Engaging With Industry Through Internships in Order to Acquire the Skills, Knowledge and Attitudes for the World of Work: The Indonesian Student Experience

Muslihati
Universitas Negeri Malang

Ahmad Yusuf Sobri
Universitas Negeri Malang

Adam Voak
James Cook University

Brian Fairman
James Cook University

Surjani Wonorahardjo
Universitas Negeri Malang

Ani Wilujeng Suryani
Universitas Negeri Malang

Merdeka Belajar Kampus Merdeka (MBKM) aims to prepare Indonesia’s future generation of students by encouraging a learning process that facilitates the acquisition of knowledge, skills and attitudes needed for the world of work. This research examined the learning experience of Indonesian students who participated in a recent ‘internship program’. It examines their developing perspectives as they sought meaningful experiences that could provide them with the confidence to enter the environment of professional work. The study used a qualitative data collection and analysis method which involved a survey of 107 University of Malang students and involved conducting individual and focus group discussions in order to ascertain the student’s individual perspectives on learning. Our research seeks to identify improvements that could be made to the program in order to enhance the learning experience for the students, university management, industry partners and Indonesian educational policy makers.

Keywords: kampus merdeka, work integrated learning, internships, world of work
INTRODUCTION

It is anticipated that 2045 will see Indonesia reach its demographic prime, with a productive age population greater than 60%. For the potential of this ‘golden generation’ to be realised, Indonesia needs to harness the latent power of its workforce, creating a labor force which is agile, competent and ‘work ready’. In response to this generational challenge, the Ministry of Education, Culture, Research and Technology has established a policy for the Higher Education sector called Merdeka Learning Campus Merdeka (MBKM) (Kementerian Pendidikan dan Kebudayaan, 2020a).

Kampus Merdeka (MBKM) aims to prepare Indonesia’s future generations by encouraging a learning environment that facilitates the acquisition of knowledge, skills, and attitudes needed for the world of work (Fuadi & Aswita, 2021; Purwanti, 2021; Siminjutak, Voak, & Fairman, 2022). One of the flagship activities in the MBKM program is an industrial ‘Internship’ or Work-Integrated Learning processes (WIL). This WIL initiative has been platformed to provide a valuable conduit to bridge the gap between Higher Education scholarship and the needs of Industry (Garcia & Puig, 2011). By enhancing and enriching the student learning experience, MBKM facilitates a fundamental change in educational thinking and provides a paradigm shift in how the higher education sector could engage more profitably with industry (Kodrat, 2021; Laga, Nona, Langga, & Jamu, 2021).

This paper will largely focus on an examination of the industrial internship element of the MBKM policy, which encourages attendance by Higher Education students from non-teaching and education study programs (Kementerian Pendidikan dan Kebudayaan, 2020b). It will help them to gain valuable hands-on learning experience in the industrial world and equip them with essential industry-based competencies (Kodrat, 2021). Kampus Merdeka’s development is in its infancy, and, as such, the implementation of the industry-based learning experiences are yet to be fully documented, recognised and understood. Consequently, the basic challenge to its developing maturity will be to (i) determine what the key learning experiences should entail and (ii) how these approaches should be shaped given Indonesia’s cultural and geographical diversity.

Much of the prior research in this area has focused on the impact of experiential learning on measurable student outcomes, such as Grade Point Averages and interpersonal skill development (Abid, Samuel, Ali, Shoaib, & Warraich, 2022; De Prada, Mareque, & Pino-Juste, 2022). However, limited research is available regarding the issue of what students actually experience or learn through industrial internship programmes (Smith, Ferns, & Russell, 2016). This research aims to fill the current paucity in WIL literature by better understanding what is needed, operationally, to improve lecturer capability and meet students’ perceived needs in this area. It will focus around WIL design and its implementation in order to enhance students’ work learning experience during their industrial internship programs (Smith et al., 2016). Further, this discussion will also highlight the challenges and opportunities which are apparent for WIL opportunities, and consider how they might be deployed to ensure Indonesia’s future economic prosperity (Defrizal, Redaputri, Narundana, Nurdiansyah, & Dharmawan, 2022), (Fairman, & Voak, 2023).

Industrial Internship Program

It is now widely recognised that Internship or well-designed WIL programs can serve as valuable enablers for the development of professional-related skills and employment preparation (Luk & Chan, 2021; Zehr & Korte, 2020). To contribute to this development, MBKM aims to reform the Higher Education system by integrating practical training for students into their academic courses. This detailed examination of the internship program is considered vital because it provides valuable recommendations to education authorities and students regarding the nature of the internship program and specifies the particular interventions needed to make improvements to learning strategies in order to enhance skills and professional growth (Tedjokoesoemo, Nilasari, & Sari, 2021).

