

Conference Paper

Kampus Merdeka: College Educational Breakthrough to Address the Wide Gap Between Industry and Academia

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Abstract.

Kampus Merdeka was part of the *Merdeka Belajar* policy released by the Indonesian Ministry of Education, Culture, Research, and Technology (Kemendikbudristek) at the end of January 2020. This study focuses on a university program that gave students opportunities to develop skills in accordance with their talents and interests by entering the workforce right away as training for future careers. Until the middle of September 2022, 12 programs had launched. To provide a reliable reference, a comprehensive analysis of the *Merdeka* Curriculum program was carried out in this work. We took a qualitative approach, conducting observations and interviews with fellow actors as well as a thorough analysis of pertinent databases on the related subjects. We found that active student participation and support from the university are the keys to the success of *Kampus Merdeka*. Furthermore, serious commitment is needed from all parties to gain a company's trust. This study is important to gain deep insights into the *Kampus Merdeka* policy so that the needs of *Kurikulum Merdeka* can be met effectively.

Keywords: independent curriculum; Kampus Merdeka, industry-academic collaboration

1. Introduction

Merdeka Belajar Kampus Merdeka or MBKM consists of two concepts, namely "*Merdeka Belajar*" and "*Kampus Merdeka*" in one program. Initiated by Minister of Education and Culture Nadiem Makarim, Freedom to Learn is a new policy initiative from the Ministry of Education and Culture of the Republic of Indonesia., where the freedom of learning is intended for basic education and secondary education such as Junior High School/Senior High School/Vocational High School/Equivalent. Meanwhile, "*Kampus Merdeka*" is a continuation program of the *Merdeka Belajar* policy. *Kampus Merdeka* are intended for universities by giving students the chance to develop their skills in

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line with their interests and capabilities via hands-on experience in the workplace as a means of preparing for future professions. In Universities, MBKM strives to provide an autonomous and flexible learning experience, provide an innovative and *Merdeka Belajar* culture according to student needs, fulfill learning rights based on a life-based, capability, and transdisciplinary approach to improve student learning capabilities, facilitate learning rights according to interests and the potential of students (1).

There is great hope that this policy will give birth to an autonomous campus cultural climate, an uncomplicated bureaucracy, and the development of a creative and innovative learning process system based on the interests and demands of the modern world. This great expectation leads to the acceleration of improving academic quality in all universities (2). The concept of MBKM is very different from the existing curriculum and is used by formal education in Indonesia. The purpose of *Merdeka Belajar* is to achieve graduate learning outcomes with additional competencies. In accordance with the demands of the times, graduates are prepared as future leaders of the nation with outstanding and personality abilities, as well as internalization of professional attitudes and appropriate work culture. and necessary for the business world and/or the industrial world so that a link and match occurs (3).

The increase in Scopus indexed research results for the 2015-2019 period which has material content related to collaboration between the academic world and the industrial world is presented in Figure 1. Although there is an increase in industrial and academic collaboration in Scopus publications, there are problems related to its application in Indonesia. Problems related to government rules or policies related to the implementation of MBKM in its implementation are not as expected, In this scenario, the declared *Merdeka Belajar* Program Policy and the *Kampus Merdeka* deviate from their execution.

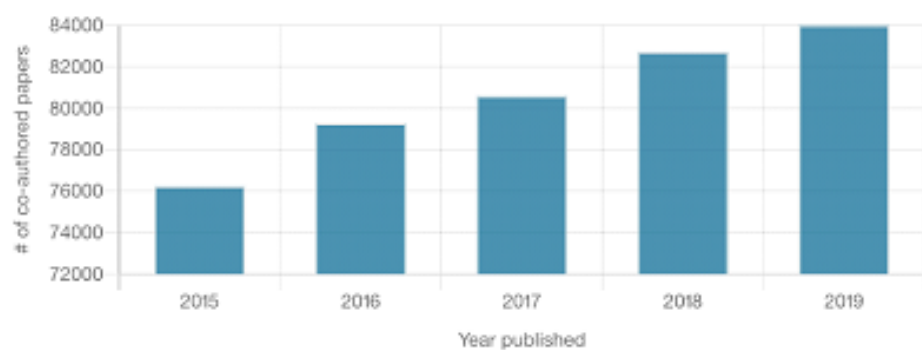


Figure 1: Histogram of academic-corporate co-authored publication growth 2015-2019.

