

Recognition Challenges in Implementing the Independent Campus Policy: The Case of Indonesia

Ferdi Widiputera^{1*} Iskandar Agung²

1. Ministry of Education and Culture, Research and Technology, Jakarta, Indonesia

2. National Research and Innovation Agency, Jakarta, Indonesia

* E-mail of the corresponding author: ferdi.widiputera@kemdikbud.go.id

Abstract

The purpose of this paper is to discuss the implementation of the Minister of Education and Culture's Independent Campus policy issued in 2019 (see: regulation of the Minister of Education and Culture of the Republic of Indonesia, No. 4, 5, 6, 7/2020). One of the policies is the provision of two (two) semesters of study away from campus with eight (eight) optional programs: student exchange, internships, school-based teaching assistance, research, humanitarian projects, entrepreneurship, independent projects, and thematic real-world lectures (building villages). Three organizers were purposefully chosen to assess the readiness of higher education institutions: tertiary institutions "L," "M," and "N." Data was collected using a focus group discussion (FGD) approach via online interviews supplemented by relevant documentation. The findings indicated that the three tertiary institutions were proactive and worked hard to implement policies. However, there were still several challenges to overcome among the difficulties in recognizing the outcomes of the activities. Universities face a variety of quality and geographic conditions, as well as situations that differ from one another. No criteria can be used as a guideline for determining the recognition and quality assurance of activity results. The government is advised to establish a work unit in charge of developing standard process criteria for each selected program to achieve the goals of competency development, competitiveness, and graduate readiness to enter the workforce.

Keywords: independent campus, student study rights, elective programs, recognition

DOI: 10.7176/JEP/13-35-06

Publication date: December 31st 2022

1. Introduction

The university is a higher education provider that oversees faculties and study programs. A faculty is a division within a university with several related fields of study, while a study program is an integrated study plan to guide academic education based on the curriculum. Their study program aims to allow students to master the knowledge, skills, and attitudes appropriate to the target educational curriculum (Quiper Campus, 2019). The Ministry of Education and Culture of the Republic of Indonesia, in the period 2019-2024 government has issued a policy of "Kampus Merdeka" (Independent Campus) for universities, especially graduate programs (S-1 / Bachelor Degree). One aspect of this policy is the fulfillment of student rights to study for 3 (three) semesters outside the study program, consisting of one semester (six months) still on campus and two semesters (two times six months) outside the campus. The policy is relatively new, is a breakthrough thought, brings change, and causes university activity. Through this policy, it is expected that universities can produce competent, competitive, and ready-to-work graduates. Indonesia is one of the countries in Asia with still many challenges in treading the Industrial Revolution 4.0. It realizes that there is a need for a fundamental transformation of education and training to acquire new, needed skills and competencies in the future to overcome crises, such as one caused by the COVID-19 pandemic that prolonged and hit almost the most significant sector in the country. Of course, this is related to how optimally implements education and training policies to prepare a workforce ready to use in the future. The current work is strongly influenced significantly by changes in technology. And now is the time to prioritize digital skills and human resource development. For this reason, it is necessary to map what competencies are relevant and how to use them in the present and the future.

One of the keys to achieving this goal is to develop and invest in digital resource skills and competencies. The modernization of competency development in all areas of life shows the importance of appropriate and adequate skills training and competency development (Kovalchuk & Sheludko, 2019). According to BAPPENAS and BPS (2018), Indonesia is projected to experience a demographic bonus in the period 2028-2030, when the productive age (15-64 years) will form a percentage of 67.2% of the total population¹.

The Independent Campus policy is a challenge and a hope to produce competent, qualified, and competitive graduates. There are about 1,316 tertiary institutions (87 with state status and 1316 with private status) in Indonesia with 11,709 study programs. Of the 87 public universities in Indonesia, 36 have A accreditation, 45

¹ See for details on https://kominfo.go.id/index.php/content/detail/18427/gandeng-dunia-pendidikan-dan-industri-kominfo-siapkan-talenta-digital-indonesia/0/artikel_gpr.

have B accreditation, and 6 have C accreditation. As many as 30 private universities have A accreditation, 479 B accreditation, and 807 accreditation C. In terms of study programs at State Universities, as many as 2292 accredited A, accredited 2806 accredited B, and accredited 448 accredited C. In private universities, there are 803 study programs accredited A, 6703 accredited B, and 4203 accredited C (see Table 1).

