

## Measuring Student Readiness for Independent Learning Programs in Higher Education to Support SDG 4: Quality Education

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### ABSTRACT

**Objective:** To measure the level of student readiness for participating in the Merdeka Belajar Kampus Merdeka (MBKM) Program at higher education institutions, particularly at Ma'soem University. **Method:** The study employed a quantitative survey method. Data were collected from 112 students selected from a population of 935 students using the Slovin formula. A Likert-scale questionnaire was used to assess three dimensions of readiness: physical readiness, psychological readiness, and material readiness. Instrument validity and reliability were tested, yielding a Cronbach's Alpha of 0.960. **Results:** The findings revealed that students' readiness to participate in the MBKM program was in the "Good" category, with an achievement percentage of 80.81%. Although overall readiness was satisfactory, the material readiness dimension, particularly the learning-recording sub-indicator, required further improvement. **Novelty:** This study proposes a comprehensive readiness assessment framework for Independent Learning Programs (MBKM) by simultaneously evaluating students' physical, psychological, and material readiness. The framework contributes to SDG 4 (Quality Education) by providing evidence-based information to support inclusive, student-centered, and effective implementation of independent learning programs in higher education while identifying specific readiness dimensions that require improvement.

## INTRODUCTION

The Merdeka Belajar Kampus Merdeka (MBKM) program is a significant initiative in the restructuring of higher education in Indonesia. This program seeks to offer students learning experiences that are more adaptable and pertinent to industrial requirements. This program enables students to acquire knowledge outside their academic curriculum via internships, humanitarian initiatives, research, entrepreneurship, and many activities that might augment their abilities and skills. This program seeks to connect education with industry and equip students to confront global concerns. The execution of MBKM is founded on the notion of autonomous learning, enabling students to choose and curate educational experiences that align with their interests and professional aspirations. The program seeks to enhance graduate quality while fostering innovation and creativity in the educational process. The Ministry of Education, Culture, Research and Technology (MoECristek) stipulates that the curriculum also fosters the development of soft skills, like leadership, teamwork, and communication, which are crucial in the professional realm (Ritter et al., 2017). This curriculum aims to bridge the divide between academia and industry, equipping students to confront global issues and ensuring their readiness for competition (Kumar & Rewari, 2022). Research indicates that students' preparedness to engage in the MBKM program is significantly influenced by their comprehension of the program's advantages and the assistance offered by their educational institutions. This preparedness encompasses their comprehension of the program's goals, policies, and processes, which may differ among educational institutions (Bahar et al., 2022). The

application of MBKM necessitates change and advancement for students as a means of adapting to the learning process. Students must be capable of responding to this policy and adapting suitably to the requirements of information technology advancement (Purike, 2021).

The MBKM policy requires prior assurance of the preparedness of institutions, faculty, and students for the program, alongside governmental support, to fulfill its objectives of enhancing the capacity and quality of higher education in Indonesia (Yusuf, 2021). Consequently, it is imperative to assess the preparation level of pupils, who are the primary focus of this program. MBKM is a program that offers students the opportunity to identify and acquire learning experiences beyond the university (Clements & Cord, 2013).

Historically, numerous researchers have undertaken scientific investigations about the implementation of MBKM, including Supriati et al. (2022) who examined MBKM in research, and Kholik et al. (2022); Budiarti et al. (2022); Wahyuningtyas et al. (2022); Sintiawati et al. (2022), who analyzed the perspectives of lecturers and students concerning the implementation of MBKM, as well as the impact of MBKM on education. Few studies to date have examined students' readiness to engage in the MBKM program. The objective of this study is to assess the preparedness of students for participation in the MBKM program. The physical, psychological, and material preparedness for participation in the MBKM program will be delineated (Fauziah & Eriherdiana, 2023). The findings of this study will serve as a modification of MBKM activity studies concerning planning, the learning process, assessment, and evaluation of learning. The findings of this study will provide a thorough overview of student preparedness, encompassing physical, psychological, and material readiness for participation in the MBKM program.