Problems that occur related to *Kampus Merdeka* include: educational purpose, norms or directions for carrying out the autonomous learning curriculum and campus learning,

mentality, curriculum preparation in study programs, partnership with other universities, collaboration with other institutions, industries, or businesses, attending courses in different study programs at their own or other colleges, putting theory into practice in industry or businesses, finances necessary for students to practice or intern, as well as human resource preparation (4).

The urgency of the research was raised due to several main issues related to the MBKM policy, namely that the findings from the results of a specific work visit in the education sector of the Indonesian House of Representatives Commission X to Tangerang City on 12-14 November 2021. It was found that most private universities depend on funds from student tuition, so that especially small private universities, it is usually difficult to improve infrastructure or the quality of lecturers and staff which definitely affects the quality. On the other side, they may also have difficulty finding quality partners, both from the *Dunia Usaha / Dunia Industri* (DUDI) and other universities. For this reason, government support is needed, for example in the form of a partnership program that pairs large *PTN* (State University) or *PTS* (Private University) with small partner *PTS*, with activities that can help raise the quality of the partner *PTS*.

2. Literature review

2.1. Kampus Merdeka

The theory of *Merdeka Belajar* was popularized by Carl Ransom Roger in his book entitled "Freedom to Learn" which was first introduced in 1969. The gift of independence and authority to educational institutions so that lecturers and students can pick and arrange their own subjects of interest is known as freedom of learning. The *Merdeka Belajar* campus is a policy that encourages students to learn diverse sciences that will help them develop a career. Opportunities and challenges are provided at *Kampus Merdeka* in order to provide opportunities for the development of personality, creativity, capacity, and student needs, in addition to gaining independence in seeking and discovering information via realities and field dynamics such as ability needs, social interaction, real problems, social interaction, self-management and collaboration, performance expectations, goals, and so forth. The goal is that students have the ability to master a variety of sciences that are useful if they are in the outside world (6).

2.2. Collaboration between Universities (Academy), Industry (DUDI) and the Government

Collaboration is the notion of inter-organizational ties, inter-governmental relations, strategic alliances, and multi-organizational networks. Collaboration refers to the collaboration of two or more stakeholders to manage the same resources, which is difficult to do when done separately. Collaboration is related to the existence of a clear arrangement of cooperation, trust balanced with commitment, structure and institutional capacity. In 2012, Leydesdorff and Loet discovered the triple helix model concept which is based on the closer relationship between universities, government, and industry. The beginning of the formation of this model because the university underwent two revolutions. The first revolution occurred when universities, which had only acted as educational or teaching institutions (teaching universities), changed by taking on a new role in conducting research (research universities). The driving factor for this research activity is because universities want to make research activities a medium to find scientific truth from various knowledge produced by students and teachers (7).

In Indonesia, various efforts have been made to strengthen the relationship between universities and industry, as exemplified above. Currently, the Ministry of Education and Culture has issued a policy regarding the *Kampus Merdeka*. The *Kampus Merdeka* is part of a series of policies from the Ministry of Education and Culture with the theme of the big umbrella of Freedom of Learning with the Policy of Freedom of Learning. *Merdeka Belajar* Policy: *Kampus Merdeka* is defined as a form of autonomously granting freedom to educational institutions and independence from complicated bureaucracy and freedom for students to choose the desired program. The Ministry of Education and Culture (Kemdikbud) purpose is to create an independent, non-bureaucratic culture of educational institutions, as well as an innovative learning system based on the interests and needs of the modern world.(8).

3. Research methods

This study uses a literature review by collecting data from various sources study which has been published in 12 national journals and 9 international journals. The data obtained includes qualitative data through the process of selecting and simplifying the data presented in the form of descriptive narratives and then drawing conclusions gradually by considering the type of data acquisition.