Accreditation is the process of evaluating the quality of an institution carried out by a team of experts (team of assessors) based on the quality standards set by the accreditation body or institution (BAN-PT, 2012). Accreditation is carried out by the National Accreditation Board for Higher Education or abbreviated as BAN-PT, which has at least six tasks, namely: (1) developing a national accreditation system; (2) carrying out institutional accreditation; (3) conducting an assessment of the feasibility of a new higher education/study program; (4) provide recommendations; (5) evaluating the Independent Accreditation Agency (IAA); and (6) carry out accreditation of study programs that do not yet have IAA (Government Regulation of the Republic of Indonesia No. 60/1999, Law No. 20 of 2003 on the National Education System, Law No. 12/2012 on Higher Education, Regulation of the Minister of Education and Culture No. 59/2012).

Table 1. Accreditation of Universities and Study Programs in Indonesia in 2018

Type	Public				Private			
	Accreditation			Total	Accreditation			Total
	A	B	C	T o t a l	A	B	C	T o t a l
Universities	36	45	6	87	30	479	807	1,316
Study programs	2,292	2,806	448	5,546	803	6,703	4,203	11,709

Source: BAN-PT, 2018

Implicitly the majority of tertiary institutions and study programs are still low and tend to produce graduates who are not competent, qualified, competitive, and unable to meet the needs of the world of work. In the public and private sectors, many people complain about the employees' low quality and productivity. The large number of college graduates who are not absorbed by the world of work indicates this lack of competence. Data from the Central Statistics Agency (2018) notes that in 2014 there were 688,660 unemployed college graduates. In 2018 it increased to 950,533 people. One thing that is often complained about is that tertiary institutions do not produce graduates who can meet the competencies required by labor users, especially in the business world and industry (Indonesia call: DUDI), even though employment is available. Many universities only produce bachelor's degrees without work readiness. In addition, the fact in the field states that in the 2016-2019 periods, the number of informal workers was larger than formal workers (see figure 1). It is also in line with the Asian Development Bank report in 2015, which stated on the kominform.go.id website that 52% of the population workers in Indonesia have skills that are below standard (underqualified). In this case, it can be assumed that workers in the informal sector require special attention from the government.

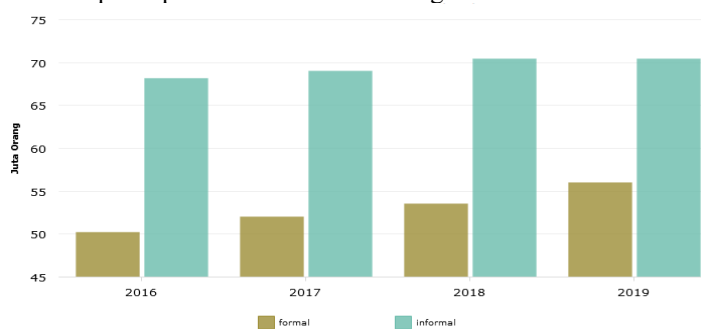


Figure 1. Population Aged 15 Years and Over Whom Worked from 2016 To 2019¹

Source: Central Statistics Agency (BPS), 2020 downloaded via katadata.com.

For example, the Ministry of Industry of the Republic of Indonesia stated that there is still much demand for labor in this sector, and university graduates have not been able to meet this need despite the estimate that the demand for labor in the industrial sector will increase by 8% per year. This increase is spread across all manufacturing sub-sectors, such as food and beverages, metals, textiles, clothing, and the automotive industry. The high demand for labor is in line with the entry of investment in Indonesia and the government's efforts to intensify the industrial sector that is growing both in the domestic and export markets (Wardani, 2019). We live in an era of rapid change in terms of technological development and at the economic and social levels. In the future, the labor market and the type of work will be frequently changed, forcing people to continue adapting and be flexible to the new requirements. Major changes in the social and demographic levels of society in Indonesia and the world poses additional challenges for policymakers to take action and ensure that all citizens can actively