The implementation of the Merdeka Belajar Kampus Merdeka (MBKM) program is closely aligned with Sustainable Development Goal (SDG) 4: Quality Education, which emphasizes ensuring inclusive, equitable, and high-quality education while promoting lifelong learning opportunities for all. Through experiential learning, interdisciplinary collaboration, and industry engagement, MBKM seeks to strengthen students' academic competencies, practical skills, and employability in response to rapidly changing societal and workforce demands. Achieving these educational objectives, however, depends on students' readiness to actively participate in the program. Assessing students' physical, psychological, and material readiness is therefore essential to ensure that MBKM implementation effectively supports student-centered learning, improves higher education quality, and contributes to the realization of SDG 4 through evidence-based educational policies and practices.

## RESEARCH METHOD

This research employs a quantitative approach utilizing the descriptive method (Mendrofa & Mendrofa, 2026). This research aims to assess the extent of students' preparedness to engage in the MBKM program at Ma'soem University. The research population comprises all students of Ma'soem University, totaling 935 individuals from the classes of 2022 and 2023, spread across five faculties and twelve academic programs. The allocation of the research population is illustrated in the subsequent Table 1.

**Table 1.** Distribution of research population

Faculty	Study Programs	Enrollment 2023		Enrollment 2022		Man	Woman	Amount
		Man	Woman	Man	Woman			
Faculty of Economics and Islamic Business	Islamic Banking	2	25	4	30	6	55	61
	Sharia Business Management	22	37	18	44	40	81	121
	Information Systems	51	20	60	32	111	52	163
Faculty of Computer	Accounting Computerization	8	22	13	22	21	44	65
	Digital Business	28	32	29	17	57	49	106
	Informatics Management	28	32	29	17	57	49	106
	Agribusiness	10	12	13	11	23	23	46
Faculty of Agriculture	Food Technology	9	17	9	14	18	31	49
Faculty of Teacher Training and Education	English Education	8	26	11	20	19	46	65
	Guidance and Counseling	14	39	8	59	22	98	120
Faculty of Engineering	Industrial Engineering	8	1			8	1	9
	Informatics	20	4			20	4	24
Amount		208	267	194	266	402	533	935

The sample of this study was determined using the proportional stratified random sampling technique to provide equal opportunities for all members of the population to become samples (Cohen, 2025). The determination of the sample size was determined using the slovin formula so that the percentage of samples taken was 9.75%. The sample recapitulation can be seen in the following Table 2.

**Table 2.** Distribution of research samples

Faculty	Study Programs	Enrollment 2023		Enrollment 2022		Man	Woman	Amount
		Man	Woman	Man	Woman			
Faculty of Economics and Islamic Business	Islamic Banking	0.20	2.44	0.39	2.93	0.59	5.36	5.95
	Sharia Business Management	2.15	3.61	1.76	4.29	3.90	7.90	11.80
	Information Systems	4.97	1.95	5.85	3.12	10.82	5.07	15.89
Faculty of Computer	Accounting Computerization	0.78	2.15	1.27	2.15	2.05	4.29	6.34
	Digital Business	2.73	3.12	2.83	1.66	5.56	4.78	10.34
	Informatics Management	2.73	3.12	2.83	1.66	5.56	4.78	10.34
	Agribusiness	0.98	1.17	1.27	1.07	2.24	2.24	4.49
Faculty of Agriculture	Food Technology	0.88	1.66	0.88	1.37	1.76	3.02	4.78
Faculty of Teacher Training and Education	English Education	0.78	2.54	1.07	1.95	1.85	4.49	6.34
	Guidance and Counseling	1.37	3.80	0.78	5.75	2.15	9.56	11.70

Faculty	Study Programs	Enrollment 2023		Enrollment 2022		Man	Woman	Amount
		Man	Woman	Man	Woman			
Education								
Faculty of Engineering	Industrial Engineering	0.78	0.10	0.00	0.00	0.78	0.10	0.88
	Informatics	1.95	0.39	0.00	0.00	1.95	0.39	2.34
	Amount	20.28	26.0325	18.915	25.935	39.195	51.9675	91.1625

Based on the results of these calculations, rounding is carried out so that the total research sample is 112 people (Table 3).

