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Evaluation of student internship programs to support the sustainability of vocational education institutions and industrial cooperation programs

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ABSTRACT

The internship program is an annual routine activity in all faculties at Universitas Negeri Yogyakarta (UNY). This program implements a link and match between educational institutions and industry but has not been evaluated comprehensively. Therefore, conducting program evaluation research using the Context, Input, Process, and Product (CIPP) model is important. The type of research used is program evaluation research with the CIPP model. Data collection techniques in this research used questionnaires, interviews, and focus group discussions. The research subjects were UNY students who were grouped into four groups. Data were analyzed descriptively and quantitatively. The results showed that the context aspect of the internship program (goals and objectives) was in accordance with the graduate profile set at UNY. However, the general policy for organizing internships during the pandemic still needs to be developed. The systems and procedures of the academic community support the internship program, but there is still a need to improve cooperation documents and internship information systems for all faculties. The implementation of the internship program is in accordance with the activity plan set at UNY, but SIPKL needs to be developed to equalize the perception of field supervisors. The product of the internship program is in accordance with the goals and objectives set at UNY, but some students (34.16%) still have not received a job offer from the internship site. The results of this research can contribute to developing a quality-oriented internship program, which will then positively impact the cooperation relationship between universities and industry. Thus, a good working relationship will benefit both parties and potentially develop cooperation in other programs.

INTRODUCTION

Vocational education has a strategic role in the development of Human Resources (HR) because the orientation of vocational education is to prepare students to enter the world of work and entrepreneurship. The main objectives of vocational education are to prepare individuals for the world of work, identify preferred occupations, provide work preparation, and support continuous development throughout working life (Billett, 2022). The history of vocational education and training is characterized by the exchange of experiences and mutual communication between people about their work and work practices (Barabasch et al., 2021). Therefore, vocational education must have a close relationship with employers, businesses, and industry (Markova et al., 2022).

The closeness of vocational education to the industrial world results in a learning process that is tailored to the competency needs in the world of work (Jalinus et al., 2023). Thus, vocational

education institutions must have a close relationship with job providers, namely the industrial world. The closeness between vocational education institutions and industry means that the industry is involved in several aspects of education, starting from the acceptance of students (input), the learning process (process), and evaluation (evaluation) to the distribution of graduates (output). Vocational education equips students with knowledge, skills, and practical abilities that are valuable to the business world, especially in the context of rapid industrial change (Anwar et al., 2023).

The closeness of vocational education to the world of work is that vocational education planning must be adjusted to the needs of the world of work, from curriculum to assessment and distribution of graduates (Rahmadhani et al., 2022; Yang et al., 2023). An adaptive curriculum model is recommended, which modifies the content of the curriculum to align with the situation, conditions, and needs in the field (Rahmawati et al., 2021). Thus, the vocational education curriculum must be prepared based on the needs of the world of work, must be developed following the dynamics of the world of work, and must be able to anticipate various changes and developments that may occur in the world of work. Cooperation between vocational schools and industry is seen as a solution to improve the competencies, skills, knowledge, and attitudes of students needed by industry, bridging the gap between vocational education and the world of work (Zhao & Ko, 2022). This effort aims to create a link and match between vocational education institutions and the world of work.

The internship program for vocational education students aims to provide competency application experience and competency development through experiential learning to gain hard skills (skills, complex problem solving, analytical skills, etc.), as well as soft skills (professional/work ethic, communication, cooperation, etc.) and entrepreneurial insights from the industry where the internship is held (Anwar et al., 2023; Istiadi, 2022; Iwacewicz-Orłowska, 2022; Yusuf & Basrowi, 2023). Industrial practice, in general, aims to enable students to develop and improve insights into the latest science and technology in their fields, which are carried out directly in industry (Anwar et al., 2023). Industrial practice allows students to gain real-world experience and apply the knowledge they have gained in a practical environment (Kamdi & Dewi, 2019). The principle of work-oriented education cannot be separated from the development of the world of work, both in terms of human resources, science, and the latest technology.

Industrial practice learning that involves students directly at the work site has a tendency to improve competency achievement in cognitive, affective, and psychomotor aspects. Industrial practice is one of the implementations of Work-based Learning (WBL) activities. Work-based learning as a learning approach plays a role in improving professional development and learning (Sofyan, 2018). The learning approach method through work-based learning has the aim that students are able to develop their potential and competencies and can understand the demands of competence in the world of work. This process can include work culture, industrial management, and technical activities carried out either directly or indirectly in the real world of work.

