



Improving Student Competence Through Industrial Internship Learning

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Abstract. Competencies possessed by students have an important role to measure the success of the learning process. The measurement of competence for students is by referring to the needs that must be met from the standards required by the Business and Industrial World. In order to fulfill these competencies, it requires cooperation between the world of education and the world of industry. The form of cooperation carried out is, among others, by carrying out industrial internship programs carried out by students. In this case, students directly carry out learning in the industry guided by professional tutors in the industry. This research provides an answer, that through industrial internship learning, students can improve the competencies needed according to the needs in the business world and the industrial world. The research method used in this research is quantitative experimental research using a purposive sample technique, which uses a comparison between the control class and the experimental class.

Keywords: Competence · Industrial Internship Learning

1 Introduction

Industry training or internship is a practical experience in the form of opportunities offered by a company or industry so that students can learn the practical impact of their studies and know about a particular industry. This industrial training is an important method that combines theoretical education and the world of work in accordance with what is needed by society in the business world. In this case, industrial training not only provides benefits for students, but also provides mutual benefits between students and industry. Where the industry has the opportunity to obtain competent human resources who have high work motivation. Because not so many graduates from universities have the skills needed in the industrial world, it is therefore very important for university graduates to be able to adapt to the needs of the world of work and industry which can be obtained from industrial training or internship experiences [1]. In other words, the internship program is a student learning experience in a real-life work environment that is relevant to their major where students complete their internship program before academic graduation [2]. The internship program itself combines cooperation in the

world of education and the world of industry to integrate practical talents with practical industry experience and competencies in order to minimize differences and gaps between education and demands in the business and industry worlds, thus to achieve the goals of technology and vocational education it is necessary to combine appropriate instruction. Meet the demands of an industry-oriented workforce [3]. To enable the development of professional competence of students by strengthening the theory and practical training received at the university and enabling students to be able to apply the skills and knowledge they have acquired in their studies, by attending industry training or internships are expected to develop their professional competencies to suit the needs of the world business and industry [4]. Industrial internships are an important part of the academic curriculum in higher education institutions. Internships provide an opportunity for undergraduate students to combine work-related experience and knowledge from their formal university education by taking part in a supervised and planned real-world work experience [5]. In this case the professional environment has defined industrial internships as a form of experiential learning that integrates knowledge and theory learned in the classroom with practical application and skill development in a professional setting. Internships provide students with the opportunity to gain valuable applied experience and make connections in professional fields they are considering for career paths and provide students with the opportunity to be mentored and evaluated by a professional expert in their field. Because the real work environment expects graduates to have skills and expertise that are suitable for the business world and industry.

The implementation of industrial internships also contributes to opportunities for students to practice their soft skills so that they can become graduates who have soft skills in accordance with the needs of the business world and the industrial world [6, 7], soft skills are very much needed at this time and have important role in getting a job.

2 Literature Review

The industrial internship program or known as “*On the Job Training*” is a cooperative education program that provides a learning process and experience to prepare students to face the outside world, which can provide professional work experience that is supervised in a structured and career-relevant manner. of this program itself is to improve the knowledge and skills of students which can later be transferred and equip them for a real, professional working life according to the needs of society and industry [8]. Because the goal of all higher education is to prepare students for their transition to the job market and the professional world. The purpose of education must be emphasized to adjust to employability where the development of student competencies can be developed through an industrial internship program where in this program allows students to have the opportunity to apply the skills and knowledge they have acquired in their studies, thus professional competencies that are market-appropriate. Workforce can be developed. Where there are still many university graduates who have not met the demands of an industry-oriented workforce, this is a challenge where educational institutions play a role in meeting industry expectations and helping full fill their student obligations, namely by offering education and skills relevant to industry, including in some developing countries that form strategies collaborative collaboration with industry

in university-industry relations [9]. The education sector must understand the mindset, internship orientation, planning programs, industry career path orientation, and mastery of case study competencies, internship students must master observation skills, increase efficiency, productivity, service functions, and access to technology that aims to gain work experience and form a network with industry in accordance with their field so that post-study students can have insight into knowledge, skills and industrial culture [10]. With the increasing demand for college graduates to produce skilled and work-ready workers, learning patterns need to have relevance to activities in the business and industrial world in the sense that students carry out activities in accordance with the fields of industrial practice. As it is known that, almost the entire world of education can be said that they do not have training facilities like those in the industry, therefore the world of education, especially vocational education and technology must work together with the business and industry world so that students can apply the knowledge they have and obtained while in college or it can be said that the practical ability (skills) and knowledge of the workforce can only be obtained through experience working in the business world or direct industry [11]. Practical ability or work skills themselves can be understood as a skill that can be used in any organization according to its field such as improving leadership skills, teamwork, negotiation, communication, which are expected to be developed in the education system [12], which is where the ability is included in the ability of soft skills which is very important to be possessed by students as a provision of competencies possessed to find work content copy share [13].

3 Research Methodology

This study uses a quantitative experimental method, the experimental research design used is the Pretest - Posttest Control Group design. In this design, there are two groups selected randomly, then given a pretest to determine the initial state, is there a difference between the experimental group and the control group. The data is used as the source data for this research to obtain credible results from the point of view of interns who carry out learning in the industry under the guidance of professional tutors in the industry. Where the sampling technique uses purposive sampling technique, the subjects of this study are industrial internship students, where this study aims to find out how internship learning or industrial internship students can improve their competencies according to the needs in the business world and the industrial world.

The following is the experimental research design of Pre-test - Post-test Control Group design. This design can be seen in Table 1.

Table 1. Research Design

Pre-Test Experiment	Treatment	Post Test
T1	X	T2

4 Result and Discussion

The university encourages students to be able to take part in industrial internship programs where they believe that there are many benefits that students will get in a work environment in the community where in this program students are supervised by professionals so that in the process, they have the opportunity to practice the theory or knowledge they have acquired. in study [14]. In today's competitive society, students are faced with a selective job market that prioritizes experience, where experience cannot be obtained in college alone, experience can be obtained by students through direct activities either in the laboratory or in the real world, where laboratory learning is clinical while the real world is known as training. Industry or internship where the internship program can provide a realistic work experience that exists in the community [15]. In connection with the implementation of industrial internship programs in implementing action knowledge integration initiatives in universities to improve knowledge and skills, several researchers have suggested that universities should increase industry-academic collaboration, where this can offer practice-oriented learning, and improve practical skills. Educators in improving the gap between theoretical and practical knowledge. To help students find employment after graduation, practice-oriented learning designs should be based on industry demands and social expectations, and the content of learning should help students develop their professional qualities, competencies and innovation abilities. In this way students can gain greater educational benefits [16]. Students also described the internship as a great experience that had a major impact on their learning and their understanding of real-world problems.

5 Conclusions

The industrial internship program is one of the university's efforts to make its graduates have the competencies required by the world of work and industry which require work skills that cannot be met only from formal education in lectures. In this case, the implementation of the industrial internship program can equip students or students to gain skills in their fields according to what is needed by the world of work and industry. Where it is important for the internship program to improve the technical abilities and *soft skills* of students who will later become a part of the community where they are required to become competent graduates who can adapt to the professional work environment. And apart from improving academic performance, another benefit that students get is the opportunity to acquire some generic job skills that help them to easily transition from an educational institution to a wider institution such as a company or industry. These skills include the ability to work in teams, build relationships, leadership, social, presentation, communication, time management, the ability to accept criticism, *problem solving* skills, and improve the ability to use technology.

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