This study specifically explores the implementation, benefits, and challenges of industrial internship experiences in the MBKM program. The particular purpose of this research is to explicitly identify the perceived strengths and weaknesses of the internship program at the State University of Malang (UM). The
results gleaned from this study will assist in the evaluation of the existing internship program, allowing the confident fashioning of improvements to the program and to suggest further research which may be needed to improve future program implementation.

The industrial internship program is based on a one semester, 20 week learning experience, and is equivalent to 20 course credits, being book-ended with preparation activities and reporting upon completion. This program can be accessed by students who have a Diploma Four or by Undergraduate students (Kemikbudristekdikti), who have taken a minimum of 80 credits (Kementerian Pendidikan dan Kebudayaan, 2020a). The internship aims to (i) improve the experience and competencies of students within their field of knowledge, whilst simultaneously introducing them to more authentic work-based learning experiences; (ii) provide general input and feedback to the Study Program, adjusting the curriculum according to observed field requirements; and (iii) assist with students making early and informed connections with industry, in order to facilitate greater graduate employment outcomes.

The Internship Program can be implemented in a wide range of industry environments, a spectrum which includes multinational companies, local companies with a good track record of performance, global technology companies, technology-based startups, non-profit organizations, multilateral organizations, universities that are on the QS100 list by science (QS100 by subject), government agencies such as State Owned Enterprises (BUMN) or Village Owned Enterprises (BUMD) and hospitals, together with Micro, Small and Medium Enterprises which have good reputations. Through the auspices of this program, students will benefit from having access to real world work experience, which gives them further certification from the host employer/industry partner, fosters the development of specific skills related to the program being undertaken, and provides valuable mentorship opportunities.

Analysis of the Industrial Internship Program and Learning Experience

Because Industrial internships are off-campus learning programs that place students in authentic work settings, the WIL model is designed to assist interns in gaining job-specific knowledge and skills and provide them with a more holistic learning experience (Hero & Lindfors, 2019; Kozulin & Pressseisen, 1995; Weiss & Li, 2020). Experiences in work environments that require heterogeneous interactions between individuals, will provide opportunities for students to observe, feel, and be directly involved in the work interaction process for the duration of the internship. It is anticipated that this will increase students’ self esteem, emotional intelligence and introduce a plethora of life and social skills. Further, this experience will strengthen resilience of students working in diverse and challenging contexts (Anwar & Rosa, 2019; Bizimana et al., 2020).

At the present time, analysis of the current learning experiences are evaluated through existing online instruments (Fusco & Ohtake, 2019). However, it is anticipated that this research will give a more complete picture of work-based experiences to assist policymakers in evaluating and improving the quality of students’ learning programs. This internship experience will be analyzed within the framework of social learning theory developed by Bandura (2011), since Anjum (2020) argues that social learning theory is a cognitive process that is based on the idea of changing beliefs (affective), concepts and knowledge (cognitive) and enhancing professional and personal learning processes (skills) (Anjum, 2020). We suggest that through participation in internship programs, all these processes provide essential developmental substrata within the context of an internship program.

Determinants of the Industrial Internship Program Learning Experience

Various studies have identified a number of factors that determine the industrial internship experience. Honan and Day (1997) identified six factors that influence the quality of internships, these being (i) the assigned internship assignments, (ii) involvement in organizational processes, (iii) structuring information-seeking tasks, (iv) structuring information-gathering tasks, (v) counseling agency supervisors, and (vi) contact with program supervisors during apprenticeships (Honan & Day, 1979). Subsequent studies have also identified specific predictors of internship experiences, including structural and curricular problems, exposure to alternative assessment systems and experience with quality internship coordinators, program objectives, internship preparation, capped by the explicit evaluation of the internship program (Gryski,
Johnson, & O’toole, 2017). This result is in line with the research conducted by Garcia and Puig (2011), which revealed that the student internship learning experience could be influenced by factors related to the structure of the internship program, such as the content and organization of the internship learning, the quality of resources and the procedures applied (Garcia & Puig, 2011).

Research conducted by Beard & Morton (1998) analyzed students’ perceptions of internship quality and job intention as part of predictors of internship quality. They showed that attitudes, quality of workplace supervision, student personal characteristics, and organizational practices determine the quality of student internships. These authors also identified organizational practices, internship financial policies and compensation as predictors of internship quality. The results align with research conducted by Petrila, Fireman, Fitzpatrick, Hodas, & Taussig (2015) that indicated that a necessary component of a quality internship is prioritizing internships within the institution, both from the financial and programmatic aspects.

**Research Road Map**

Whilst between 2018-2021 the nature of research directions included conducting studies on student careers and academic programs, in 2018, the research shifted to focus on the learning skills which guide students to achieve meaningful scholarship when exposed to external ‘placements’. This research developed a successful conceptualization of personalized learning study roadmaps for students (2019) and student study guidelines (2021) which have advised this study.