Through internship activities, students and supervisors can learn about and adapt to technological developments and work culture in the world of work or industry. Moreover, industrial technology is currently developing rapidly, and Industrial Revolution 4.0 has been applied to various types of work. Therefore, the internship program implements a link and match between educational institutions and industry. Apprenticeships are presented as a solution to unemployment, skills shortages, and low productivity, but also as a means to disrupt traditional recruitment and development routes by opening new pathways to increase social mobility into professional employment (Casey & Wakeling, 2022).

In the 2020 Merdeka Belajar-Kampus Merdeka (MBKM) Guidebook launched by the Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia, one of the important points of the Merdeka Belajar policy is freedom of learning, which provides flexibility and autonomy to educational institutions and gives students the freedom to choose their preferred fields according to their interests. With this policy, students have the right to study for three semesters outside the study program.

The three semesters can be used to study in the industrial world, which is called a work internship in the independent learning policy. Universitas Negeri Yogyakarta (UNY) has implemented the MBKM Curriculum as stipulated in UNY Rector Regulation No. 5 of 2020 concerning the MBKM Curriculum for Undergraduate and Applied Undergraduate Programmes at

Universitas Negeri Yogyakarta to carry out work internships for one full semester. Thus, the concept of dual system education in vocational education can run well. Qualifications under dual apprenticeship training in the core industrial sector to date have provided the greatest benefits to young people in terms of labor market outcomes (Haasler, 2020).

Given the importance of the internship program and the potential for program development to implement the MBKM curriculum, the program should be developed on an ongoing basis to improve the quality of the program continuously. This requires an evaluation of the program's goals and objectives, systems, procedures, implementation, and outcomes. So far, the internship program has yet to be evaluated comprehensively. Various studies have revealed the results of the evaluation of the MBKM program, including Hardia et al. (2023), which revealed that 74% of students were interested in participating in MBKM, but only 18% chose the internship / practical work program. The low interest of the research sample in the internship/practical work program indicates various things, such as the dissemination of program benefits, conversion targets, or the impact of previous programs. Therefore, a more in-depth study is needed to uncover these issues.

More specifically on MBKM apprenticeship program, Nasution (2023), who examined the implementation of the MBKM apprenticeship program, revealed that apprentices were able to realize the purpose of the apprenticeship, which is to gain work experience at partners who accept apprentices in accordance with the field of work placement. However, it has yet to be revealed how the internship program is achieved from initial planning to assessment. Therefore, it is important to review and evaluate the internship program in more detail.

Program goals and objectives need to be evaluated to gauge whether they are relevant to the graduate profile. At the same time, systems and procedures are also important in measuring whether they accommodate the preparation and planning of the internship program. The next important stage is to evaluate whether the implementation is in accordance with what was planned at the beginning, including how the mentoring method is, both mentoring from the campus (supervisors) and mentoring from the industry.

The last aspect is the result of the internship, where this result can be in the form of a competency assessment conducted by the industry and the quality of the internship report prepared by students. Based on these evaluation components, the evaluation model used in this study is the Context - Input - Process - Product (CIPP) model. In addition to the evaluation components that are relevant to the CIPP Model, it is also relevant to the purpose of evaluating this internship program as a study material to improve the quality of the program in a sustainable manner. A key agenda in university-industry collaboration is to generate successful and sustainable partnerships to ensure that a qualified and competent workforce is provided to meet industry needs (Silva et al., 2021).

The demand for evaluation is a must for educational institutions and will be one of the main bases for making improvements and determining policies in the implementation of learning in educational institutions. Given the importance of the internship program and the potential for program development for the implementation of the MBKM curriculum, this program must continue to be developed in order to continue to improve the quality of the program. Therefore, it is necessary to evaluate the internship program held at UNY, starting from the goals and objectives of the program, systems, procedures, and implementation to results.