4. Research Results and Discussion

4.1. Literature Summary Results

Based on the collection of references from several research articles collected, a summary of the literature can be seen in the Table 1.

Source: Several research articles, 2022

The collaboration of universities, government and industry provides benefits to each party, namely to invest in the development of research capabilities carried out by universities and industry (7). The MBKM curriculum, which is the latest curriculum in Indonesia, emphasizes the process of learning activities outside and inside campus. In terms of assessment, MBKM focuses on characteristic assessment to instill the values of Pancasila and Bhinneka Tunggal Ika which are the characteristics of the Indonesian nationality (1).

The government policies or programs that will be or are being implemented or implemented in 2020 have the potential to cause problems. Problems will occur if the rules or government policies that are implemented or implemented are not as expected, in this case the *Merdeka Belajar* Program and *Kampus Merdeka* Policies that are proclaimed are different from their implementation (4). The success of universities in confronting the industrial era 4.0 are closely related to innovations created by quality resources, so that they can respond to the challenges of confronting technological advances and competition in the world of work in the globalization era (3). With the right to study outside the study program, students will be trained not only in the classroom but also in the field to socialize with the community so that students' insights and learning experiences are realized (6).

Collaboration between academics and industry professionals needs to be applied to meet the needs of post-graduate students from higher education to the industrial world (7). Students need to be given permission to identify themselves in terms of their competence and expertise during their education, either through informal extracurricular interactions or through curricular design (13). Therefore Universities must be responsible for enabling collaboration between universities and the industrial world. To bridge the gap between the industrial world and the academic world, a roadmap for the use of Learning Factories as an integral part of the technical academic system in India is proposed. Learning factories adopted concepts and infrastructure to be applied in existing facilities and curricula at universities in India (14).

TABLE 1: Literature Research Summary.

No.	Researcher name and year	Research Objectives	Data analysis technique
1.	Aji and Putra (2021)	Explaining the best ideal role model to be applied in the governance of an <i>Kampus Merdeka</i>	Explanatory research and field research
2.	Maghfiroh and Sholeh (2022)	Explaining the implementation of the MBKM curriculum in order to improve human resources to face the era of disruption and the era of society 5.0	Literature review
3.	Anwar (2021)	Describe the challenges and opportunities for implementing this MBKM policy in response to the Society 5.0 period	Descriptive analysis
4.	Sabriadi and Wakia (2021)	Examine the basic concepts and problems in the implementation of the MBKM curriculum in universities.	Literature review
5.	Diana and the Judge (2020)	Explain the potential collaboration of Higher Education, Industry and Government Partnerships,	Descriptive analysis
6.	Vhalery et.al. (2022)	Describe and explain the MBKM curriculum	Literature review
7.	Wijaya, Pae and Jati (2022)	Knowing the impact of MBKM implementation on lecturers, students, and education staff at Widya Mandala Catholic University Surabaya (UKWMS).	Descriptive analysis
8.	Siregar et.al. (2020)	Explain and analyze the concept of an <i>Kampus Merdeka</i> in the era of the industrial revolution 4.0	Descriptive analysis
9.	Rodiyah (2021)	Explain and analyze the various obstacles faced in the implementation of the MBKM program to form students who are professional and have character	Descriptive analysis
10.	Susetyo (2020)	Describe MBKM Curriculum implementation	Descriptive analysis
11.	Widodo (2021)	Explaining the implementation of education 4.0 and MBKM in teaching in universities	Descriptive analysis
12.	Zainal (2021)	To find out in more detail and analyze the concept of <i>Merdeka Belajar</i> , students are needed in welcoming the era of the industrial revolution 4.0, as well as how the plan for implementing the <i>Kampus Merdeka</i> concept.	Literature review
13.	Lucietto, Peters, Taleyarkhan and Tan (2020)	Describe best practices for establishing and maintaining collaborative relationships between academia and industry	Literature review
14.	Buth et.al. (2017)	Identifying the gap between the academic world and the industrial world and presenting an approach to bridge industry-academic collaboration using the concept of Learning Factories.	Literature review
15.	Ahmed, Fatani, Ali, Six (2022)	Integrating the triple helix model, namely the collaboration of the academic world (universities), the industrial world and the government.	Literature review
16.	Bikard and Marx (2020)	Describe the infrastructure required for industrial and academic collaboration	Quantitative analysis with correlation

TABLE 1: Literature Research Summary.

