Improving the National Internship Certified Program based on Examination from Vocational Education Program (University of Indonesia) Students Experience

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Keywords: Human Capital, Vocational Education, Competency, Industry 4.0

Abstract: This article aims to deliver recommendations based on the research as a result of student experiences and to provide recommendations for improving the implementation of the nationally certified internship program. Method uses an analytical method with a quantitative approach, the research design used in this study is Cross-Sectional. The study was conducted by survey method on samples in a population using a questionnaire as a method of data collection. This research indicates that the implementation of nationally certified internships able to broaden the insight and skills of the students but needs to be improved the readiness of the company for day to day implementation. Several recommendations for nationally certified internship program improvement, based on student's experience regarding the assignment orientation given, mentor guidance and working environment conditions as long as they take part in a certified internship program. This study expands the exciting literature on the national internship program by providing theoretical support focusing on vocational education.

1 INTRODUCTION

In the year of 2018, the Ministry of BUMN along with Forum Human Capital Indonesia initiated the National Internship Certified Program. This program has a strategic goal of optimizing human resources in order to develop vocational education based on competency that is connected to industrial needs.

Certified Internship model grows more importantly when industrial landscape evolved compare to previous few decades ago; even more, since the term of IT-based industrial revolution 4.0 term appeared. There are growing concerns that in the near future IT will replace human capital in the industry. These risks must be anticipated, despite the notion that whether or not these concerns materialized. Nonetheless, industrial 4.0 should become an indicator of early warning to improve the quality of human capital. By then, only the most improved human capital will win the competition in the future.

An internship is a unique educational program with the purpose of integrating research with planned experiences and related performance. It is designed for the most commonly unemployed freshly graduate students and postgraduate students all around the world who have completed 14 to 16 educational years. The main objectives of the internship program are to develop and to strengthen student's abilities and to prepare them for the profession. (*Parveen, 2012*)

By definition, nowadays, an internship is defined as a part-time job for a certain period of time, with or without pay, where interns gain knowledge while at the same time making a contribution to the organization. For students, an internship provides a better understanding of the reality of business situation under supervisions and supports (Batool, 2012)

Entering industrial era 4.0, most scholars especially undergraduates must prepare themselves optimally and be ready to show uniqueness or distinction and their added value. Inside the Industrial revolution 4.0, there are automatic systems and internet integration (combining digital automation with cyber technology). With this industrial revolution, the job competitions are getting much tougher. Vocational education program is implementing a few things to prepare their students for the upcoming industrial revolution 4.0, these may

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Improving the National Internship Certified Program based on Examination from Vocational Education Program (University of Indonesia) Students Experience DOI: 10.5220/0010030800002967

In Proceedings of the 4th International Conference of Vocational Higher Education (ICVHE 2019) - Empowering Human Capital Towards Sustainable 4.0 Industry, pages 84-90 ISBN: 978-989-758-530-2; ISSN: 2184-9870

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include: replacing the term Internship program with undergraduates' internships program, strengthening cooperation with the world of industry, campus that cooperates with world of industry must prepare their undergraduates' competencies, by cooperating with the industry playmaker, students clearly have more added values to the industries demand once they graduate, foreign language implementation , cooperation with local campuses as well as foreign industries.

According to the Research, Technology and Higher Education Ministerial regulation number 44 the year 2015 article 11, the learning process characteristics consist of these values: interactive, holistic, scientific, thematic, effective, collaborative which centered with the students themselves. Industrial revolution era 4.0 triggers the promotion of higher education level 4.0, where universities have the obligation to provide their students and graduates to grasp the technology literation, data and people, and the implementation of lifelong learning education. The Ministry of Research, Technology and Higher Education (KEMRISTEKDIKTI) has put a lot of effort in increasing access, relevance, and quality of higher education in the industrial revolution era 4.0 through co-operative learning and work-integrated learning/Co-operative education or Co-op which objectives are to increase leadership competencies, teamwork and Higher Order of Thinking Skills (HOTS) for higher education graduates.

Internships provide real-world experience for those who want to explore or gain the relevant knowledge and skills needed for a specific field of work. Internships are relatively short with the primary focus getting into the job training, taking what is learned at the university and applying it into the real world. Internships generally have supervisors who assign specific tasks and evaluate the intern's performance. (Mung'atu, 2016)

A good internship program is not merely duplicating documents or making coffee for the superior. Effective and structured internships play an important key role in maximizing the students' potentials and guiding them in order to make significant contributions to the institution.