This study is research to evaluate the internship program at UNY. CIPP evaluation is an evaluation research tool or model that can determine the condition of an institution's program, so researchers use the CIPP evaluation model, which is one of the most comprehensive evaluation research models, to obtain appropriate data. The evaluation dimensions in this study include two evaluation dimensions, namely context, input, process, and product. The context evaluation dimension includes the goals and objectives of the internship program, as well as the graduate profile that has been set at UNY.

The input evaluation dimension includes system and procedure support from the UNY academic community and partners for the internship program. The process evaluation dimension includes the suitability of the process/implementation of the internship program with the activity plan that has been established at UNY. This allows for a holistic assessment of the effectiveness and impact of the program (Zhiyong, 2023). Finally, the product evaluation dimension includes the conformity of the products/outcomes of the internship program with the goals and objectives set at

UNY. The results of this study can contribute to the development of quality-oriented internship programs, which will then positively impact the cooperation relationship between universities and industries. A good working relationship will provide many benefits for both parties and has the potential to develop cooperation in other programs.

METHOD

This research is a program evaluation study using the Context - Input - Process - Product (CIPP) model. The CIPP model is used because the program evaluation model can measure comprehensively from context to results. The context aspect is the goals and objectives of the program, the input aspect is related to systems and procedures, the process aspect is related to the process/implementation of the program, and the product aspect is related to the results of the internship program. In addition, the CIPP model is also relevant to the purpose of evaluating this internship program as a study material to improve the quality of the cooperation program in a sustainable manner. The essence of the CIPP evaluation model is the ability to explore in-depth information on four different aspects that are interrelated with the program being implemented (Osokoya et al., 2010). The feedback generated makes it possible to focus on almost all components of the program and has the possibility to give different treatments to each component.

This research was conducted through an online survey (Google Form), interviews, and Focus Group Discussions (FGDs) on aspects of CIPP evaluation. The research subjects were classified into four groups: (1) UNY students who carry out the internship program in 2021-2022, (2) supervisors, (3) representatives of UNY partner industries for the internship program in 2021-2022, and (4) managers of the internship program. This research uses 4 (four) groups of questionnaires given to these 4 (four) sample groups. Each group of questionnaires included questions related to Context - Input - Process - Product, each of which totaled 35 items. UNY students who became respondents came from various faculties at UNY and had carried out industrial practices or internships with a total of 363 students.

Questionnaire data from respondents will then be analyzed descriptively and quantitatively. Descriptive statistics are essential to provide a full understanding of sample characteristics, assist in decision-making, determine appropriate inferential statistics, and guide the design of future studies (Fulk, 2023). In an industrial context, descriptive analysis through data visualization can improve organizational performance (Haasler, 2020), and the aim of this study is to reveal the collaboration between the university and the industry. Furthermore, the data will be used for interviews and FGDs with the academic community and relevant stakeholders involved in the implementation of internships in 2021-2022.

RESULTS AND DISCUSSION

Results

Evaluation of Context

Based on the data from the research, it is known that in the context aspect, the formulation of the vision, mission, and objectives of the internship have been formulated, and all three have compatibility, as evidenced by the agree and strongly agree statements chosen by more than 90% of respondents. These vision, mission, and objectives are the main components of program planning. The formulation of vision and mission is part of the formulation of management, which is a stage of strategic management (David et al., 2019), where it is known that one of the functions of implementing strategic management is to provide the direction in which the organization implementing a program will go.

Although, in general, the context aspect is good, some indicators need to be improved, especially based on the assessment of Field Supervisors (DPL) and internship managers. This is related to the general policy of organizing internships during the pandemic, which, indeed, each study program in each faculty has its own policies that adjust to the policies of the industry where the internship is held. This policy point is difficult to generalize, along with the various types and policies

in the industry. Another note is the existence of an internship coordinator, which only exists in the faculty of engineering, which has a coordinator from the study program level to the faculty, while some faculties still need one. In order to make the implementation of internships more focused and organized, each study program in all faculties that organize internships should appoint one lecturer as the coordinator.

