Lecturer Analysis on the Implementation of MBKM Internship in the Construction & Infrastructure Industry at Faculty of Engineering and Computer Science of Narotama University

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Abstract

The COVID-19 pandemic has affected the education sector. Nevertheless, the enthusiasm of students, teaching staff, and the public are great in welcoming creative, adaptive, and innovative programs from the government to support sustainable development. One of them that received a positive response is the Independent Learning Independent Campus (MBKM) internship program. This study aims to describe the implementation of MBKM internships from FTIK Narotama University students in the Construction and Infrastructure Industry based on Lecturer Assessment. Crosstab analysis is used to see the relationship between effectiveness and benefits resulting from the policy and apprenticeship. The results indicate that there is a relationship between these variables. So, it can be concluded that the Civil Engineering Study Program has run the program well, where the experience of six months in the field improves students' soft skills.

Keywords
MBKM Internship, Covid-19, Digital Collaborative Learning, Crosstab

1. Introduction

The COVID-19 pandemic has affected the education sector. This unprecedented challenge has been going on for almost two years, and no end sight yet. However, the spirit and enthusiasm of students, teachers, and the public are tremendous in welcoming the government's creative, adaptive, and innovative programs. One of them that received a positive response was the Independent Learning-Independent Campus (MBKM) policy which was launched to prepare students to become solid scholars and relevant to the needs of the times. MBKM, under Minister of Education and Culture Regulation No. 3 of 2020, consists of four central policies (Tohir, 2020) related to study programs, higher education accreditation systems, status change of universities into legal entities, and student learning rights. The last point provides three semesters of learning opportunities outside the study program, within a faculty, University, or outside, even in the field: industries, businesses, and society.

Learning can occur anywhere, not limited to classrooms and laboratories. It can be in the village, a place of service, a center for industrial research, and the construction world. Learning activities outside higher education include internships in industries, including construction companies, government, village building, teaching in

schools, sharing knowledge with development vocational students in project planning and scheduling, research, independent projects, humanitarian projects, and student exchange. Here, students can choose courses according to their passion but still have continuity with the world of civil engineering and computer science. For example, civil engineering students may take artificial intelligence in the computer science study program or take courses related to construction law at the law faculty. They can also take classes at other campuses that have become partners. The lecturer must still guide all activities, though. The program is expected to provide contextual field experience to improve student competencies and prepare them to work.

One of the exciting activities is the internship, which provides professional work experience in a structured manner with the help of experts in their field (SUN, 2014). Two supervisors will accompany students during the process: lecturers and field supervisors. The latter will train work culture in the industry, especially the construction world, and interaction with the new environment. It, indeed, will teach new skills in the construction world and how to work (Fatah, 2021). Meanwhile, mentoring by supervisors from Campus aims to integrate field cases with existing theories and build thinking patterns in decision-making according to applicable rules. It will make students realize that what they learn on Campus helps prepare them for their future.

It also provides benefits for the supervisor of the student's college. They can explain their knowledge according to the actual case to make it easier to understand. This collaboration will make the University produce excellent, professional, creative, adaptive, competitive, and productive alumni.

However, Universities need the support of an integrated system to accommodate the program and facilitate recognizing learning carried out by students outside the home campus. The collaborative information system will be a site for processing data into the required information, meaning that it must be able to complete the handling of access, control, and distribution of information (Hermanto et al., 2021).

The support from Narotama University Surabaya for the activities is Simnaro. It facilitates online guidance, where students must provide video and written reports to each supervisor. This study aims to describe the implementation of the MBKM of FTIK Narotama University internship in the Construction and Infrastructure Industry based on lecturer assessments.

2. Literature Review

2.1 Independent Learning Internship Program

Independent Campus is part of Independent Learning that provides opportunities to hone skills according to talents and interests by entering the world of work as preparation for future careers. Internship/Work Practice Programs for one to two semesters provide sufficient experience through experiential learning. Students will gain hard skills (complex problem solving, analytical proficiency, etc.) and soft skills (professional/work ethics, communication, collaboration, etc.) On the other hand, the industry gets talent that, if suitable, can be immediately recruited, thereby reducing the cost of recruitment and initial/induction training. Students familiar with the workplace will better understand starting their careers. Through this activity, industrial problems will be conveyed to universities to provide an opening for updating teaching and learning materials and research topics (Kemendikbud, 2020). The following is a description of the Internship process based on the Guidebook for Independent Learning on an Independent Campus 2020.