¹ See for details on <https://databoks.katadata.co.id/datapublish/2020/04/08/jumlah-pekerja-informal-lebih-banyak-dari-pekerja-formal>.

participate in competence (Frau-Meigs et al., 2017). To remain competitive and innovative on a global stage, Indonesia should increase its efforts in developing its competencies and exploiting the creative potential of all its citizens (Risamasu, 2019). In 2017, the Coordinating Ministry for the Economy, Finance, and Industry noted that between 2017 and 2025, at least 1.3 million workers were needed, starting from processing natural goods, necessities, information technology, health, financial services, infrastructure, and transportation to energy and telecommunications services (Wardani, 2019). Indonesia will face new challenges arising from changes in the labor market in the coming decades. Globalization, migration, and technology will be the main drivers of change (Yuniarto, 2016). In 2030, it takes 113 million new workers with good skills so they can compete (Djamhari et al, 2018).

However, to meet the demand for job opportunities that are still open, a competent and qualified workforce is needed by existing demands. The Ministry of Manpower notes that from 2015 onwards, a total of 3.7 million workers are needed annually. According to research McKinsley Global Institute (MGI) 2017, an educated and skilled labor force required in Indonesia will reach 113 million in 2030. Traymansah, Soejitno, and Priyadi (2012) found a shortage of educated and skilled workers in the shipping industry. Sumantri et al. (2016) show that the maritime industry in Indonesia is in dire need of literate personnel such as commercial ships and cruise ship workers. New technologies (information and communication technology (ICT), biotechnology, manufacturing) will play a significant role in shaping the labor market in the future. They also pose a major challenge to Indonesia's education and training system. ICT enables education and training to be much more effective by activating new innovative teaching and learning methods and changing the roles of educators and students (Fitriyadi, 2013). Moreover, the impact of the COVID-19 pandemic has driven the teaching and learning process to change that was previously offline and now online.

Strictly speaking, universities still need strategic steps to fill employment in various sectors (Asyar, 2020). The task of higher education is not limited to teaching theory, improving the quality of learning, and pursuing world-class status. Yet, it needs to prepare competent, qualified, and competitive graduates. Universities and study programs enter the world of practice to prepare graduates to become an anticipatory workforce and responsive to the needs of the world of work outside the campus. The Independent Campus Policy is an effort to produce university graduates who are competent and competitive, and in line with developments in the strategic environment on a local, national and global scale.

How do universities anticipate, respond to, and implement the Independent Campus policy, which is the focus of discussion in this paper? In addition, the article will also show obstacles to realizing an Independent Campus, especially related to the policy of fulfilling the right to study for 2 (two) semesters (one year) outside the campus. Finally, the paper will also suggest alternatives to solve problems in implementing the Independent Campus policy.

2. Literature Review

a. Independent Campus

There are many types of higher education providers in Indonesia, including undergraduate and postgraduate universities/institutions directed to master and develop branches of science and technology. Vocational education academy/polytechnic diploma programs to prepare students with specific applied skills and professional higher education following undergraduate programs to prepare students for jobs requiring particular skill requirements. Higher education functions as an effort to foster the character and civilization of the nation, foster innovative, responsive, creative, skilled, competitive, and cooperative academicians, and develop science and technology by paying attention to and implementing human values (Law of the Republic of Indonesia No. 12/2012).

However, the data show that various types of higher education providers (especially undergraduates) still produce graduates who are deemed not qualified, competitive, and ready to work. Of the 7 (seven) million unemployed, 13.58% are higher education graduates (Central Statistics Agency, 2018).

The issuance of the Independent Campus policy is an effort so that universities can produce graduates who are competent, competitive, and ready to work. The concept of the Independent Campus provides more alternative freedom for students to develop competencies according to their interests and talents. One of the primary policies is to encourage students to study for three semesters outside their chosen study program. With this policy, it is expected that students will not only have abilities in one field of science but can master various disciplines that are useful in the world of work. Regulation of the Minister of Education and Culture Number Article 17 of 3/2020 states that the implementation of the 1 (one) semester policy is learning outside the study program at the same university; and a maximum of 2 (two) semesters or the equivalent of 40 (forty) credit points of study outside the study program outside the university.