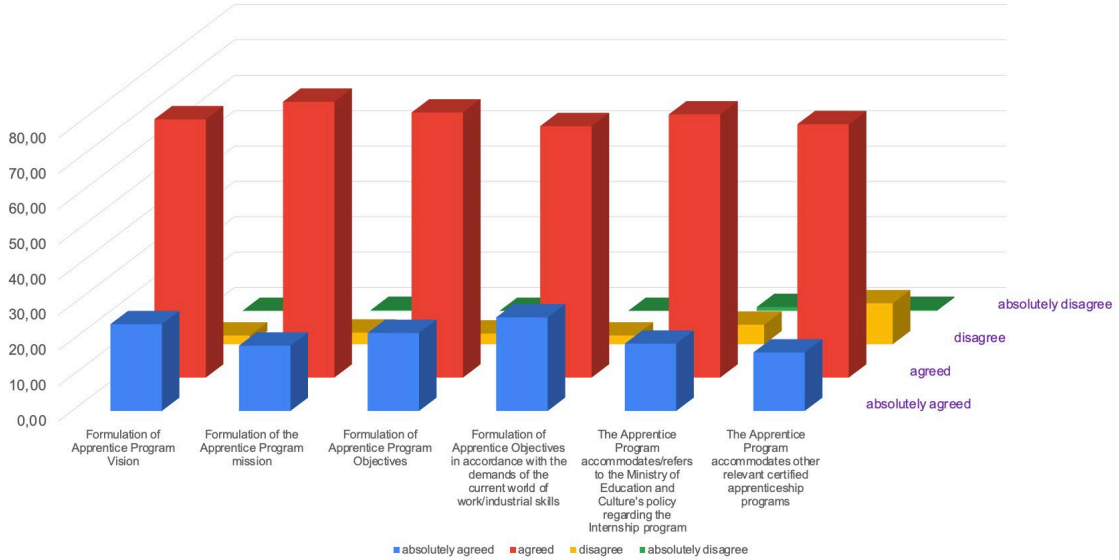

Figure 1. Context Evaluation of Internship Programme Implementation

Input Evaluation

The evaluation in the input section includes 11 indicators, consisting of (1) Suitability of apprenticeship organizing agencies/companies; (2) Availability of cooperation documents with partners; (3) Apprenticeship location meets the specified criteria; (4) Apprenticeship students are registered as active students; (5) Apprenticeship students are registered as active students; (6) Apprenticeship students are registered as active students; (7) The Guidebook contains complete pprenticeship procedures; (8) The guidebook has a high level of readability; (9) Apprenticeships are managed based on an information system; (10) The information system contains complete apprenticeship implementation information; (11) The PKL apprenticeship assessment system is easy to access and the information has adequate features. Respondents' opinions on the condition of the eleven indicators are depicted in Figure 2.