No.	Researcher name and year	Research Objectives	Data analysis technique
17.	Kettunen et.al. (2022)	Describe the successes and challenges of industrial and academic collaborations	Descriptive analysis
18.	Singh and Kaundal (2022)	To describe the modes and challenges of long-term partnerships between academia and industry in terms of education and research partnerships.	Literature review
19.	Marques, Dallegrove, and Barbosa (2022)	Identify collaborations between industry and academia related to software engineering development and IAC projects (Industry-Academic Collaboration)	Literature review
20.	Marijan and Sen (2022)	Describe the research experience and shared knowledge creation between industry-academic collaboration in software engineering tools	Descriptive analysis
21.	Manevska et.al. (2018)	Describe the interpersonal skills that students acquire in the form of academic-industrial collaboration	Descriptive analysis

That there are three kinds of institutional relationships between universities, industry, and government (18). in their research concluded that collaboration between industry and academia can help in the formation of more qualified researchers and to make industry more adequate for technology and to improve processes (19). Found a set of 14 patterns and 14 anti-patterns in terms of industry-academic collaboration to support researchers and industry practitioners in building and running collaborative research projects in software engineering (20). There is a gap between academia and industry in the context of student interpersonal skills is caused by the inability of academics to collaborate with industry in understanding their needs so that academic graduates are unable to meet industry needs (21).

4.2. Discussion

For the framework of implementing the MBKM curriculum, higher education entities need to prepare themselves to be more optimistic in facing challenges in the era of disruption, the industrial revolution 4.0 and the era of society 5.0 so that a review of the readiness of human resources as well as the facilities and needs of each university as well as an understanding of resources is needed. human resources related to implementing the MBKM curriculum. Education policies, especially in the curriculum structure, often change so that the community and industry’s interpretation of the sustainability of the *Kampus Merdeka* can be used as an evaluation in the future and the implementation of the *Merdeka Belajar* curriculum in universities needs further field research. Implementation of an *Kampus Merdeka* adapted to the era of disruption, the

industrial revolution 4.0 and the era of society 5.0 which is directed so that students are more ready to work, work together, be creative and can be useful for students and the community. It is necessary to prepare a responsive higher education curriculum and redesign the curriculum with an *Merdeka Belajar* approach. Teaching in universities must also adapt to the use of digital and cyber technology and *Kampus Merdeka*.

The MBKM program needs to be socialized to lecturers and education staff to be followed by all students by considering the challenges that must be overcome, namely the adjustment of the MBKM curriculum, improvement of existing information systems, and the formalization of cooperation with partners (industry). In the concept of an *Kampus Merdeka*, of course, it is necessary to develop research related to the collaboration of the industrial world and the academic world in order to create human resources (graduates) of universities that are reliable and ready to work. In the long term, it is necessary to implement a project or consortium or funding that involves sustainable industry-academic collaboration, the outcome of which must impact not only the participating institutions,

In implementing an *Kampus Merdeka*, there is a need for innovation and exploitation of learning and research methods in order to implement processes effectively to integrate the possibility of increasing collaboration in the academic world (universities), industry and government.

5. Conclusion

The active participation of students and support from the university are the keys to the success of the *Kampus Merdeka*. Furthermore, to gain the company's trust, serious commitment is needed from all parties. It is important to conduct this study to find out in depth the policies of the *Kampus Merdeka* so that the needs of the Independent Curriculum can be met effectively. Suggestions for this research, among others, to gain the trust of the company, requires serious commitment from all parties. It is important to conduct this study to find out in depth the policies of the *Kampus Merdeka* so that the needs of the Independent Curriculum can be met effectively.

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