBKM is beneficial since it can help students develop their abilities, including both hard and soft skills. Additionally, up to 35% of additional instructors acknowledge the advantages

gained for the lecturers themselves, namely an increase in ability.

4. CONCLUSION

The MBKM program's socialization with professors is a significant cause of the Mechanical Engineering Cluster at FT UNJ's lack of optimal execution, it can be inferred from the above description. Supported by MBKM Program regulations, which need to be clarified and modified to make them easier to implement.

This must be foreseen as best and as soon as feasible given the advantages and goals of the MBKM Program to develop a creative learning community. So that the program's advantages can be fully experienced right away.

5. SUGGESTION

According to the description given above, some suggestions made and used as discussion starters to improve the MBKM program in the Mechanical Engineering Cluster are as follows:

1. Maximizing the University, Faculty, Study Program, or Student participation in the MBKM Program's socialization using various publication media, both online and offline.
2. Conduct recurring training sessions for the staff, students, faculty, and study program regarding the implementation of the MBKM Program.
3. Participate in all MBKM program-related activities with the staff; and
4. The MBKM Program's rules are being reviewed to make them clearer and simpler to implement.

REFERENCES

- [1] R. Indriani et al, Understanding and Involvement of Students, Lecturers and Staff in the MBKM Policy Program in the PGSD Study Program FKIP Universitas Pasundan, 2017.
- [2] I. et al Yuliasari, Communication Interaction Patterns Of Lecturers And Students In Academic Activities And Independent Learning Activities At Jayabaya University, 2021, p. 6.
- [3] K. D. P. Meke, R. B. Astro, and M. H. Daud, The Impact of the Independent Learning Independent Campus Policy (MBKM) on Private Universities in Indonesia, *Educative J. Science Educator.* , 4(1), 2021, pp. 675–685. DOI: 10.31004/edukatif.v4i1.1940.
- [4] F. A. Pangruruk, B. Siregar, G. Illya, A. Arifin, D. A. Agatha, Analisis Hasil Survei Kebijakan dan Implementasi Medeka Belajar Kampus Merdeka (MBKM) di Universitas Matana, *Syntax Literate; Jurnal Ilmiah Indonesia*, 7(2), 2022, p.23312342.
- [5] S. H. D. et al Reksoputro, *Technical Guidelines For Independent Learning Independent Campus*, the University Of Indonesia 1st Edition, 2021.
- [6] T. M. Fuadi and D. Aswita, Merdeka belajar kampus merdeka (MBKM): bagaimana penerapan dan kendala yang dihadapi oleh perguruan tinggi swasta di Aceh. *Jurnal Dedikasi Pendidikan*, 5(2), 2021, pp.603-614.
- [7] Shofia Hattarina, Nurul Saila, Adenta Faradila, Dita Refani Putri, and RR. Ghina Ayu Putri, Implementation of the Independent Learning Curriculum in Educational Institutions, *Semin. Nas. Sos. Science, Education, Hum*, 1, 2022, pp. 181–192.
- [8] Y. Yuherman, W. Nugroho, and D. Sunarsi, The Impact of MBKM Policy on the Readiness of Human Resources and Facilities of the Faculty of Law Usahid Jakarta, *Moral. J. Science Huk.* , 7(2), 2021, p. 222. DOI: 10.52947/morality.v7i2.235.
- [9] R. Tanjung, T. Ritonga, and E. Y. Siregar, Analysis of Student Learning Interest in Online Learning During the Covid-19 Pandemic in Ujung Batu Barus Village, *MathEdu (Mathematic Educ. Journal)*, 4(1), 2021, pp. 88–96.
- [10] L. Puspitawati, T. Rohmawati, M. Solihat, I. Prayoga, and A. Surya, Survey of Knowledge Level and Readiness of Lecturers and Students in the Implementation of the Independent Learning Independent Campus Program, 2023, pp. 66–75.
- [11] D. Harefa et al., The Use of Jigsaw-Type Cooperative Learning Model on the Ability to Understand Student Learning Concepts, *Script J. Science Educator. Nonform.* , 8(1), 2022, p. 325. DOI: 10.37905/Aksara.8.1.325-332.2022.
- [12] A. Zunaidi, N. Fatmawatie, S. A. Natalia, and I. A. Mushlihah, Strengthening Understanding and Orientation of the Independent Campus Curriculum in Welcoming Independent Learning-Independent Campus, *Batuah J. Pengabd. Kpd. Masyarakat*, 1(2), 2021, pp. 1–7.
- [13] Sugiyono and P. Lestari, *Communication Research Methods Book.pdf*, pp. 1–152, 2021.
- [14] R. Ariyanti and M. T. Hidayat, *ELSE (Elementary School Education GURU SD)*, 7(1), 2023, pp. 15–18.
- [15] S. H. Sahir, This book was written by a lecturer at Medan University The Copyright Area is Protected by Law It has been deposited into the UMA Repository on January 27, 2022.
- [16] N. and G. G. Juliati, Literature Study: E-learning Platform, Student Response and Challenges in the

Process of Implementing Chemistry Learning during the Covid-19 Literature Pandemic, *Enthalpi Educator. Kim.*, 2(3), 2021, pp. 75–83.

- [17] V. P. S. Eriska and R. Mukhaiyar, Online Learning Evaluation of Electrical Circuit Courses in the Department of Electrical Engineering, Padang State University, *J. Educator. Tech. Electro*, 3(1), 2022, pp. 34–38. DOI: 10.24036/jpte.v3i1.157.
- [18] I. Jaya and Ardat, *Application of Statistics to Education*, 2013.
- [19] Wulandari, N. Dantes, and P. A. Antara, Open Ended-Based Realistic Mathematics Education Approach to Students' Mathematical Problem Solving Ability, *J. Ilm. Col. Basics*, 4(2), 2020, pp. 131–142.

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