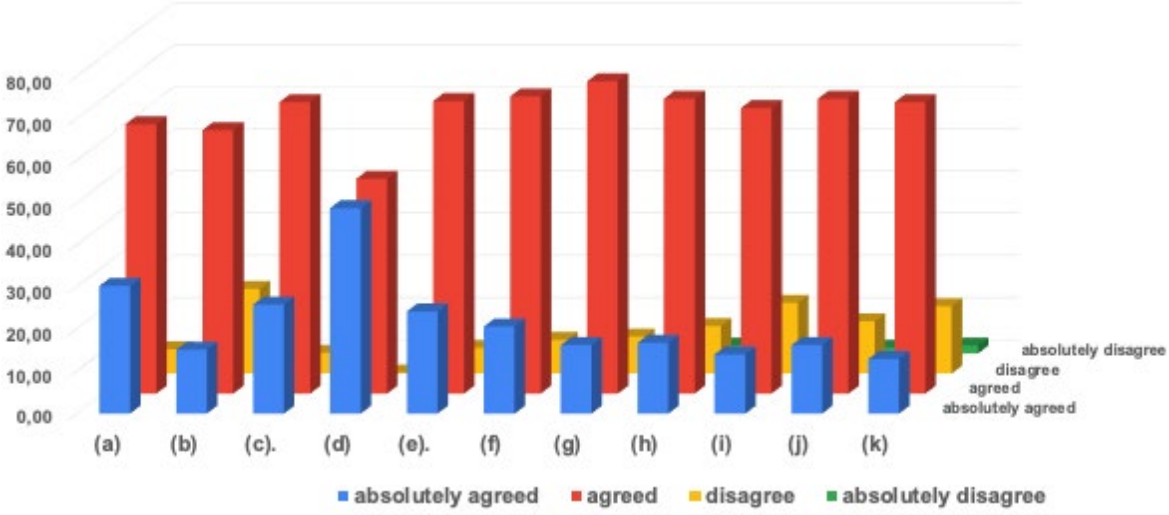

Figure 2. Evaluation of Apprenticeship Input

Process Evaluation

This process includes preparation mechanisms (initial briefing and observation), program design, proposals, activity notes, and tasks in carrying out internships, which generally received good ratings (agree and strongly agree) from respondents. The internship evaluation indicator is at the process stage, which contains 11 questions. The questions are (1) Students attend debriefing before internship; (2) Students obtain information related to the program offered; (3) Students get an internship location independently; (4) Students make observations to prospective internship companies; (5) Students make plans in the form of proposals; (6) Proposals are consulted with the agency/company; (7) Proposals are consulted and communicated with supervisors; (8) Work program proposals are uploaded to the information system; (9) Students make daily/weekly activity program notes; (10) Students have a sense of responsibility for the tasks assigned; and (11) Tasks can be completed by practicing students properly. The following are the respondents' answers depicted in Figure 3.

Overall, the results of this research indicate that the process aspect of the internship program is important and has been well implemented by students. The implication of these findings is the importance of continuing to strengthen internship preparation and processes, as well as increasing support and monitoring from schools and industries to ensure the success of the internship program and the development of employability skills of vocational students.

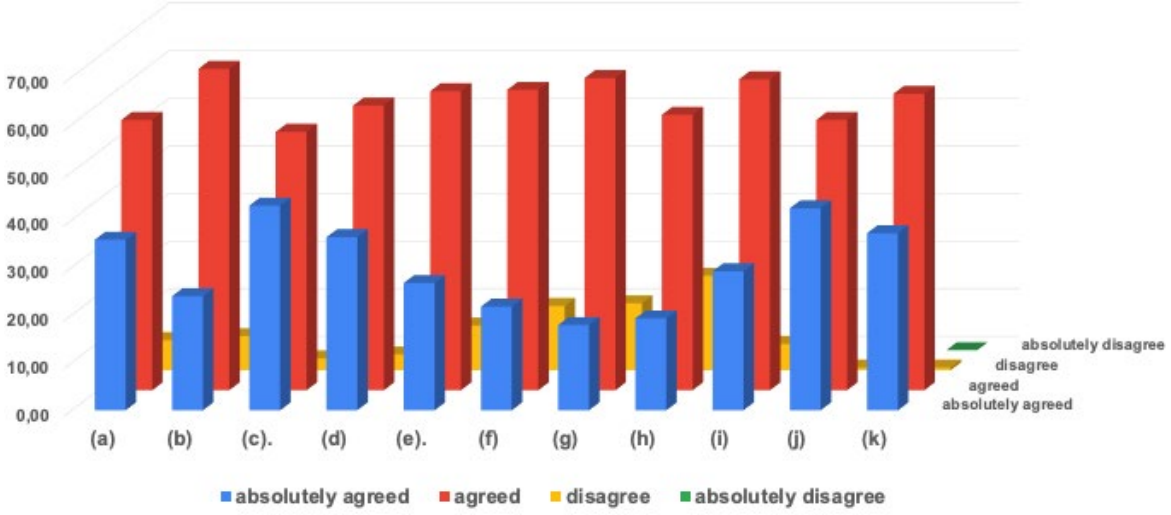

Figure 3. Evaluation of the Apprenticeship Process

Product Evaluation

Product evaluation contains competencies obtained (hard skills and soft skills), evaluation mechanisms and internship reports, and job offers from internships. In this aspect, only one indicator received low ratings from respondents, especially students, related to job offers from internship sites. There are 34.16% of students who do not get job offers after doing Internship Work. This can be caused by various things, including the competence of students who are considered poor or, indeed, the absence of recruitment in the near future in the company where students do internships. The absence of recruitment in the near future is very relevant to the current conditions, where many companies are experiencing difficult times due to COVID-19, which requires the termination of employees' employment.

In order to ensure the success of the internship program and improve the employability skills of vocational students, there is a need for continuous evaluation and adjustment of the internship evaluation and reporting mechanism, as well as greater support for students in finding and securing employment opportunities after completing the internship program.