This current research now extends this basic research by focusing on the first phase of a collaborative learning partnership between the University of Malang and James Cook University. It analyses the students’ industrial internship learning experiences and compares Indonesian and Australian internship programs, in order to better inform MBKM policy. It was expected that this collaboration may lead to the designing of a joint industrial internship program, according to MBKM principles, between Indonesia and Australia. If this last phase is seen to be successful, it was anticipated that the results may lead to the implementation and strengthening of the MBKM program via joint Industrial Internship activities between Indonesia and Australia. This Roadmap of Research activities is outlined in Figure 1.

**FIGURE 1**

**ROAD MAP OF RESEARCH ON INDUSTRIAL INTERNSHIPS FOR INDONESIAN AND AUSTRALIAN COOPERATION**

![Research Road Map Diagram](image-url)
METHOD

This investigation examined the meaning and interpretations of the views of the students on the experience of an ‘industrial placement’, which we assume are modified by the social and cultural assumptions that inform students’ worldviews (Gomm, 2008). Whilst these views may be subjective, an epistemological paradigm is applied to this research in order to capture a ‘reality’ that was experienced ‘out there’ by the students (Lichtman, 2012). This paper seeks to put ‘form and structure’ to these experiences in order to document and understand the individual learning experiences.

This study surveyed 107 students undertaking a Ministry of Education Culture Research and Technology-sponsored Kampus Merdeka ‘internship program’. It examined the ‘students experiences’ whilst on placement in relation to ‘course-work studies’, and employed participant observations and perspectives which were qualitative in nature, to generate data (Creswell, 2014). The data collection is necessarily qualitative because perspectives are underpinned by a social constructivist worldview, where realities are agreed to be constructed by societal and individual experiences (Punch, K. F., & Oancea, 2014).

Overall, to help to locate the circumstances of the cohort, an explanatory sequential mixed methods design was used, where quantitative data collected in the early phase to establish the nature of the cohort was used (Creswell & Creswell, 2017; Lune, H. & Berg, 2017). In this approach, the quantitative survey results were used to develop appropriate questions for in-depth interviews with a subset of the sample that participated in the survey.

The survey collected quantitative data which allowed the exploration of previous student learning experiences of those who were undertaking industrial internship programs. Questionnaires were developed which included learning experiences in cognitive aspects (increasing knowledge insight, critical and analytical thinking skills) and affective (self-management, emotions, soft skills, interpersonal skills, and psychomotor technical and operational skills). Consequently, semi-structured interviews were conducted to collect rich data about students’ personal experiences, strengthened by a series of focus group discussions with critical informants, who were all students participating in the MBKM Industrial Internship.

The research location was the Malang State University Campus in a student internship location. Respondents were randomised through choosing a proportionate stratified random sample taken from the students participating in the industrial internship program (Currie, 2009). Sandi & Nurhayati (2020) opined that an effective sampling approach for examining entrepreneurial education impacts can be derived from a convenience sampling method, with the sample size informed by the Slovin formula by calculating the sample size needed to reach a certain confidence interval when sampling a population. Further, qualitative data were obtained through interviews with research informants who are the leaders of the State University of Malang as well as representatives of industrial partners. These informants have the authority to make policies related to the industrial internship program and are implementers of the industrial internship program. Quantitative data was analyzed descriptively, whilst the data collected through focus group discussions with student representatives from the MBKM Internship participants, was analyzed using content analysis techniques with an emphasis on an ‘ethos of objectivity’ creating a ‘scientific and value-free way of avoiding bias’ (Curtis & Curtis, 2011).

Research Purpose

This study explored the implementation, benefits, and challenges of industrial internship BKP in the context of MBKM at the University of Malang. In particular, this research:

1. Examined student learning experiences in the MBKM industrial internship program;
2. Analyzed the advantages and disadvantages of implementing MBKM industrial internships for this cohort of students.
RESULTS

MBKM Student Learning Experience

Industrial internship is one of the Merdeka Campus programs released by the Ministry of Education, Culture, Research, and Technology. Students from various universities can join this program by registering through the Ministry of Education, Culture, Research, and Technology website MBKM. On the website, students can freely choose the industrial sector they are interested in, which is usually directed by their respective fields of study. Six industrial sectors are offered: (i) technology, (ii) services, (iii) state-owned enterprises, (iv) health and services, (v) multilateral and non-profit institutions, and (vi) other relevant sectors.