2.2 Student Study Rights Elective Program

For the implementation of the Independent Campus, the Directorate General of Higher Education of the Ministry of Education and Culture (2020) has issued activities to fulfill student learning rights. They are (1) student

exchanges, (2) internships/work practices, (3) teaching assistance in education units, (4) research, (5) humanitarian projects, (6) entrepreneurial activities, (7) independent projects, and (8) Thematic Real Work Lecture (Indonesia: Kuliah Kerja Nyata Tematik/KKNT).

Student exchange is a cross-campus learning activity (at home and abroad) by living with the family at the destination campus. The apprenticeship program is an activity to provide students with sufficient experience by learning directly in the workplace (experiential learning) so that students get hard skills and soft skills (ethics, professionalism, communication, cooperation, etcetera). Teaching assistance is a teaching aid activity for elementary, middle, and senior high schools, either in cities or in isolated areas. This form of research is a student activity in research institutions to build critical thinking, deepen, understand, and can do research methods better. Humanitarian programs are the involvement of students in other humanitarian and development projects. Entrepreneurship is an activity to develop student businesses from an early age, foster, and at the same time overcome the problem of intellectual unemployment among undergraduates. Independent projects are learning activities to complement the curriculum through cross-disciplinary group work so that students can develop innovative products that become their ideas, conducts development-based research and education (R&D), and improve achievement in the national and international arena. Finally, the Thematic Real Work Lecture (KKNT) is an activity that provides learning experiences to students by living in a community outside the campus, together with the community identifying potentials and developing village / regional potential.

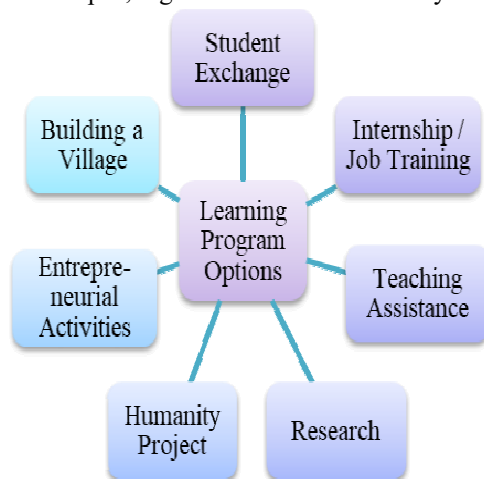


Figure 2. Student Study Rights Elective Program

2.3 Quality Assurance

The Independent Campus program requires a guarantee of quality processes and results. The disparity in conditions and situations between tertiary institutions requires specific standards to ensure the quality of the process and results so that graduates meet the expected competencies. The Independent Campus Guidelines issued by the Directorate General of Higher Education (2020) stated that the Independent Campus policy guarantees quality, especially the three-semester study rights program outside the study programs. It is necessary to determine the quality of participant competence, the quality of implementation, the quality of the internal coaching process and external, the quality of facilities, the quality of reporting and presentation of results, and the quality of assessment.

There are no quality assurance indicators. However, several criteria are mentioned to maintain quality and earn the credit points needed. For example, in a student exchange program, the fulfillment of credit points must be the type of subject that meets the requirements of the study program (such as meeting the elementary curriculum, general subject requirements, elective requirements, etcetera). An internship program must meet the ability level equivalent to the level of an undergraduate (not middle school level and below). Students become part and active in the work team; there is a performance input every two months, and they must give a presentation at the end of the internship to one of the company leaders. The Teaching Assistance program must meet the targets to be achieved (for example: improving students' numerical abilities, learning achievement, and others). The program must be able to determine the type of research with a level of difficulty appropriate to the undergraduate level, and students must be involved in reporting and presenting the results. Humanitarian projects must meet the requirements of 1 or 2 main projects with a focus on addressing social problems (for example, meeting the shortage of health workers in the area, environmental sanitation, assisting personnel in alleviating the burden of disaster victims, etc.) supported by positive results and impacts.