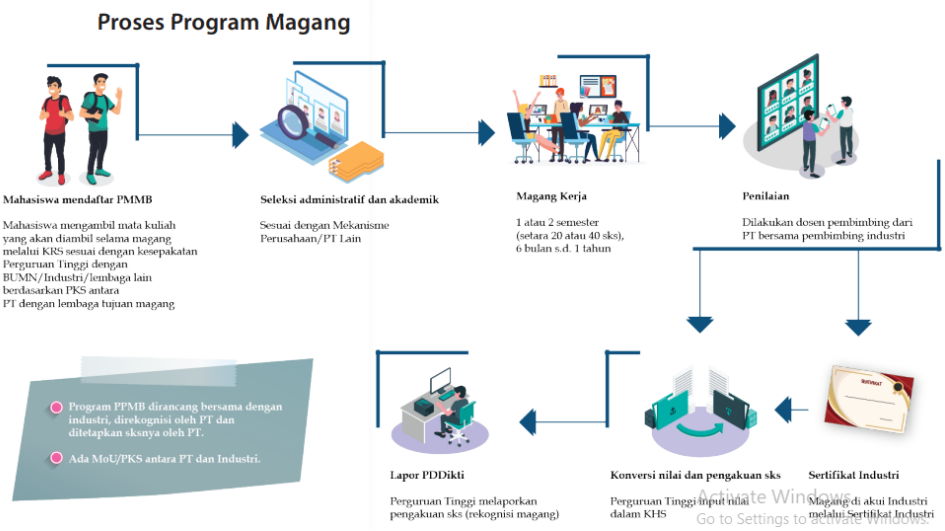


Figure 1 Internship Program Process

2.2 Digital Information System for Field and Academic Collaborative Learning

Hasan et al. 2011 in Hermanto, 2021 state that partnership technology can help organizations solve problems due to poor communication, share information and expertise in previously impossible ways. Cross-functional CIS can help improve communication, coordination, and alliance among members and workgroups to achieve common goals. It provides tools that enable individuals to manage documents, share information and knowledge, and cooperate on shared projects and tasks. It helps organizations to work more efficiently.
Narotama University Surabaya has started to develop an online internship guidance feature on the academic information system or SIMNARO so that students and lecturers can connect from anywhere to consult and report on the progress of these activities. It is equipped with a space to enter a YouTube video link or internship document and a supervisor review column for each report, as shown in the following image.