An effective internship experience is mutually beneficial for both apprentices and the institutions. Students are faced with best practices, effective management and a good understanding of the skills and applications needed to be successful in the transition into productive contributors. Business benefits by providing structures and guidelines for the students by helping them understand the opportunities in their organizations, industry, and business. (Natarajarathinam, 2014)

Facing the industrial revolution 4.0 is certainly not an easy thing. There are several things needed to be prepared, for instance, converting the learning method in the world of education that exists today. The very fundamental thing is to change the nature and students' mindset. According to the Kemenristekdikti version, to counter this industrial revolution 4.0 is by building a more innovative learning system, institutional policy reconstruction, improving the quality of lecturers and research breakthroughs. Therefore, in this era, educational institutions must have cross-sector collaboration, all of which must be involved, including government, scholars and industry players so that the impact of this industrial revolution 4.0 can truly benefit all levels of society.

Internships can also develop partnerships between educational institutions, companies, businesses, and industries. Internships create positive attitudes toward the business community while at the same time business may be taking part in student education.

Local businesses also can take part by offering internship programs according to their business discipline or technical field. (Merritt, 2018)

A well-planned internship program will include the following functions: (Parveen, 2012)

• Understanding the target profession and prospects for future working conditions.

• Providing valuable exposure to work

· Developing professional skills and attitudes

• Building a network of people with a similar profession.

By participating in an internship program, students get a chance to do the job and interact with other professionals in the same field for some time, which can be their field of interest. Internships provide students with opportunities to gain knowledge about their prospective careers in industry, identify general preferences related to the job, and develop profound vocational interests. Internship students will learn what they like or dislike from one job, and this can be identified early in the process of their job search, it has more advantages compared to students who do not take part in the internship. One of the competitive advantages for apprentice workers is that they have an early head start to the career because of the knowledge and experience gained during the internship program, therefore there is no need for trial and error in their field of interest. (Maertz Jr, 2013)

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Internships can empower students and help them improve their professionalism. Apprentices who participate in this program appreciate that by participating in the internship programs they can prepare themselves better for important career skills including problem-solving, job interviews, networking, resume writing, oral presentations, interpersonal communication, and written communication. (James, 2018)

To take part in this certified internship program, prospective apprentices also attend a recruitment process organized by each institution, such as BUMN employees' recruitment. Prospective apprentices are asked to make job applications, CVs, take interviews and also undergo the tests requested by the company.

A certified internship program involving the Ministry of BUMN in Indonesia was recently implemented in 2018, so there are still many things can be done in the future in order to make the internship program functions optimally. With this research, it is hopeful that we found solutions that can improve the implementation of certified internships program through interns' experiences during the 6month internship at a state-owned enterprise (BUMN), therefore the implementation of the internship can run effectively and achieve its main objectives.

2 DATA AND METHODOLOGY

2.1 Research Approach

The approach used by the author in carrying out this research is a quantitative research approach. The quantitative research approach is research conducted by calculating numbers statistically based on hypothesis testing, analyzing and interpreting the results that answer the research objectives. Quantitative research according to Sudjan (2005), measurements based on the form of numbers, numbers or direct observations that can produce a measurable result from the object or variable to be measured.

According to the development model or growth model, this type of research approach is known as a cross-sectional model. The cross-sectional model is a way of obtaining complete data which is done quickly, while at the same time can predict developmental stages of individuals in a certain growth period. The quantitative approach is a relation that will be calculated statistically through variables involved, which are the independent and dependent variables. The quantitative approach can decipher all the explanations in the operational definition such as describing the purpose of measuring a measuring instrument, measuring method and measuring the scale and not deviating from the objectives and formulating the research problem (Arikunto, 2010).

The method used in data collection is the survey method. Survey research is the way research is carried out by directly coming to the location that will be used as an object by making observations or conducting data collection according to existing problems (Singarimbun, 2008). One of these types is characterized by the distribution of questionnaires in a place with the number of respondents adjusted.

2.2 Research Data Sources

Data collection is carried out by stages of process based on the procedures in the field and the selection of data collection techniques is precisely picked through the nature, character, and frequency of respondents sampled. The process of retrieving data from primary data, known as the distribution of questionnaires or conducting in-depth and second interviews using secondary data taken from the previously generated reports from research or previous records. Sources of data or information include primary data and secondary data.

a. Primary data is data obtained directly as a result of questionnaires distribution with subjects about evaluating the implementation of work internships in state-owned enterprises (BUMN) that are influenced by independent variables such as work environment, mentor role, and task orientation

b. Secondary data is data that the author obtained through literary studies by studying literature, scientific writing, legislation and documents obtained by the related agency of which the research objectives and the issues raised.

2.3 **Population and Sample**

The population in this study were Vocational Education Program students who participated in a certified internship training at BUMN companies as many as 75 people. The sampling technique used in this study was a total sampling of 75 people.

2.4 Research Instrument

A research instrument is a tool selected and used by researchers in their activities to collect the data needed in their research so that the activity becomes systematic and puts the author at ease in doing this research. In quantitative research, the instrument must be created and become an "independent" tool apart from the researcher.