**Table 3.** Distribution of research samples (After rounding)

Faculty	Study Programs	Enrollment 2023		Enrollment 2022		Man	Woman	Amount
		Man	Woman	Man	Woman			
Faculty of Economics and Islamic Business	Islamic Banking	1	3	1	3	2	6	8
	Sharia Business Management	3	4	2	5	5	9	14
Faculty of Computer	Information System	5	2	6	4	11	6	17
	Accounting	1	3	2	3	3	6	9
	Computerization							
	Digital Business Informatics Management	3	4	3	2	6	6	12
Faculty of Agriculture	Agribusiness	1	2	2	2	3	4	7
	Food Technology	1	2	1	2	2	4	6
Faculty of Teacher Training and Education	English Education	1	3	3	2	4	5	9
	Guidance and Counseling	2	4	1	6	3	10	13
Faculty of Engineering	Industrial Engineering	1	1	0	0	1	1	2
	Amount		33	24	31	48	64	112

**Research instrument, data collection and analysis**

The research variables and indicators developed into data collection instruments can be seen in Table 4.

**Table 4.** Research variable and Indicator

Variable	Indicator
Student Readiness	Physical Readiness
	Psychic Readiness
	Material Readiness

The tool employed in this study is a questionnaire structured with a 5-point Likert scale, with the following response options: always (SL), often (SR), sometimes (KD), seldom (JR), and never (TP). Prior to the utilization of the questionnaire in this study, it was initially assessed to ascertain the validity and reliability of the instrument. The valid and reliable questionnaire served as a tool for data collection in the field investigation.

The validity test findings indicated that, utilizing IBM SPSS Statistics Version 24, all elements of the variable were deemed valid. The reliability test findings of the questionnaire yielded a calculated R value of 0.960, exceeding the Cronbach's alpha reliability coefficient of 0.70, so indicating that the questionnaire is reliable. This valid and trustworthy questionnaire used as a data gathering instrument in the field investigation.

### *Data processing and analyzing*

The research data was processed in several stages, namely 1) coding the data, 2) entering the data into statistical software, namely SPSS and Excel, 3) checking the consistency and completeness of the data. After processing the data, data analysis is carried out using descriptive statistical techniques which are carried out in several stages, namely: 1) Calculating the size of data center (central tendency) by calculating mean, median, and mode values to describe the characteristics of the data, 2) Calculating measures of data spread (dispersion): Measures such as standard deviation, variance, and range are used to see how the data is spread, 3) Creating frequency distribution tables in histograms, 4) Analyzing proportions and percentages, and 5) Visualizing data in tables and graphs. After these steps, the data is interpreted to get an overview of the sample characteristics and data patterns that appear. The data are then compared to the performance classification Table 5.

**TABLE 5.** Achievement clasification

<b>Respondent Achievement Level (%)</b>	<b>Criteria</b>
90-100	Very Good
80-89	Good
65-79	Fairly Good
55-64	Less Good
0-54	Not Good

## **RESULTS AND DISCUSSION**

### *Results*

The student readiness variable questionnaire consists of 23 questions, the highest score is 5 and the lowest score is 1. The minimum score that can be obtained is 23 (1 x 23) and the maximum score that can be obtained is 115 (5 x 23). After collecting data from the study by distributing the student readiness questionnaire to 112 respondents, the results showed that the lowest score was 137 and the highest score was 195. From the data processing, the mean was 171.25, the mode was 170, the median was 173 and the standard deviation was 12.796. In order to get a clearer picture of the acquisition of scores on the variable of teacher performance, it can be seen in the Table 6.

**Table 6.** Statistics descriptive student readiness

<b>Statistics Descriptive Student Readiness</b>		
N	Valid	112
	Missing	
Mean		92.54
Median		93.00
Mode		92
Std. Deviation	7.675	
Variance		58.899

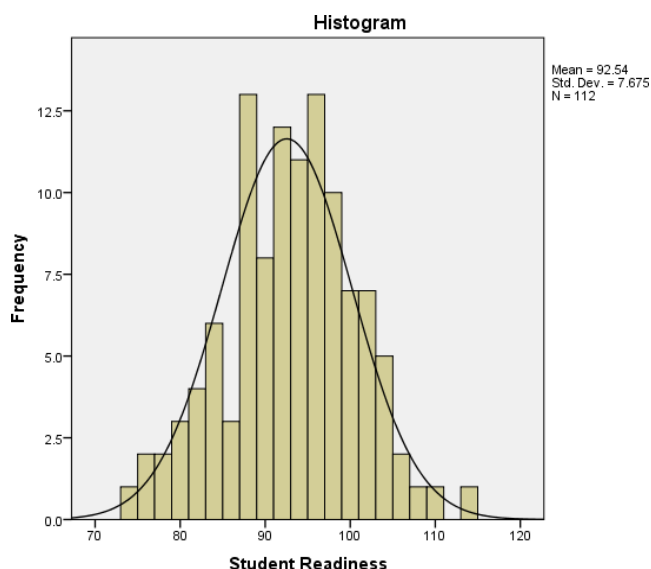
Statistics Descriptive Student Readiness	
Range	39
Minimum	74
Maximum	113
Sum	1036

The frequency distribution of the research results can be seen in the Table 7.