Students can participate in an industrial internship through administrative selection which applies criteria such as valid status as a student at a university and evidence of academic achievement index score. An independent campus program team of the Ministry of Education, Culture, Research, and Technology are charged with the conduct of the selection process. Students who pass the selection process are announced through a decree released by the Ministry’s website, and to ensure transparency of process, every student and university can access this information. A specific individual is assigned to the process by the university campus and this person manages each college’s industrial internship activities. In addition to the Ministry’s selection team, partner companies that offer industrial internships are involved in the selection process, where teams from each company select prospective participants through their profiles and achievement data.

In Indonesia, especially at the State University of Malang, there are two models of industrial internships. These are (i) industrial internships financed by the Ministry of Education, Culture, Research, and Technology and (ii) industrial internships, which are managed independently by the campus. This research focuses on students participating in the MBKM industrial internship, which is funded by the Ministry of Education, Culture, Research, and Technology.

The duration of the MBKM industrial internship is 5-6 months, a period which covers the preparation, internship implementation and reporting stages. During these activities, students participate in activities designed by the company, and are accompanied by (i) mentors from the company where the internship is hosted and (ii) field assistant lecturers determined by the campus. Mentors play a valuable role in assisting the industrial internship process, by reviewing student performance, selecting activities to perform, designing problem-based work tasks, organising team building activities and supporting interns to engage with the company.

The MBKM industrial internship program provides several advantages for students. After joining this program, they receive an internship certificate which adds value to their competency profile and can be used when applying for jobs after graduation. Students can also obtain expert certifications such as a Halal supervisor certificate from National Agency of Drug and Food Control Indonesia (BPOM RI) and those used by companies like Microsoft.

The industrial internship program provides students with cognitive learning experiences in the form of developing insight, knowledge and critical thinking skills, affective experiences in the form of developing work attitudes and character, as well as psychomotor experiences in the form of implementing work skills and developing new skills. The following is data on the learning experience of industrial interns presented by 107 students.

This data set illustrates that the majority of students claim to get a memorable cognitive learning experience, especially in terms of developing new knowledge, strengthening mastery of theory, improving the ability to analyze contextual conditions in the application of science, analyzing work difficulties and authentic contexts, comparing the application of several theories in natural contexts, the ability to examine opportunities in achieving work targets and experience in being creative by applying theories according to their fields of knowledge.
TABLE 1
ACCUMULATIVE DATA OF INDUSTRIAL INTERNSHIP STUDENTS’ COGNITIVE LEARNING EXPERIENCES

<table>
<thead>
<tr>
<th>No</th>
<th>Statement</th>
<th>Answer Options</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Very suitable</td>
</tr>
<tr>
<td>1.</td>
<td>Through industrial internships, I gain new knowledge in my field of science.</td>
<td>52.3%</td>
</tr>
<tr>
<td>2.</td>
<td>I got theoretical reinforcement in the field of science through industrial internships.</td>
<td>41.1%</td>
</tr>
<tr>
<td>3.</td>
<td>I analyze the contextual conditions of applying the field of science through industrial internships.</td>
<td>42.1%</td>
</tr>
<tr>
<td>4.</td>
<td>I analyze the difficulties of working in a natural context through industrial internships.</td>
<td>37.4%</td>
</tr>
<tr>
<td>5.</td>
<td>I compare the application of several theories through industrial internships.</td>
<td>30.8%</td>
</tr>
<tr>
<td>6.</td>
<td>Through industrial internships, I explore opportunities to achieve work targets.</td>
<td>47.7%</td>
</tr>
<tr>
<td>7.</td>
<td>I create the application of theory in my field of science through industrial internships.</td>
<td>34.6%</td>
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</table>

Through the focus group discussion forum, industry interns said they had valuable experience in collaborating with industrial staff to develop work programs and to create the latest innovations. According to students, the learning experience in industrial internships is generally relevant to the theory of the field of science. The different contexts in the company provide opportunities for them to gain new knowledge that is different from the theory taught on campus, and they have suggested that the demands of the field make them think more practically:

“I can apply the theory I get in lectures directly when carrying out industrial internships. Sometimes I have taken the relevant theories in semester 3, so I have to open my notes again so I can remember the theory and apply it in the field correctly” (HRA/22092022/MLG/Batch 1).

“By following this internship, I could explore methods of solving cases when my coding went wrong. Usually, when I go to college, I will ask my friends if I have problems, but during this internship, I have to be able to and dare to try” (MRF/22092022/MLG/Batch1/PT).

“At first, I only knew the theory regarding the right way to become HRD. Theoretically, it is easy to understand when entering the world of industrial internships is not as easy as I imagined” (RA/22092022/MLG/Batch 1).

Thus, the experience during industrial internships is clearly seen to provide an opportunity to practice analyzing problems directly regarding facts in the field and provides a very challenging learning experience:

“I was given a project-based task which had to be completed quickly according to a predetermined time line. This allows me to manage my time better and have an idea of what it would be like to be an honest worker” (MM/22092022/MLG/Batch 1).
“There was a situation where I was surprised to be asked to do data analysis when I did not master the knowledge. However, now I can because I am assisted by mentors and look for tutorials through social media” (TM/22092022/MLG/Batch 1).