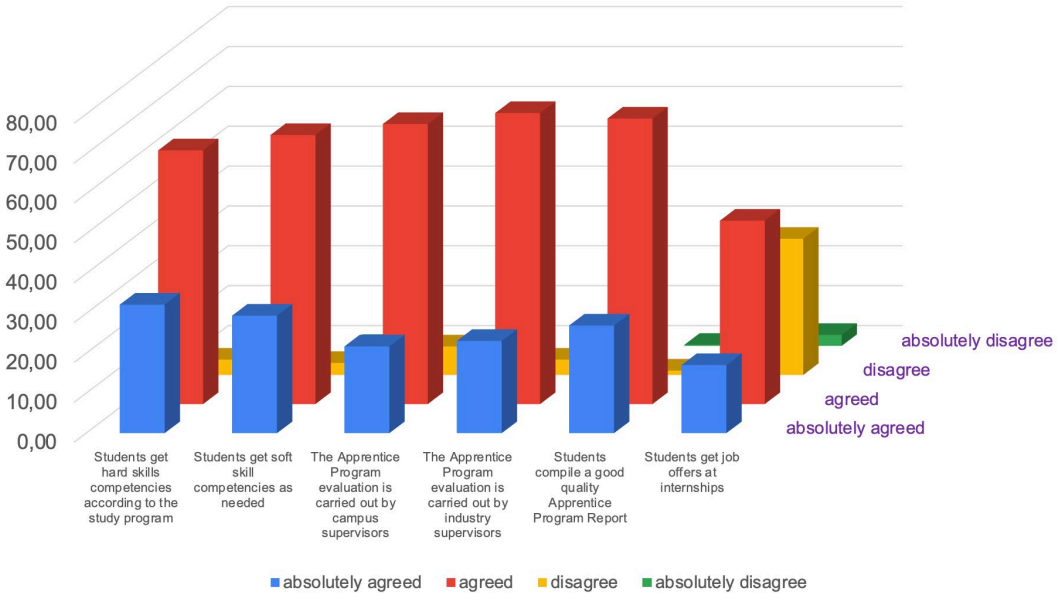

Figure 4. Product Evaluation of Internship Programme Implementation

Discussion

Based on Figure 1, the trend of evaluation data for the context aspect leads to a good trend, where the majority of respondents agree and strongly agree that the vision, mission, objectives, and policy support are in accordance with the implementation of the Internship Programme at UNY. Another important point is that respondents consider the internship program to be less accommodating of certified internship activities organized by the Ministry of Education, Culture, Research, and Technology. This condition can be understood because the Certified Internship program incorporated in the Certified Internship and Independent Study (MSIB) program is a new program organized by Kemenristekdikti starting in July 2021. The information has yet to be widely disseminated.

Based on Figure 2, it is known that the trend of evaluation data in the input section leads to a good trend, where the majority of respondents agree and strongly agree that the guidelines, information system, assessment system, and suitability of the internship site are suitable for the implementation of internships at UNY. Five questions received "disagree" responses above 10%, namely about cooperation documents and internship information systems. The cooperation document is optional for the implementation of internships; only a statement letter has been received by the industry/institution where the internship is located. However, cooperation documents are one of the important administrative aspects in the implementation of the program, at least in the form of an Implementing Arrangement (IA).

As written in the UNY Cooperation Guide, the Implementing Arrangement (IA) is a document that contains details of the plan for implementing cooperation activities based on the MoU / MoA that has been agreed upon previously, so that with the IA or other forms of cooperation documents, the implementation of the cooperation program becomes more secure. MoU / MoA provides a framework for systematic cooperation mechanisms and can help maintain good relations between parties (Jain et al., 2014).

Another thing that needs attention is the internship information system. So far, only the Faculty of Engineering of Universitas Negeri Yogyakarta has used the Internship Information System (SIPKL) through the link https://sipkl.lppmp.uny.ac.id, while other faculties at UNY have not used it, so respondents from faculties other than the engineering faculty will give an unfavorable assessment. In the future, other faculties can be encouraged to use SIPKL so that the management of internships becomes more structured from planning to assessment. Information systems for

internships provide various benefits for students and institutions. It simplifies the internship process, from registration to report submission, minimizing errors and saving time (Alya & Ikhwan, 2022). The system also provides students with quick access to internship information so they can make informed decisions (Hasti et al., 2019).