**Table 7.** Descriptive student readiness

	Frequency	Percent	Valid Percent	Cumulative Percent
	74	1	.9	.9
	76	2	1.8	2.7
	77	1	.9	3.6
	78	1	.9	4.5
	80	3	2.7	7.1
	81	3	2.7	9.8
	82	1	.9	10.7
	83	3	2.7	13.4
	84	3	2.7	16.1
	85	1	.9	17.0
	86	2	1.8	18.8
	87	8	7.1	25.9
	88	5	4.5	30.4
	89	6	5.4	35.7
	90	2	1.8	37.5
Valid	91	3	2.7	40.2
	92	9	8.0	48.2
	93	5	4.5	52.7
	94	6	5.4	58.0
	95	7	6.3	64.3
	96	6	5.4	69.6
	97	5	4.5	74.1
	98	5	4.5	78.6
	99	2	1.8	80.4
	100	5	4.5	84.8
	101	5	4.5	89.3
	102	2	1.8	91.1
	103	3	2.7	93.8
	104	2	1.8	95.5
	105	1	.9	96.4
	106	1	.9	97.3
	108	1	.9	98.2
	109	1	.9	99.1
	113	1	.9	100.0

Furthermore, the histogram of the student readiness variable can be seen in Figure 1.



**Figure 1.** Histogram of frequency distribution of variables student readiness

Subsequently, the analysis of the student readiness variable yielded a score of 80.81%, derived from the average score of 92.54 divided by the highest score of 115, multiplied by 100. The obtained score indicates that the student readiness variable falls inside the "good" category. To acquire more comprehensive information regarding each indicator and sub-indicator of student readiness, the subsequent Table 8.

**Table 8.** Student readiness

Indicator	Sub Indicator	Number of Items	Total score Ideal Average	Total Score Average Achievement	% Achievement	Criteria
Psychic readiness	Be physically fit	2	10	8.18	81.79	Good
	Keep fit total	3	15	12.13	80.83	Good
	Total	5	25	20.30	81.21	Good
	Concentration	3	15	11.95	79.64	Good
	Intrinsic motivation	2	10	8.39	83.93	Good
	Desire	3	15	12.48	83.21	Good
	Intelligence and memory	2	10	7.96	79.64	Good
Material readiness	Learning media readiness/providing lecture	10	50	40.79	81.47	Good
	Equipment	3	15	11.86	79.05	
	Taking learning notes	3	15	11.52	76.79	Enough
	Learning resources	2	10	8.08	80.80	Good
	Total	18	90	72.24	80.27	Good
	Grand Total	33	165	133.33	80.81	Good

Based on the research data shown in the table above, it is concluded that student readiness is in the good category with a percentage achievement of 80.81%. The description of each indicator and sub indicator can be described as follows.

Physic Readiness, Physical readiness is in the good category with an achievement percentage of 81.21%. For the physical health sub indicator: the average achievement score is 8.18 with an achievement percentage of 81.79%, which is categorized as "Good."

This shows that the physical Readiness or physical health of students is good to support the MBKM program. Meanwhile, the Maintain Fitness sub-indicator is at an average score of 12.13 and an achievement percentage of 80.83%, and is included in the "Good" category. This shows a relatively good level of awareness to maintain fitness among students.

Physical Readiness, Mental readiness is in the good category with an achievement percentage of 81.57%. The sub-indicator of concentration obtained an average score of 11.95 with an achievement percentage of 79.64%, which is in the good category. This indicates a good level of concentration ability, although there is room for improvement. Furthermore, the sub-indicator of intrinsic motivation obtained an average score of 8.39 with an achievement percentage of 83.93% and was included in the "Good" category. This can be interpreted that the students' intrinsic motivation is at a good level, and is the main force in psychological preparedness (Printer, 2023). Meanwhile, the desire sub-indicator has a value of 12.48 and a percentage of 83.21%, categorized as "Good." This indicates a high desire to learn and participate in learning. As for the intelligence and memory sub-indicator, it is at a score of 7.96 and a percentage achievement of 79.64%, and is categorized as "Good." This indicates a good capacity for intelligence and memory, but there is still potential for improvement (Wang et al., 2024).