In entrepreneurial activities, quality assurance criteria refer to ownership of a business plan and objectives (short and long term), sales success according to business plans, and human resource development in business

institutions. In an independent project, the criteria for achieving quality are determined by the type of activity with difficulty according to the undergraduate level, the topic of activities not offered in the study program curriculum, developing independence, the existence of a lesson plan, and the final result. In the Thematic Real Work Lecture (TRWL) program or village building, students must show involvement in 1 or 2 main projects with a focus on increasing the capacity of community entrepreneurs, small and medium enterprises, or village-owned enterprises; to solve social problems (for example: meeting the shortage of health workers in the village, building environmental sanitation) which have a factual impact at the end of the activity (for example the realization of village agricultural irrigation, village cooperatives, and others).

3. Methodology

This manuscript is a case study conducted from March to July 2020 on 3 (three) universities with 2 (two) A-accredited universities (called the "L" and "M" campuses), and 1 (one) university (called Campus "N") accredited B. Although the two tertiary institutions have been accredited A, they have different characteristics, especially the ownership of the number of study programs that have been accredited A. Campus "L" only has half of the total study programs with A status, while the other half still accredited B or C. As much as 80% of the study programs have been accredited A, while 20% have been accredited B. Campus "N" has more study programs accredited B or C.

Due to the COVID-19 pandemic with travel restrictions and mandatory work from home (WFH), this study also adjusted its strategy in gathering field data and information. Data collection was through online discussions by intensifying inquiries about the readiness of the university and the programs to be implemented related to the policy of the Independent Campus. Key informants, including the Vice-Rector, Dean, Independent Campus Development Team, and Head of Study Program, were invited to discuss. In addition, the informants were also asked to answer the questions contained in the questionnaire.

The analysis was thorough qualitative techniques based on data and information obtained from online discussions, filling out questionnaires, documentation, and relevant literature. The deepening and strengthening of research results have been discussed several times with stakeholders, ranging from the director-general of higher education, experts, research institutions, practitioners, business and industry actors, and community organizations.

4. Finding and Results

The limited coverage of university samples and the operational techniques of data collection based on online discussions resulted in the implementation of research not being optimal. From the results of online discussions and supported by documentation owned by the universities "L," "M," and "N," it is known that since early 2020 it has been preparing to realize the Independent Campus policy, especially the fulfillment of 3 (three) semesters outside the study program. The university formed a special team involving the chancellor, faculty, study programs, and lecturers to develop guidelines for the Independent Campus. Prodi Association held a meeting to discuss the learning materials, assessment, reporting administration, and others.

In particular, the policy of studying for 2 (two) semesters outside the study program outside the campus implemented per Permendikbud No. 3/2020 Article 15 paragraph (1) above consists of 8 (eight) optional programs. However, there are differences in the realization of these policies. University "L" plans to apply three patterns: the block learning model outside the university, the non-block learning model outside the university, and the accelerated model. The university "M" will implement 3 (three) patterns, namely: the 5-1-2 pattern (five semesters in the study program, one semester outside the study program within the same campus, and two semesters outside the off-campus study program, 6-1-1 pattern (six semesters within the study program, one semester outside the study program within the same campus, and one semester outside the study program outside the campus; and the 6-0-2 pattern (six semesters in the study program, and two semesters off-campus.) For "N" university, it has not yet planned the pattern of fulfilling the right to study. Still, it is assumed that it is not much different from the pattern applied by the two universities above.

5. Discussion

One semester outside the study program on the same campus may not cause significant problems for the three universities. The application of the credit system allows students to choose courses of their choice to take courses outside the study program, either within the same faculty or outside other faculties. The challenge faced is realizing two semesters outside the campus in the form of 8 (eight) elective programs with the fulfillment of 20 credits for one semester or 40 credits for one year.

From the results of this study, at least 5 (five) challenges must be addressed for the Independent Campus policy to be implemented, especially in terms of fulfilling the right to study for 2 (two) semesters outside the study program campus, as follows.

- The study program needs to compile a re-lecturing curriculum, previously implemented 8 (eight)

semesters (identical to 4 years) with 144 credits, reduced to 5 (five) semesters of lectures in study programs with three semesters outside the study program. These changes must be made carefully so that the objectives of the study program are not deprived of their essence.

- The study program not only needs to find alternative ways of teaching subjects that are reduced in the curriculum but also to meet the workload of lecturers' obligations no longer taught in class;
- The implementation of student activities for 2 (two) semesters raises questions in terms of funding. Who is responsible for student financing to participate in learning activities outside of campus?
- Less widespread socialization to open up stakeholder understanding and support for the Independent Campus policy in fulfilling study rights for 2 (two) semesters outside the study program and the campus;
- Recognition of the fulfillment of student study rights outside the study program for two semesters outside the university.