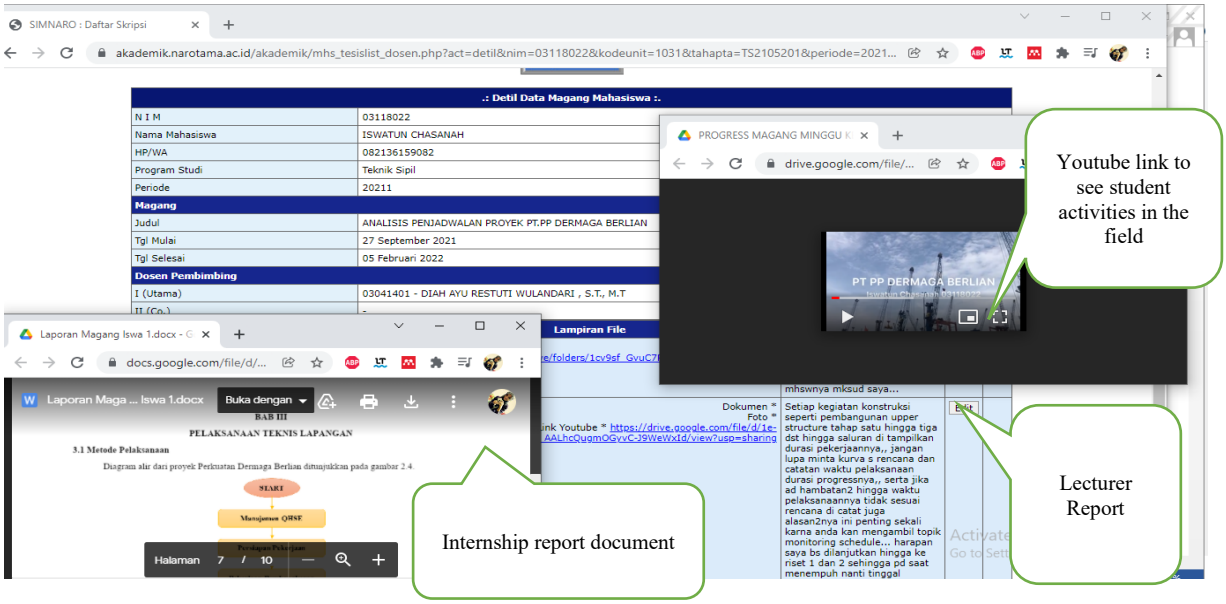


Figure 2 Digital Information System for Internship Learning

3. Methods

This research is a qualitative descriptive study on 18 supervisors and lecturers of the Unnar FTIK Internship course in 2021. Data collection techniques were carried out through forum discussion group (FGD) activities, observation, and documentation. Meanwhile, data analysis was carried out using the Crosstab Method, an analytical method by presenting data with two or more variables but a descriptive relationship (Tjiptono, 2001, p176).

4. Data Collection

The data used in this study are primary and secondary data obtained from questionnaires and interviews with lecturers. It is done to gather knowledge about policies and program implementation, especially in the study program. Below are pictures of FGD activities and questionnaires.

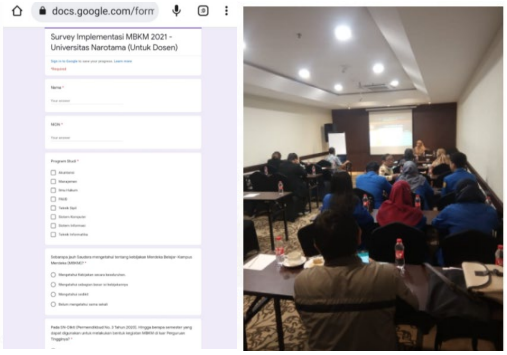


Figure 3 Kuesioner dan Proses FGD

5. Result and Discussion

5.1 Validity Test

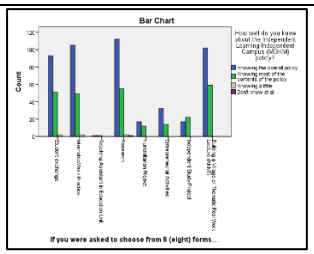
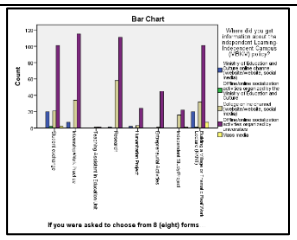
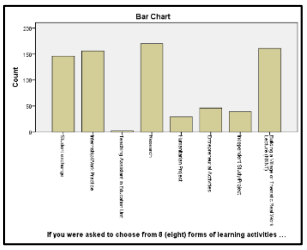
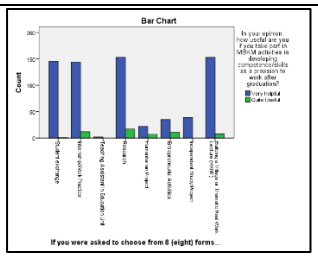
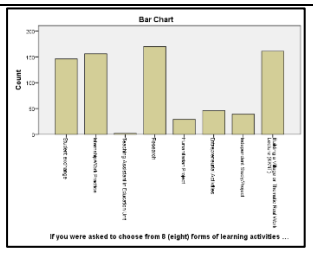
According to Sugiyono (2016), a questionnaire is valid if the question can reveal something to be measured. A validity test is used to gauge whether or not a questionnaire is good. This study was made up of eight questions with a significant level of 5%. The table below shows that all variables are valid.

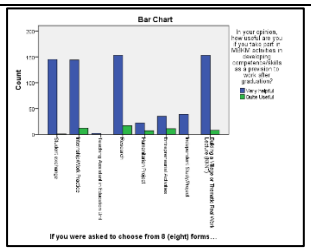
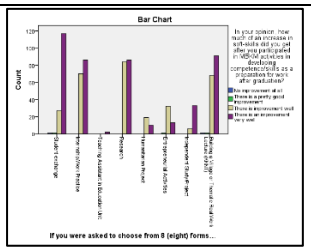
Table 1. Variable Validity Test- Case Processing Summary