“I know the concept of managing a tourist village, but participating in this industrial internship, opened my eyes to the fact that not all theories can be used in the community. Innovation is needed so that a startup remains sustainable” (IAS/22092022).

Industrial internships have also been seen to develop critical thinking skills, especially when mentors assign problem-based activities by studying real problems. We conduct surveys, observations, and interviews, and the process encourages students to think critically. In the process, we often consult with mentors and discuss with teammates were the topics of discussion tend to be multidisciplinary so that our insights develop.

“At the beginning of the industrial internship, each student will be included in the team; each team will be given a project with a particular case or challenge. The project will be presented during the final report on the implementation of the industrial internship” (TM/9102022/MLG/Batch 1).

“Very often I do FGD activities and presentations to mentors to find out whether what I am doing is correct or not. Revision has become a daily routine” (YER/9102022/MLG/Batch 1).

“Struggling to find customers is an unforgettable moment. How difficult it is to be a sales target to get customers” (MAN/9102022/MLG/Batch 1).

The MBKM industry internship is also seen to provide a learning experience which contributes to an increase in creativity. Students said that all industrial internship activities help students prepare to adjust to the world of work, even if the experience is transferable, so even though they will work in different fields later, their abilities and experience during industrial internships are beneficial. Developing transferable skills and adapting to new work environments remains an important and critical skill for the golden generation.

### TABLE 2
EXPERIENCES OF INTERACTING WITH THE NEW ENVIRONMENT

<table>
<thead>
<tr>
<th>No</th>
<th>Statement</th>
<th>Very suitable</th>
<th>Suitable</th>
<th>Less than Suitable</th>
<th>Not Suitable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I studied how to interact in the world of work through industrial internships.</td>
<td>53.3%</td>
<td>44.9%</td>
<td>1.9%</td>
<td>0</td>
</tr>
<tr>
<td>2.</td>
<td>Industrial internships guide me to time discipline</td>
<td>59.8%</td>
<td>37.4%</td>
<td>1.9%</td>
<td>0.9%</td>
</tr>
<tr>
<td>3.</td>
<td>Industrial internships guide me to be responsible at work</td>
<td>65.4%</td>
<td>33.6%</td>
<td>0.9%</td>
<td>0</td>
</tr>
<tr>
<td>4.</td>
<td>Through industrial internships, I gained experience in empathizing with coworkers and customers</td>
<td>57%</td>
<td>41.1%</td>
<td>0.9%</td>
<td>0.9%</td>
</tr>
<tr>
<td>No</td>
<td>Statement</td>
<td>Answer Options</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
| 5  | Industrial internships gave me the experience of communicating politely with coworkers and customers | Very suitable: 63.6%  
Suitable: 34.6%  
Less than Suitable: 1.9%  
Not Suitable: 0% |
| 6  | Industry internships gave me the experience of respecting my coworkers and customers | Very suitable: 63.6%  
Suitable: 34.6%  
Less than Suitable: 1.9%  
Not Suitable: 0% |
| 7  | The industrial internship gave me the experience, to be honest, at work    | Very suitable: 66.4%  
Suitable: 33.6%  
Less than Suitable: 0%  
Not Suitable: 0% |
| 8  | During my industrial internship, I learned how to deal with and solve problems on the job. | Very suitable: 55.1%  
Suitable: 39.3%  
Less than Suitable: 3.7%  
Not Suitable: 1.9% |
| 9  | After joining the industry internship, I was able to face the difficulties and challenges of work | Very suitable: 53.3%  
Suitable: 46.7%  
Less than Suitable: 0%  
Not Suitable: 0% |
| 10 | I feel ready to enter the workforce after taking an industrial internship | Very suitable: 36.4%  
Suitable: 61.7%  
Less than Suitable: 0.9%  
Not Suitable: 0.9% |
| 11 | I feel ready to enter the workforce after taking an industrial internship | Very suitable: 34.6%  
Suitable: 61.7%  
Less than Suitable: 2.8%  
Not Suitable: 0.9% |

Industrial internships are also claimed to hone students’ skills in interacting with new environments, especially in multicultural contexts. Students say that they learn to respect and adapt to colleagues from different cultural backgrounds. In addition, they try to be careful to understand the company’s work culture and supervisor’s characteristics to avoid violating the rules and principles during industrial internships.

“I am faced with being able to make customers comfortable so they do not feel deterred from using products from our company. There are diverse patterns of interaction; customers are very friendly, stubborn, and even like to demand things that are not according to company SOPs” (BR/22092022/Batch 1).