Material Readiness, Material readiness is in the good category with a percentage of achievement of 80.27%. The sub-indicator of learning media readiness is in the good category with an average score of 11.86 and an achievement percentage of 79.05%. This indicates that there is sufficient readiness in the provision of learning media. For the sub-indicator of learning recording, an average score of 11.52 and a percentage of 76.79% was obtained, categorized as "Fair." This sub-indicator is the only sub-indicator with a category below "Good," which indicates a need for improvement in note-taking skills. In addition, the learning resources sub-indicator had an average score of 8.08 with an achievement percentage of 80.80%, which was categorized as "Good." This achievement indicates adequate access to and use of learning resources.

### ***Discussion***

The research findings show the following points:

1. First, students' physical readiness showed satisfactory results, indicating that their physical condition supports the learning process. This finding is consistent with the research findings that physical health has a positive effect on students' cognitive abilities and academic performance. Regular physical activity can improve brain function, including memory, attention, and the ability to process information (Erickson et al., 2019). Thus, learners with good physical health and fitness are better able to actively participate in learning activities and achieve more optimal results. However, there are still opportunities to improve fitness through additional physical activities, such as regular exercise. Improved fitness is not only important for physical health, but also has a positive impact on mental well-being and motivation to learn (Ma et al., 2026).
2. Second, the psychological preparation aspect includes concentration, intrinsic motivation, desire, and intelligence and memory, which show positive results. High intrinsic motivation is a positive factor that contributes to academic success. High intrinsic motivation encourages individuals to learn independently because they are driven by the desire to understand the material and achieve self-development (Laor, 2020). High motivation, as demonstrated in this study, supports continued learning

and learner engagement in the educational process. However, the concentration and intelligence scores are below the higher "good" category, indicating challenges in maintaining focus. Based on research, factors such as stress, sleep deprivation, and inability to manage time can impair concentration as well as other executive functions (Diamond, 2013). Therefore, intervention programs that focus on stress management or mindfulness-based learning techniques can be implemented to improve outcomes in this area to engage students in the MBKM program.

3. Third, the material readiness of students to participate in the MBKM program includes the readiness of learning media, the ability to record learning, and the accessibility of learning resources. The most visible weakness is in the aspect of ability to record learning, which is in the "fair" category. This is important, as note taking is one of the fundamental ways in which information retention can be improved. According to a study, effective note-taking can improve comprehension and long-term memory (Seo, 2025). Given the low score on this subscale, training or new strategies in note-taking techniques, such as the Cornell method or the use of interactive digital notes, are needed. In addition, the readiness for learning media is somewhere between "fair" and "good," indicating that not all Ma'seom college students have equal access to learning tools and materials. Adequate access to educational technology is essential to support modern learning, especially in the context of distance or hybrid learning (Mulenga & Shilongo, 2024). This suggests that improving the quality and equitable provision of learning media can help improve material readiness.

Overall, the research findings show that students are prepared to engage in the MBKM program in the "Good" category; nevertheless, there are still a number of areas that need further focus, especially when it comes to enhancing note-taking and concentration abilities. Students' preparedness to participate in a program can be greatly increased by program execution, improving motivation and learning skills, and providing better learning facilities (Abidin & Muhammad, 2024).

To be more specific, the following actions can be taken to improve students' preparedness for the MBKM program:

1. Development of Motivation and Self-Direction: Enhancing intrinsic motivation and self-learning skills through motivation training programs can encourage students to be more independent in their studies, making them willing to participate in the MBKM program (Nyoto, 2021). Previous research has shown that self-directed learning significantly contributes to students' academic readiness and motivation (Saeid & Eslaminejad, 2017).
2. Concentration and Emotional Intelligence Training. A study shows that emotional self-regulation is important in enhancing academic readiness, which encourages participation in programs organized at the university (Webster-Stratton et al., 2008; Santiawati et al., 2022).
3. The Use of Learning Technology: Encouraging the use of technology such as learning applications and digital platforms to record and access learning resources can enhance students' material readiness. The use of technology in learning has been proven to increase student motivation and engagement in a program (Christensen & Knezek, 2017).
4. Effective Note-Taking Skills Training: Providing workshops on good note-taking methods can help students improve the quality of their notes and their learning efficiency, thus equipping them for future involvement in the MBKM program (Qoyyimah, 2022).