Of the five challenges above, two aspects are of serious concern in this paper related to 2 (two) semesters of lectures outside the campus, namely: (1) funding for the implementation of student activities and (2) introduction of competencies resulting from program implementation.

Students' program selection certainly requires financial support, both for student exchange activities, internships in industry, provision of learning assistance at schools (SD / SMP / SMA), entrepreneurship, and others. There is still a question of whether the need for these funds is borne by students, universities, or other parties. It will be a problem for those from underprivileged families if students bear it. The same thing is experienced by universities categorized as having "weak" financial capacity. The government can only assist with a particular element of funding for 30 students per university (it is unknown whether this funding is intended for private universities as well?). Funding for activities in implementing the Independent Campus policy is an important component, and the program will not run well without adequate support, including from the central government, local governments, and the community (Tamam, 2018).

In implementing a student exchange program, for example, who should fund this activity: students, campus, or the government? This issue is often raised in the discussion of the author of several campuses (public and private). It was predicted that most students at campus would not be able to bear it on their own. Likewise, submitting it to campus will be a heavy burden for campuses with limited financial capabilities. It is different from the favorite campuses with a large number of students and adequate budget sources. This situation applies to all courses of 2 (two) semesters outside the campus.

Another problem is the recognition of the achievement of student competencies after studying for 2 (two) semesters outside the campus. The existence of striking disparities between campuses and regional conditions certainly brings problems in achieving the results of student activities. Universities and study programs are faced with differences in quality and accreditation between state, public and private status, and also places to carry out activities (for example, internships in various large-medium-small industries). Is the recognition of competency for the achieved results sufficiently determined by the activity manager (for example, the industry where students are interning) or by the respective universities? This recognition problem will arise because there are no standard criteria for each selected program. Of course, there are differences in outcome competencies between students who carry out internships in large industries and medium and small industries. Likewise, there are differences in student exchange recognitions between tertiary institutions categorized as A to B / C and B / C to A accreditations. Even in particular cases, for example, student mutations from one university to another are common for students to repeat specific lectures since the teachers on the new campus did not recognize them.

This recognition problem needs to be addressed immediately so that program implementation achieves satisfactory results. Process standard criteria for each selected program are established to guide and ensure the quality of results. The standardized process makes program implementation not only fulfill policy demands. The 2 (two) semester policy for students studying outside the campus must be truly able to develop the university graduates' competence, competitiveness, and work readiness.

6. Conclusion

The Independent Campus policy issued by the Ministry of Education and Culture of the Republic of Indonesia, especially regarding the fulfillment of student learning rights for 2 (two) semesters outside the campus with 8 (eight) optional programs, can be said to be a renewal in the implementation of learning at universities. This policy is expected to produce competent, competitive, and ready-to-enter the world of work graduates.

However, the Independent Campus policy implementation still faces many challenges that need to be resolved, including the funding and recognition of guaranteed activities results. There is still a need for certainty regarding who will bear the tuition fees for the 2 (two) semesters, especially for universities with limited financial capacity. On the other hand, there are disparities in quality, accreditation, and conditions in the areas where universities are located, resulting in discrepancies between program implementation and outcomes. Who guarantees student results in carrying out 2 (two) semesters (identical to one year of learning) off-campus? For this reason, policy implementation still requires standard process criteria for each program to guarantee the

achieved results. Ministries, universities, and other stakeholders need to sit together as teamwork to solve these two problems in particular.