Based on Figure 3, it is known that the trend of evaluation data for the input aspect leads to a good trend, where most respondents agree and strongly agree that the preparation mechanism (debriefing and initial observation), program design, proposal, activity records and tasks in carrying out internships are in accordance with the regulations at UNY. However, there are some that need attention, namely the discussion of student proposals to Field Supervisors and industry supervisors/mentors/institutions where internships are held, uploading proposals in SIPKL, and equalizing DPL perceptions.

Regarding proposals, 13.5% of students cannot access proposal guidance. This can be caused by limited communication media between lecturers and students, which can be caused by health protocols (face-to-face) or network problems for online guidance. Given that community activities have been restricted for the past two years to prevent the spread of COVID-19, information technology should be optimally utilized for student and lecturer guidance. According to the results of another study mentioned below, during the COVID-19 pandemic, technology plays an important role in keeping community activities running during large-scale social restrictions (Komalasari, 2020).

The second problem is the uploading of proposals in SIPKL, which received unfavorable results from respondents because only the Faculty of Engineering UNY uses the information system. The last thing that needs to be highlighted is the common perception of field supervisors, where 11.43% of field supervisors stated that there was no common perception regarding the internship program organized by the manager. It is important to discuss this common perception in the program, from planning to evaluation, so that field supervisors can carry out their roles and duties properly. For the following year, it is important to hold discussions between managers and field supervisors. Internship program supervisors must understand the regulations, the profile of the industry being taught, and the character of students (Marsono et al., 2019).

Based on Figure 4, it is known that the trend of evaluation data for the input aspect leads to a good trend, where the majority of respondents agree and strongly agree that the internship program can provide hard and soft skill competencies, a good evaluation mechanism, a well-organized report, and get a job offer at the company where the internship. The competencies obtained by students during internships are related to the competencies developed on campus. In relation to workplace learning, Alfeld et al. (2013) states that learning activities in industry are a process of transferring scientific concepts learned in the classroom to be used in solving problems and being able to apply knowledge in the workplace.

Eraut (2004) states that there are four types of workplace learning activities, namely: (1) participation for specific purposes such as practice, (2) working with professional practitioners, (3) mapping tasks in the workplace, and (4) working for clients. Thus, learning in the workplace is an activity of applying the knowledge gained from the classroom to the workplace by being directly involved in the work process and environment. From these results, it can be said that the implementation of the internship has been successful, marked by the fulfillment of activity components, which include essential attitudes and values, reflection skills, communication skills, personal resources, essential knowledge, and empowerment (Sweitzer & King, 2009).

The CIPP evaluation method not only reveals how the internship program is implemented in the Context - Input - Process - Product aspects but also provides various information relevant to developing cooperation between vocational education institutions and partner industries. In the context aspect, the purpose of the internship is to achieve certain competencies that are relevant to industry needs, which can have a positive impact on the fulfillment of additional human resources in the industry. In addition, lecturers who become internship coordinators will be liaisons for universities to consolidate with the industry. This role continues in the process aspect, where the internship coordinator will continue to interact with partner industries as part of the student internship monitoring process so that it will be a good momentum for universities to strengthen collaboration with industry, including developing collaborative programs for other activities. The last positive

impact is the absorption of UNY alumni in the industry where they do their internships. In addition to indicating the relevance of competence, the absorption of alumni can strengthen the alumni network and has the potential to recruit interns and absorb more alumni in the next period.

CONCLUSION

Based on the results of the research and discussion, the conclusions in this research are as follows: (1) The context aspect (goals and objectives) of the internship program is in accordance with the graduate profile set at UNY. However, the general policy for organizing internships during the pandemic still needs to be developed; (2) Community systems and procedures support the internship program but still need improvement in cooperation documents and the use of internship information systems for all faculties; (3) The process/implementation of the Internship program follows the activity plan set at UNY but still needs to develop SIPKL and equalize the perceptions of Field Supervisors (DPL); and (4) The product/result of the internship is in accordance with the goals and objectives set at UNY, but there are still many students (34.16%) who have not received job offers from internships. The evaluation of the internship program using the CIPP method also provides findings that the internship program aimed at achieving certain competencies that are relevant to industry needs can have a positive impact on the sustainability of university and industry cooperation, ranging from program development to cooperation in the absorption of graduates (providing labor needs in the industry).

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