5. Mentoring and Coaching Program: Establishing a mentoring program to assist students in identifying their areas of strength and weakness in their learning. This is crucial for improving learning readiness and academic resilience, which raises awareness of the necessity of program participation (Ang et al., 2022).

This study supports earlier research indicating that physical, psychological, and material readiness are key determinants of successful educational outcomes (Ryan et al., 2023). The findings suggest that these dimensions of readiness are equally essential for students participating in the government-initiated MBKM program, as they influence students' ability to adapt to independent learning, overcome academic challenges, and maximize learning opportunities (Ramdhan et al., 2024). From the perspective of the Sustainable Development Goals (SDGs), these findings contribute directly to SDG 4 (Quality Education) by providing empirical evidence that assessing students' readiness is a critical prerequisite for implementing inclusive, student-centered, and high-quality higher education programs. A comprehensive understanding of students' readiness enables higher education institutions to design appropriate support systems, improve learning experiences, and strengthen the effectiveness of the MBKM program. Ultimately, enhancing students' readiness not only promotes successful participation in independent learning initiatives but also supports the development of competent, adaptable, and lifelong learners envisioned in SDG 4.

## CONCLUSION

**Fundamental Finding:** The study found that students' readiness to participate in the Merdeka Belajar Kampus Merdeka (MBKM) program at Ma'soem University was categorized as "Good", with an achievement level of 80.81%. Students demonstrated adequate motivation, concentration, physical preparedness, and access to learning resources. However, the material readiness aspect, particularly the ability to grasp learning content quickly, requires improvement. **Implication:** The findings imply that higher education institutions should strengthen students' academic readiness through targeted interventions, including evidence-based support programs, instructional technology integration, physical well-being initiatives, and motivational development activities. These strategies contribute to the implementation of SDG 4 (Quality Education) by fostering inclusive, student-centered, and high-quality learning environments that enhance students' preparedness for Independent Learning Programs (MBKM). Furthermore, improving student readiness equips learners with the competencies, adaptability, and lifelong learning skills required to succeed in higher education and future professional careers, thereby supporting the broader objectives of sustainable educational development. **Limitation:** The study appears to be limited to students from one university (Ma'soem University), which may restrict the generalizability of the findings. In addition, the research primarily focuses on readiness levels and does not examine how readiness influences actual participation outcomes or academic performance in MBKM programs. **Future Research:** Future studies should involve students from multiple universities and compare readiness levels across institutions and disciplines. Researchers may also investigate the relationship between MBKM readiness and academic achievement, program participation, learning outcomes, or employ longitudinal designs to examine readiness development over time.

## AUTHOR CONTRIBUTIONS

**Muthahharah Thahir** contributed to the conceptualization of the study, research design, methodology development, data collection, formal analysis, manuscript drafting, and project administration. **Widiawati Widiawati** contributed to the conceptual framework, supervision, validation, manuscript review and editing, and provided academic guidance throughout the research process. **Ananda Rachmaniar** contributed to data collection, data analysis, visualization, manuscript review and editing, and validation. **Cucun Sunaengsih** contributed to supervision, data interpretation, manuscript review and editing, and validation. All authors have read, reviewed, and approved the final version of the manuscript.

## CONFLICT OF INTEREST STATEMENT

The authors state that no financial or personal conflicts of interest exist that may have affected the content or findings of this research.

## STATEMENT ON THE USE OF AI OR DIGITAL TOOLS IN WRITING

The authors declare that no artificial intelligence (AI) tools or other digital writing assistants were used in the preparation, analysis, or writing of this manuscript. All stages of the research process, including data analysis, interpretation, and manuscript writing, were conducted solely by the authors. The authors take full responsibility for the originality, accuracy, and integrity of the content presented in this article.