References

- Asyar, R. (2020). Independent Learning and Higher Education Readiness. <https://www.unja.ac.id/2020/03/02/merdeka-belajar-dan-kesiapan-perguruan-tinggi>
- BAN PT. (2012). Accreditation Form, Jakarta: National Higher Education Accreditation Board.
- BAN-PT. (2018). Distribution of Accreditation for Higher Education and Study Programs, Jakarta: National Higher Education Accreditation Board.
- BAN PT. (2019). Higher Education National Accreditation Board Regulation No. 3 of 2019 concerning Higher Education Accreditation Instruments, Jakarta: National Higher Education Accreditation Board.
- Central Bureau of Statistics. (2018). Indonesia in Figures, Jakarta: Central Bureau of Statistics.
- Development of a 4 Year Vocational School, Research Report, Research Center for Education and Culture Directorate General of Higher Education. (2020). Merdeka Belajar guidebook, Jakarta: MOEC Republic of Indonesia.
- Djambahari, E. A., Ningrum, D. R., Harja, I. T., Thaariq, R. M., Zunivar, A. Y., Ramdlaningrum, H., & Lauranti, M. (2018). *Vokasi di Era Revolusi Industri (Kajian Ketenagakerjaan di Daerah)*. Perkumpulan PRAKARSA.
- Fitriyadi, H. (2013). *Integrasi teknologi informasi komunikasi dalam pendidikan: potensi manfaat, masyarakat berbasis pengetahuan, pendidikan nilai, strategi implementasi dan pengembangan profesional*. Jurnal Pendidikan Teknologi dan Kejuruan, 21(3).
- Frau-Meigs, D., O'Neill, B., Soriani, A., & Tomé, V. (2017). Digital citizenship education: Volume 1: Overview and new perspectives.
- Government Regulation of the Republic of Indonesia No. 60/1999.
- Kovalchuk, V. I., & Sheludko, I. V. (2019). Implementation of digital technologies in training the vocational education pedagogues as a modern strategy for the modernization of professional education. *Annales Universitatis Paedagogicae Cracoviensis. Studia ad Didacticam Biologiae Pertinentia*.
- Law of the Republic of Indonesia No. 20/2003 on National Education System.
- Law of the Republic of Indonesia No. 12/2012 on Higher Education.
- McKinsey Global Institute. (2017). A future that works: Automation, employment, and productivity. Downloaded at <https://www.mckinsey.com/featured-insights/digital-disruption/harnessing-automation-for-a-future-that-works/de-de> on 15 December 2020.
- Regulation of the Minister of Education and Culture of the Republic of Indonesia No. 4/2020 concerning Amendments to the Regulation of the Minister of Education and Culture Number 88 of 2014 concerning Changes of State Universities to Become Legal Entity State Universities.
- Regulation of the Minister of Education and Culture of the Republic of Indonesia No. 5/2020 concerning Accreditation of Study Programs and Higher Education.
- Regulation of the Minister of Education and Culture of the Republic of Indonesia No. 6/2020 concerning New Student Admissions for Undergraduate Programs at State Universities.
- Regulation of the Minister of Education and Culture of the Republic of Indonesia No. 7/2020 concerning the Establishment, Change, Disbandment of State Universities, Revocation of Private Higher Education Permits.
- Risamasu, J. E., & Zafrullah, A. (2019). *Upaya Indonesia Untuk Mencapai Sumber Daya Manusia Yang Berdaya Saing Global*.
- Sumantri, D., Subijanto, Siswantari, Sudiyono and Warsana. (2016). Vocational Education Management Study: Development of a 4-Year Vocational School, Research Report, Research Center for Education and Culture Policy - MoEC the Republic of Indonesia.
- Tamam, B. (2018). Reorientation Education Funding in Building Quality Schools, *Misykat al-Anwar Journal of Islamic and Community Studies*, Vol. 29(2), 35 – 48. <https://jurnal.umj.ac.id/index.php/MaA16/index>.
- Traymansah, D. H. Soejitno, & Pribadi, SR (2012). *Analisa Kebutuhan Tenaga Kerja Terampil Untuk Mendukung Peningkatan Produksi Pembangunan Kapal Baru Di Galangan-Galangan Kapal Di Surabaya*. Jurnal Teknik ITS, 1(1), 331-335.
- Wardani, R. T. (2019). *Kebutuhan Tenaga Kerja Industri Akan Naik 8% pada 2035*. Downloaded at <https://economy.okezone.com/read/2019/05/01/320/2050198/kebutuhan-tenaga-kerja-industri-akan-naik-8-pada-2035> on 02 January 2021.
- Yuniarto, P. R. (2016). *Masalah globalisasi di Indonesia: Antara kepentingan, kebijakan, dan tantangan*. Jurnal Kajian Wilayah, 5(1), 67-95.