Cases	Valid		M		T	
	N	Percent	N	Percent	N	Percent
How well do you know about the Independent Learning-Independent Campus (MBKM) policy? * STUDY PROGRAM	749	100.0%	0	0.0%	749	100.0%
Where did you get the Independent Learning-Independent Campus (MBKM) policy? * STUDY PROGRAM	749	100.0%	0	0.0%	749	100.0%
Does your study program have a previous program following the form of the Independent Learning-Independent Campus (MBKM) activity? * STUDY PROGRAM	749	100.0%	0	0.0%	749	100.0%
Do your study program already have curriculum documents, guidelines, and operational procedures for participating in MBKM activities? * STUDY PROGRAM	749	100.0%	0	0.0%	749	100.0%
In your opinion, do MBKM activities for higher education meet the needs of future graduates? * STUDY PROGRAM	749	100.0%	0	0.0%	749	100.0%
In your opinion, will off-campus learning activities provide additional competencies such as skills in solving real complex problems, analytical skills, professional ethics, etc.? * STUDY PROGRAM	749	100.0%	0	0.0%	749	100.0%
In your opinion, how beneficial is it if your students take part in MBKM activities in developing competence/skills as a provision for work after graduation? * STUDY PROGRAM	749	100.0%	0	0.0%	749	100.0%
In your opinion, how much of an increase in soft skills did your students get after participating in MBKM activities in developing competence/skills to prepare them for work after graduation? * STUDY PROGRAM	749	100.0%	0	0.0%	749	100.0%

5.2 Crosstab Analysis Result

The crosstab analysis output describes the relationship between variables, such as knowledge of MBKM policies, how to obtain information with the MBKM process, and so on. It was reviewed through the Chi-Square test. Here are the results of the analysis per variable.

Variable	Bar Chat	Pearson Chi-square	Asymptotic Significance (2-sided)	Meaning
Knowledge of MBKM policy		17.155	702	18 cell 56.3% have expected count less than 5. The minimum expected count is 0.00
How to get information related to MBKM policy		98.716	0.000	22 cells (55.0%) have an expected count less than 5. The minimum excepted count is 0.01
Availability of guide curriculum documents and operational procedures for the Implementation of MBKM in Study Programs		-	-	No statistics are calculated because do you think off-campus learning activities provide additional competencies such as skills in solving complex real problems, analytical skills, professional ethics, etc.? It's constant.
The relationship between MBKM activities and the needs of future graduates		45.689	0.000	5 cells (31.3%) have an expected count less than 5. The minimum expected count is 15.
The relationship between perceptions of off-campus learning activities provides additional competence for solving decision-making on real complex problems.		-	-	No statistics are calculated because do you think off-campus learning activities provide additional competencies such as skills in solving complex real problems, analytical skills, professional ethics, etc.? It's constant.

The relationship between the benefits of participating in MBKM and student competency development		45.689	0.000	5 cells (31.3%) have an expected count less than 5. The minimum expected count is 15.
The relationship between improving soft skills and MBKM activities in developing competence as a provision for work after graduation		79.906	0.000	18 cells (56.3%) have an expected count of less than 5. The minimum expected count is .0.01

6. Conclusions

The results of Crosstab calculations and bar charts show that the Civil Engineering Study Program of Narotama University has carried out the MBKM internship program well. Experience for six months can improve soft skills, which can be used for work after graduation. It is reflected in the progress report on the Simnaro website for online internship guidance to supervisors. Students can see project problems and then learn how to solve them. They also understand whether implementing the construction and planning follows the applicable rules and theories.

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Sri Wiwoho Mudjanarko, Starting his career in construction services since 1991, since 2000 he has worked as a Lecturer in Civil Engineering at Narotama University, Surabaya and as an Extraordinary Lecturer in the Master of Civil Engineering at the 17 August 1945 University of Surabaya. Diploma III Civil Engineering at Petra Christian University, Surabaya, Undergraduate Civil Engineering Narotama University, Surabaya, Magister Civil Engineering at Sepuluh Nopember Institute of Technology, Surabaya, Doctoral Civil Engineering at Brawijaya University, Malang, Engineerin g Professional Program (Ir) Universitas Gadjah Mada (UGM) and in the professional field of Railways. The author is currently serving as the Chancellor of Narotama University, the Head of the Narotama University LPPM, a member / professional committee of the Inter-College Transportation Study Forum (FSTPT), the Indonesian Railroad Society (MASKA) and the Chair of the LPPM Association in Surabaya and its surroundings. He has been awarded Research Grants from the Government of Indonesia on various schemes since 2009 until now.

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