- The variable and indicator are :
- 1. Evaluation :
 - a. Recommendation
 - b. According to needs
 - c. According to abilities
 - d. Comfortability
- 2. Role of mentor :
 - a. Discussion
 - b. Directing
 - c. Responsibility
- 3. Working Environment :
 - a. Work Relation
 - b. Communication
 - c. Directing
 - d. Responsibility
- 4. Task Orientation :
 - a. According to competency
 - b. Increasing knowledge
 - c. Increasing skill

2.5 Data Collection and Technique

Sambas and Maman (2009) explain that data collection techniques are ways that can be used to collect data. In research with this quantitative approach data collection techniques used are questionnaires. As mentioned in Sugiyono (2009) that questionnaires are instruments used to explore information relating to statements or theories presented through the respondent's answers according to their views when filling out.

The technique that I use to collect data in this study is by distributing questionnaires to respondents using a Likert scale. Likert scale is used to measure the attitude, and perceptions of people or groups of people about a social phenomenon (Sugiyono, 2014). Respondents will choose one of the available options, usually, five scale options will be provided with the following format:

- 1. = Strongly Disagree (SD)
- 2. = Disagree (D)
- 3. = Neutral(N)
- 4. = Agree(A)
- 5. = Strongly Agree (SA)

In the questionnaire used in this research, there are also included open sentences in each statement that will be answered by the respondent. According to Mas'ud (2004), the implementation of the method of data collection in this research is administered by using surveys in groups. Respondents are collected in a certain place, then explained the purpose, and how to answer the questionnaire. After filling out the questionnaire, the respondent then returned the questionnaire.

The methodology adopted for conducting the research was a questionnaire. A questionnaire is often used in quantitative marketing research and social research. This method is a valuable method for gathering information from a large number of individuals. Zamara Batool (2012), in her research, has taken samples of students who have been part of a national internship program in the Punjab region - India. We have taken their views on the program and its continuation. (Batool, 2012)

2.6 Descriptive Statistic

Descriptive statistical analysis is used to determine the description criteria of each variable studied and the characteristics of the respondents. Descriptive analysis is a quantitative analysis that is used to explain more deeply the results of the analysis and able to provide more detailed information (Umar, 2010).

Descriptive analysis in this study is used to quantify work environment factors, the role of mentors and task orientation towards evaluating the implementation of work apprenticeship programs in state-owned enterprises (BUMN) and describe descriptions of research variables based on the answers to each questionnaire by giving scores to each answer. The analysis then uses the average value and percentage of the respondent's answer scores.

The collected data are classified into two groups of data, namely quantitative data in the form of numbers and qualitative data in the form of words or symbols. Qualitative data in the process is temporarily set aside because it will be used to accompany and complete the picture obtained from quantitative analysis. Quantitative data are summed or grouped according to the shape of the instrument used.

3 RESULT AND DISCUSSION

The results of the study were arranged systematically beginning with a description of univariate analysis which objective was to obtain an overview of the distribution of respondents or variations of the variables studied. This analysis was used to describe the variables studied by making a frequency distribution table, and the data was presented in the form of a percentage. Then, at the end of this study, an SEM (Structural Equation Modeling) analysis was provided to explain the complex relationship between ICVHE 2019 - The International Conference of Vocational Higher Education (ICVHE) "Empowering Human Capital Towards Sustainable 4.0 Industry"

some of the variables tested in this study. The number of samples in this study was 75 respondents.

3.1 Characteristics of Respondents

The number of questionnaires distributed was 75 questionnaires to vocational program students as primary respondents who took a certified apprenticeship program at state-owned enterprises (BUMN). The characteristics of respondents in this study were divided into 3 (three) categories, which consisted of gender, age, and interests of the chosen profession. The study on the characteristics of respondents based on these categories was carried out to provide an overview of the identity of respondents, as shown in the pie chart. Based on the results of data processing, a frequency distribution can be arranged to exhibit the characteristics of respondents as shown at the following:

1. Gender



Figure 1: Respondents Data by Gender (n = 75)

Data on the frequency distribution of respondents in figure 4.1 shows that based on gender, most of the samples in this study were 55 women (73%) and 20 men (27%).

2. Internship Placement by State-owned enterprises (BUMN)



Figure 2: Respondents Data by State-owned enterprises (BUMN) internship placement

Data on the frequency distribution of respondents' characteristics in figure 4.2, shows that based on the company internship placement, most of the apprentices work at Perum Jamkrindo (41%), Bank Rakyat Indonesia (28%), Bank Mandiri (16%), Bulog and PT Telkom respectively 5% each as well as other companies 4%.