“Each team forms the implementation of industrial internships; I was placed in a team that I did not know. Maybe because my team is primarily from outside Java, it makes me very uncomfortable. But after a week or so, I started to adapt to my surroundings” (HK/9102022/MLG/Batch1).

“The scope of the industrial internship I participated in was international, so I had to adapt to the work culture applied in the industry” (GDP/22092022/MLG/Batch 1).

In particular, students said that they tried to learn to overcome difficulties in communicating with people from different cultures during the MBKM internship process. Communication and collaboration are also felt to increase the ability to cooperate with various parties (Fairman, Voak, & Babacan, 2022). Many students felt that industry internships also provide authentic experience in interacting with a range of significant people, including government representatives, industry and education superiors and potential customers. This experience was thought to be valuable because it helped them to polish their ability to communicate well, think critically and understand the importance of the public/customer’s point of view. This experience is extremely significant for students who are preparing to enter the world of work.

Students also experience obstacles during the industrial internship process. They say that they are afraid of being misunderstood and worried if their work does not match the mentor’s expectations. As a solution, they always try to consult and communicate with mentors so that the obstacles they face can be immediately
overcome. In addition, sometimes the technology owned by students is not equivalent to that of the host organisation’s, so students often need to learn to use new software.

“At first, I was terrified to work on the given project independently, even though there was guidance from the mentor. Afraid of the results that are not according to the customer’s wishes or not according to the provisions of the company” (HRA/22092022).

“I find it challenging to divide my time between college and industrial internships. Considering that there are many agendas on campus, I always communicate with mentors to get the best solution for what I need to do” (DRZA/9102022/MLG/Batch2).

“At first, I had difficulty using the software used in my internship in data administration. So I have to learn how to use it again. Finally, over time I can use the application” (TM/22092022/MLG/Batch1).

Students noted that they soon realized that their responsibility as a staff member becomes greater because they deal directly with the community and with customers, and they find that these contacts can often be very demanding. They also learn time management, punctuality, the value of money and time.

“Initially, students during internships had to adapt to the work environment; they sometimes did not work on assignments on time, did not entertain customers well, and forgot to make attendance. As a fellow intern, I have to remind them to be more optimal in doing internships. The students have shown a significant change in not even two weeks by reminding each other” (DRZA/9102022/MLG/Batch2).

“There must have been mistakes at the beginning of the internship, but I always try to improve myself and do an evaluation” (TM/22092022/MLG/Batch1).

“When making a mistake, it will be communicated with other students or directly communicated with the industrial internship mentor so that they can find out how improvements must be made in the future” (HK/9102022/MLG/Batch1).

On reflection, students indicated that the industry internship experience made them try to improve the quality of their performance. Respondents said that the industrial internship experience was instrumental in developing independence, and further, the experience of working in a team made them more empathetic and caring for their teammates.

**TABLE 3**

**DATA ON IMPROVING THE SKILLS OF INDUSTRIAL INTERNSHIP STUDENTS**

<table>
<thead>
<tr>
<th>No</th>
<th>Statement</th>
<th>Answer Options</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Very suitable</td>
</tr>
<tr>
<td>1.</td>
<td>Industry internships provide experience to improve my skills at work</td>
<td>56.1%</td>
</tr>
<tr>
<td>2.</td>
<td>Through my industrial internship, I learned how to communicate with company leaders</td>
<td>57%</td>
</tr>
<tr>
<td>3.</td>
<td>Through industrial internships, I learned how to negotiate with corporate partners</td>
<td>33.6%</td>
</tr>
<tr>
<td>No</td>
<td>Statement</td>
<td>Answer Options</td>
</tr>
<tr>
<td>----</td>
<td>----------------------------------------------------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Very suitable</strong></td>
</tr>
<tr>
<td>4</td>
<td>Through industrial internships, I learned how to make decisions</td>
<td>47.7%</td>
</tr>
<tr>
<td>5</td>
<td>Through industrial internships, I integrate the theory I learned through lectures into the world of work</td>
<td>33.6%</td>
</tr>
<tr>
<td>6</td>
<td>Through industrial internships, I practice solving problems that I face</td>
<td>51.4%</td>
</tr>
<tr>
<td>7</td>
<td>I apply scientific field theory through industrial internships</td>
<td>34.6%</td>
</tr>
</tbody>
</table>

In addition to providing cognitive and affective learning experiences, MBKM industrial internships also provide skills-building opportunities. Students have the opportunity to learn how to make crucial decisions.

“The overall learning experience that I have gained is that I feel more prepared to enter the workforce because, during this industrial internship, I have gained new skills that will support my field of work. Besides that, I can feel how to put into practice the knowledge I got when I was in college” (HK/9102022/MLG/Batch1).