## REFERENCES

- Abidin, Z., & Muhammad, N. (2024). Effective classroom management as a quick solution to improve student participation and motivation in the learning process. *Zabags International Journal of Education*, 2(2), 88–104. <https://doi.org/10.61233/zijed.v2i2.22>
- Ang, W. H. D., Shorey, S., Zheng, Z. J., Ng, W. H. D., Chen, E. C.-W., Shah, L. B. I., Chew, H. S. J., & Lau, Y. (2022). Resilience for undergraduate students: Development and evaluation of a theory-driven, evidence-based and learner-centered digital resilience skills enhancement (RISE) program. *International Journal of Environmental Research and Public Health*, 19(19), Article 12729. <https://doi.org/10.3390/ijerph191912729>
- Bahar, H., Nuraeni, N., Ismah, I., Herli, V., M., A., Rosiyanti, H., Setiyanti, A., Izzah, L., & Widyasari, N. (2022). Level of understanding and readiness of academic community in MBKM implementation at Muhammadiyah University of Jakarta. *Dinasti International Journal of Management Science*, 3(3), 499–507. <https://doi.org/10.31933/dijms.v3i3.1037>
- Budiarti, R. P. N., Amalia, R., Soleha, U., Hartatik, S., Sulistiyani, E., Khamida, K., Khusnah, H., Sisiawan, R., & Andini, A. (2022). Implementation of Merdeka Belajar Kampus Merdeka (MBKM) and modeling of questionnaire based on a case of MBKM in Universitas Nahdlatul Ulama Surabaya. *Business and Finance Journal*, 7(1), 83–92. <https://doi.org/10.33086/bfj.v7i1.2576>
- Christensen, R., & Knezek, G. (2017). Readiness for integrating mobile learning in the classroom: Challenges, preferences and possibilities. *Computers in Human Behavior*, 76, 112–121. <https://doi.org/10.1016/j.chb.2017.07.014>

- Clements, M. D., & Cord, B. A. (2013). Assessment guiding learning: Developing graduate qualities in an experiential learning programme. *Assessment & Evaluation in Higher Education*, 38(1), 114–124. <https://doi.org/10.1080/02602938.2011.609314>
- Cohen, M. P. (2025). Stratified sampling. In M. Lovric (Ed.), *International encyclopedia of statistical science*. Springer. [https://doi.org/10.1007/978-3-662-69359-9\\_660](https://doi.org/10.1007/978-3-662-69359-9_660)
- Diamond, A. (2013). Executive functions. *Annual Review of Psychology*, 64, 135–168. <https://doi.org/10.1146/annurev-psych-113011-143750>
- Erickson, K. I., Hillman, C., Stillman, C. M., Ballard, R. M., Bloodgood, B., Conroy, D. E., Macko, R., Marquez, D. X., Petruzzello, S. J., Powell, K. E., & Physical Activity Guidelines Advisory Committee. (2019). Physical activity, cognition, and brain outcomes: A review of the 2018 physical activity guidelines. *Medicine & Science in Sports & Exercise*, 51(6), 1242–1251. <https://doi.org/10.1249/MSS.0000000000001936>
- Fauziah, M., & Eriherdiana, M. (2023). Improving educational quality through the implementation of learning planning in the MBKM context. *Khazanah Pendidikan Islam*, 5(3), 168–179. <https://doi.org/10.15575/kp.v5i3.34404>
- Kholik, A., Bisri, H., Lathifah, Z. K., Kartakusumah, B., Maufur, M., & Prasetyo, T. (2022). Impelementasi kurikulum Merdeka Belajar Kampus Merdeka (MBKM) berdasarkan persepsi dosen dan mahasiswa. *Jurnal Basicedu*, 6(1), 738–748. <https://doi.org/10.31004/basicedu.v6i1.2045>
- Kumar, V., & Rewari, M. (2022). A responsible approach to higher education curriculum design. *International Journal of Educational Reform*, 31(4), 422–441. <https://doi.org/10.1177/10567879221110509>
- Laor, T. (2020). The added value of college radio: Student self development, fulfillment, and confidence. *Higher Education, Skills and Work-Based Learning*, 10(2), 339–354. <https://doi.org/10.1108/HESWBL-07-2019-0089>
- Ma, D., Akram, H., & Li, S. (2026). Assessing the role of physical activity in shaping students' academic motivation: The mediating role of mental health. *BMC Public Health*, 26(1), Article 32. <https://doi.org/10.1186/s12889-025-25541-8>
- Mendrofa, N. K., & Mendrofa, R. N. (2026). Analysis of students' readiness to prepare research reports in research methodology courses. *Kognitif: Jurnal Riset HOTS Pendidikan Matematika*, 6(1), 84–95. <https://doi.org/10.51574/kognitif.v6i1.4599>
- Mulenga, R., & Shilongo, H. (2024). Hybrid and blended learning models: Innovations, challenges, and future directions in education. *Acta Pedagogica Asiana*, 4(1), 1–13. <https://doi.org/10.53623/apga.v4i1.495>
- Nyoto, N. (2021). Perception of PGSD FKIP UPR students on the independent campus learning program. *Budapest International Research and Critics Institute (BIRCI-Journal)*, 4(4), 13515–13520.
- Printer, L. (2023). Positive emotions and intrinsic motivation: A self-determination theory perspective on using co-created stories in the language acquisition classroom. *Language Teaching Research*. <https://doi.org/10.1177/13621688231204443>
- Purike, E. (2021). Political communications of the Ministry of Education and Culture about “Merdeka Belajar, Kampus Merdeka (Independent Learning, Independent Campus)” policy: Effective? *EduLine: Journal of Education and Learning Innovation*, 1(1), 1–8. <https://doi.org/10.35877/454RI.eduline361>
- Qoyyimah, U. (2022). *Critical pedagogy for developing learners' skills in building argumentative texts: A participatory action research* [Project report]. Unipdu Press. <http://eprints.unipdu.ac.id/id/eprint/2433>