3. Career Interest

No	Career Interest	Qty (n)	%
1	Retail	8	11%
2	Government	22	29%
3	Finance	18	24%
4	IT/ Telecommunication	6	8%
5	Others	21	28%
Total		75	100%

Table 1. Characteristics of Respondents by Career Interest

Based on career interests, most of the respondents interested in a career in government (29%), others such as consultants, education and culinary (38%), finance (24%), retail (11%) and IT /Telecommunication (8%). Thus, the respondents interested in a career in the government sector are much larger than respondents with other career interests.

Categories of characteristics of respondents by variables can be exhibited in the form of a histogram as follows:



Figure 3: Frequency of Working Environment Score in Histogram (n = 75)

Figure 4.3 above shows that the largest dimension in terms of establishing a working environment in BUMN companies is communication (4.7) compared to comfort (4.1) and working relations (3.6). Based on vocational program students' perception, there are statements that communication is the highest dimension which establishes the highest working environment, among others:

- 1. Good communication relationships with colleagues or employees around the working environment
- 2. Do not experience communication barrier with fellow colleagues
- 3. It is free to express opinions at the working environment



Figure 4: Frequency of Mentor Role Score in Histogram (n = 75)

Figure 4.4 above shows that the largest dimension establishes the role of a mentor in a BUMN company is the directing dimension (4.6) compared to the discussion dimension (3.6) and responsibility (3.4). Based on vocational program students' perception, there are statements that directing is the highest dimension which establishes the highest role of mentor, among others:

- 1. The mentors provide me with detailed instructions on how to do the assignment
- 2. The mentors provide guidance related to working internships in state-owned enterprises (BUMN)
- 3. The mentors provide an explanation to apprentices on how to start and end a task.



Figure 5: Frequency of Task Orientation Score Histogram (n = 75)

Figure 4.5 above shows that the largest dimension which establishes the task orientation in BUMN companies is the dimension of increasing knowledge (4.5) compared to the dimension of adding skills (3.6) and competency (3.2). Based on the vocational program students' perception, there are statements that increasing knowledge is the highest dimension that establishes the highest task orientation, among others:

- 1. Tasks given can increase knowledge and experience at work
- 2. Technical obstacles in carrying out a task that is highly important
- 3. Explanation about all I need in this company comes very late

4 CONCLUSION AND RECOMMENDATION

Based on the results of research and discussion also analysis that have been done in the previous chapter, then this chapter concludes the following research:

4.1 Descriptive Variable

The biggest dimension forming a working environment in implementing a certified apprenticeship program in state-owned enterprises (BUMN) is the communication dimension

The biggest dimension forming the role of a mentor in implementing a certified apprenticeship program in state-owned enterprises (BUMN) is the directing dimension

The biggest dimension forming the task orientation in implementing a certified apprenticeship program in state-owned enterprises (BUMN) is the dimension of knowledge

4.2 The Evaluation of the Implementation of a Certified Internship Program

There is a direct influence between the work environment on the evaluation of the implementation of the work apprenticeship program in SOEs with a P value (0,000) <alpha value. Thus the better the work environment factors will improve the implementation of work apprenticeship programs in state-owned enterprises (BUMN)

There is a direct correlation between a mentor role towards implementation evaluation of the internships program in state-owned enterprises (BUMN) with P value (0,000) < alpha value. Therefore the better a mentor role in state-owned enterprises (BUMN) will increase the implementation of internship programs in state-owned enterprises (BUMN).

There is a direct correlation between task orientation towards the implementation evaluation of the internships program in state-owned enterprises ICVHE 2019 - The International Conference of Vocational Higher Education (ICVHE) "Empowering Human Capital Towards Sustainable 4.0 Industry"

(BUMN) with P value (0,000) < alpha value. Therefore the better the task assignments will increase the implementation of the internship program in state-owned enterprises (BUMN).

4.3 Recommendation

This research shows that the working environment, mentor roles, and task orientation become important aspects of the implementation evaluation of the internship program of state-owned enterprises (BUMN). Therefore, there are some recommendations made as follows:

- This program should be continued, the internship program not only giving benefits to all the students but also strengthening the relationship between the higher education system and state-owned enterprises (BUMN). Therefore, combining roles, skills, and knowledge from the higher educations systems with the industry becomes a way of improving the quality of vocational program graduates.
- The educational institution needs to direct and communicate with the participants of the internship program in terms of work at the state-owned enterprises (BUMN) by giving assignments that match their skills.
- Education institution together with companies should prepare standard internship guidance and socialized to the mentors or users. In some case we have found that some mentors did not understand so well regarding this program.
- Companies should be more seriously doing the program, specialy in facilities and working equipment and also companies should prepare more budget for extra works, because the internship program applied for six months minimum, so the company may maximize the students contribution but they should pay attention to student benefit.

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