“The most challenging thing in implementing this industrial internship program is how we can achieve the given target. For example, each project per week or for a certain period must achieve what?” (TM/22092022/MLG/Batch1).

“Usually, every time there is an assignment, there will be a time limit, and if it is late, you must report it to the mentor. In addition, every task has a minimum indicator that must be completed” (DRZA/9102022/MLG/Batch2).

As skills develop, students indicate that they feel better prepared and more confident to enter the workforce. Unlike when working on group assignments in lectures during the industrial internship program, students are asked to work independently and/or in work-team situations, tasked to carry out projects from needs analysis, development, implementation and evaluation.

“I feel that by participating in this industrial internship program, I gain experience to be able to apply the knowledge I learned during college, even though it is not the same as a whole” (DRZA/9102022/MLG/Batch2).

“If my skills increase with this industry internship, I can master how to communicate and feel when dealing directly with clients or customers” (BR/22092022/Batch 1).

“I feel that the experience I gained when implementing the MBKM industrial internship program was precious because I could practice directly in a different world of work when I practised in lectures” (AP/9102022/MLG/Batch2).

Students generally became more optimistic about their future careers because they already has experienced the world of work. The data suggests that implementing the MBKM industrial internship program appeared to become a natural laboratory for students.
**MBKM Monitoring and Evaluation**

One of the key components in implementing the MBKM industrial internship program is the fulfilment of administration tasks and reporting when the program is running. The administrative forms that need to be filled by students are daily notes (activity logbooks) and implementation reports for the monitoring and evaluation process.

“Usually, the evaluation is carried out every week to discuss with the mentor the project’s progress and what obstacles are experienced” (BR/22092022/Batch 1).

“Every day we are asked to report what was done on implementing industrial internships in the form of a daily logbook on the independent learning system of the independent campus. In addition, every week, we discuss what has been done and, if there is a problem, how to solve it” (AP/9102022/MLG/Batch2).

“Every day required to fill in the daily logbook in the MBKM sister, then the mentor will check through the system, and if there are students who do not fill in or experience obstacles, they will be contacted for the discussion process” (TM/22092022/MLG/Batch 1).

The monitoring of MBKM industrial internships is carried out centrally on the independent learning system of each campus by the Ministry of Education, Culture, Research and Technology in coordination with campuses and industrial internships. In this system, activities can be tracked in real time. In addition, each mentor can monitor an intern’s progress through the logbook section which outlines daily activities.

Monitoring is carried out to assist students in taking full advantage of industrial internship activities by mutual agreement. The evaluation is divided into several parts, including: (i) process evaluation which is carried out every week between the group and the mentor or between combined groups and (ii) the evaluation of the results, the last phase of the industrial internship, which is carried out through the presentation of a final project report. Evaluation is not only focused on how students may have achieved the results but how they process and contribute to each problem or project resolution.

Industrial internships are a pivotal component of implementing the independent learning-independent campuses (MBKM). MBKM’s goal, to harmonize university curriculum with the world of work through the alignment of internship programs with their future career expectations. The advantages and disadvantages of implementing the MBKM industrial internship program are as follows.

**TABLE 4**

**STRENGTHS AND WEAKNESSES OF THE MBKM INDUSTRIAL INTERNSHIP PROGRAM**

<table>
<thead>
<tr>
<th>No</th>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Providing students with ‘hands-on’ learning experiences in the business world of work</td>
<td>A system that is still in the development process makes it difficult for students.</td>
</tr>
<tr>
<td>2</td>
<td>Provision of mentors to help conduct student learning in internships</td>
<td>The process of disbursing funds for a living sometimes still experiences problems.</td>
</tr>
<tr>
<td>3</td>
<td>Students gain new skills</td>
<td>Alignment of curriculum between universities and internships that are still difficult to get credit conversions</td>
</tr>
<tr>
<td>4</td>
<td>Students have the readiness to enter the world of work</td>
<td>Limited funds so that you cannot take part in inter-island internships</td>
</tr>
<tr>
<td>5</td>
<td>Provision of incentives to help with living expenses for student internships</td>
<td>The implementation of internships is limited to national companies</td>
</tr>
</tbody>
</table>
DISCUSSION

MBKM Student Learning Experience

Industrial internships (internship programs) are an off-campus learning program that places students in real work location settings (Tistogondo et al., 2021; Tuasikal, Hartoto, Prakoso, Kartiko, & Haryanto, 2021). The aim of the internship program is to build graduate competency in the cognitive, affective and psychomotor domains through providing real-life / real-work knowledge and skills transfer learning experiences (Hero & Lindfors, 2019; Kozulin & Presseisen, 1995). There are various studies that have successfully identified the factors that determine the success of an industrial internship. Research conducted by Honan and Day (1979) identified six factors that influence the quality of apprenticeships, namely the relevance of the assigned program, intern involvement in organizational processes, the structure of information-seeking and information gathering tasks, counseling abilities of institutional supervisors, and the amount of contact and interaction with program supervisors (Honan & Day, 1979). Various subsequent studies have also succeeded in identifying specific predictors of apprenticeship experience success, including structural and curricular issues, appraisal systems and quality of apprentice coordinators, program objectives, apprentice preparation, and apprentice program evaluation (Alpert, Heaney, & Kuhn, 2009).