- Ramdhan, T. W., Mufaizin, M., Baitaputra, M. H., & Arisandi, B. (2024). Implementation of MBKM program on Islamic education learning in improving critical thinking at Darul Hikmah Bangkalan High School. *International Journal of Islamic Educational Research*, 1(3), 1–15. <https://doi.org/10.61132/ijier.v1i3.30>
- Ritter, B. A., Small, E. E., Mortimer, J. W., & Doll, J. (2017). Designing management curriculum for workplace readiness: Developing students' soft skills. *Journal of Management Education*, 42(1), 80–103. <https://doi.org/10.1177/1052562917703679>
- Ryan, R. M., Soenens, B., & Vansteenkiste, M. (2023). Trajectories in cognitive engagement, fatigue, and school achievement: The role of young adolescents' psychological need satisfaction. *Learning and Individual Differences*, 101, Article 102248. <https://doi.org/10.1016/j.lindif.2022.102248>
- Saeid, N., & Eslaminejad, T. (2017). Relationship between student's self-directed-learning readiness and academic self-efficacy and achievement motivation in students. *International Education Studies*, 10(1), 225–232. <https://doi.org/10.5539/ies.v10n1p225>
- Seo, J. Y. (2025). Cornell note-taking strategy instruction for Gen Z: Enhancing EFL students' reading comprehension. *Asian-Pacific Journal of Second and Foreign Language Education*, 10(1), Article 40. <https://doi.org/10.1186/s40862-025-00347-8>
- Supriati, R., Dewi, E. R., Triyono, T., Supriyanti, D., & Azizah, N. (2022). Implementation framework for Merdeka Belajar Kampus Merdeka (MBKM) in higher education academic activities. *IAIC Transactions on Sustainable Digital Innovation (ITSDI)*, 3(2), 150–161. <https://doi.org/10.34306/itsdi.v3i2.555>
- Wahyuningtyas, R., Isyнуwardhana, D., Rismayani, R., & Gunawan, I. (2022). The awareness and implementation of MBKM program as flexible learning in faculty. *Humaniora*, 13(3), 231–239. <https://doi.org/10.21512/humaniora.v13i3.8382>
- Wang, Z., Cai, S., Liu, A., Jin, Y., Hou, J., Zhang, B., Lin, H., He, Z., Zheng, Z., Yang, Y., Ma, X., Liang, Y., & Liang, Y. (2024). Jarvis-1: Open-world multi-task agents with memory-augmented multimodal language models. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 47(3), 1894–1907. <https://doi.org/10.1109/TPAMI.2024.3511593>
- Webster-Stratton, C., Reid, M., & Stoolmiller, M. (2008). Preventing conduct problems and improving school readiness: Evaluation of the incredible years teacher and child training programs in high-risk schools. *Journal of Child Psychology and Psychiatry*, 49(5), 471–488. <https://doi.org/10.1111/j.1469-7610.2007.01861.x>
- Yusuf, F. A. (2021). The independent campus program for higher education in Indonesia: The role of government support and the readiness of institutions, lecturers, and students. *Journal of Social Studies Education Research*, 12(2), 280–304. <https://jsser.org/index.php/jsser/article/view/3283>

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