These results are in line with research conducted by Garcia and Puig (2011) which revealed that the student internship learning experience could be influenced by factors related to the structure of the internship program, for example the content and organization of internship learning, the quality of resources, and the procedures applied (Garcia & Puig, 2011). Other studies have also analyzed student perceptions of internship quality and work intention as part of the predictors of student internship quality. Research conducted by Beard and Morton (1998) revealed that attitudes, quality of workplace supervision, student personal characteristics, and organizational practices determine the quality of student internships (Beard & Morton, 1998). This is in line with other researchers findings which concluded that students have the perception that apprenticeships provide higher practical and career-added value than formal business class education (Hergert, 2009; Starr-Glass, 2006). Beard and Morton (1998) also identified organizational practices, as well as policies and financial compensation of apprentices as predictors of apprentice quality (Beard & Morton, 1998). These results concur with research conducted by Petrila et al. that found quality internships are the product of dedicated financial and programmatic investment by the educational institution (Petrila, Fireman, Fitzpatrick, Hodas, & Taussig, 2015).

The Advantages and Disadvantages of Implementing MBKM Programs

This research found that MBKM programs have the potential to provide direct learning experiences for students. These findings are also shared by other researchers who concluded that internship programs assist students to apply their knowledge (Ghosh & Jhamb, 2021). Further, the existence of a dedicated mentoring system provided by the host employer also enhances the student learning experience and an acceleration of student adaption to the world of work and workloads (Jamison, Clayton, & Thessin, 2020). The existence of incentives from the Ministry of Education and Culture for students who participate in the internship program also provides an additional motivation to students (Cockayne, 2022).

MBKM internship program while a positive initiative needs closer operational scrutiny around program management from the Ministry of Education and Culture. The infancy of the program means that it is yet to reach its full potential (Venkatasubramanian, 2019) and overtime with greater investment into sector wide management systems would enhance opportunities for further success. Further, the credit conversion program offered by the Ministry of Education and Culture requires greater formalisation, acceptance and harmonisation with University policy makers and administrators (Afriansyah, Voak, Fairman, Suryono, & Muslim, 2022). This asymmetry often leads to disappointment amongst the various stakeholders (Tsai, Whitelock-Wainwright, & Gašević, 2020). Additionally, the funding scope provisioned by the Ministry of Education and Culture directly impacts on the quality of the internship program for students. Disparity and limitations in funding allocations can directly impact on the student and host employer experience regarding work comfort. Juliati (2021) noted that ‘work comfort’ was one of the factors that is very influential in job results (Juliati, 2021).
The researchers believe a number of recommendations could enhance not only the strategic but also operational nature MBKM internship programs. If implemented effectively, Industrial internships could provide a valuable connecting mechanism between often insular universities and the industrial world. Notably, student learning experiences of MBKM industrial apprenticeship program can be enhanced by:

1. improving the industrial apprentice academic value conversion policy, particularly at the study program level;
2. providing greater clarity around what constitutes learning achievement and the parameters around student/employer fit /matching that can contribute to learner success;
3. framing expectations / responsibilities of funding bodies, students, host employers and universities within internship programs;
4. simplifying the process for dispursement of program funds; and
5. involving universities more in the process of higher-order program design and development.

CONCLUSION

Thorough the eyes of the Indonesian students, the ‘internship program’ has successfully challenged their views of the world of work in specific and meaningful ways. Building a resilient and capable human resource capability in Indonesia to meet the expectations of the ‘golden generation’ is going to be a journey in itself, and this study has highlighted the improvements that government policy makers, university management and key stakeholders in industry could implement to improve the ‘experience’ of the MBKM industrial internship program. These improvements could include providing clarity of learning achievement by documenting outcomes and facilitating a data bank or jobs desk within participating internship companies to match student expectations with the most appropriate industry setting. The Ministry’s disbursement of funds to the participating institutions could be more streamlined and simplified, which could assist universities to align their management and curriculum requirements with the industry internship partners. Beyond these findings, the authors believe that further research is required into the implementation aspects of the internship programs in order to ensure that the policy imperatives of MBKM are succeeding in incorporating industrial internship values with the most meaningful student learning outcomes.

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REFERENCES


Program: Implementation & Impact of MBKM Internship in Construction and Infrastructure Industry at Narotama University, (3), 4075–4081.


