

EVALUATION OF LEADERSHIP AND PERSONAL SKILLS IN ENGINEERING-INFORMATICS STUDENTS AT STIKOM PGRI BANYUWANGI

Mohamad Dedi

D3 Information Management, College of Computer Science PGRI Banyuwangi

dedimantab stikom@yahoo.co.id

(*) Corresponding Author dedimantab_stikom@yahoo.co.id

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ABSTRACT

Along with the increasing need for competent human resources in the information technology industry which continues to develop dynamically, Higher Education Institutions have a crucial role in formulating curricula that can answer these needs. The leadership function becomes an important parameter in moving the organization so that it can run according to plan. In its implementation, Leadership courses and personal skills are needed in an engineering profession that utilizes a wide range of disciplinary knowledge. The purpose of this study was to obtain an overview of the evaluation of the learning outcomes of Leadership and Personal skills in 49 students of the Informatics Engineering study program at the PGRI Banyuwangi College of Communication Sciences (STIKOM). This research was conducted in stages including planning, action, observation, & evaluation. The results of implementation and direct observation are supplemented by documentation and analyzed qualitatively. The evaluation results show that the level of ability of respondents tends to increase in cycles I to II with good qualifications. The conclusion of the research shows that the respondents' awareness of the importance of leadership courses and personal skills in managerial issues, innovative products, and success metrics is formed.

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INTRODUCTION

In the last few decades, technological advances have changed human life a lot. Innovation that continues to develop at an accelerating pace has created countless opportunities. Today, technology is widely recognized as the main driver of innovation and, in turn, innovation is considered essential for achieving a level of professional success (Torres et al., 2020). Informatics engineering exists as a domain of knowledge, where this knowledge forms the core of most technology software, from web browsers to large-scale banking systems. Software is everywhere and you can take it practically anywhere. Products that have been born by engineers who then make their position a highlight of the development of innovation. The role of specialists and expert professionals is highly demanded by the industry at the moment (Eurostat, 2017), with the level of demand showing no signs of decreasing in the coming years (Eurostat, 2016).

Information technology management is a strategic component in today's business organizations. At the macro level, it is one of the driving forces behind the globalization of the world economy and at the corporate level it plays a critical role in reengineering and restructuring business processes in response to increased competition. However, there is still widespread dissatisfaction about the performance of information technology projects. The results of a survey report that as many as twice as many IT projects are considered `less successful' than those considered successful due to weak leadership performance (Torres et al., 2020).

In moving an organization, Leadership or leadership is an important parameter needed in leading. It is intended that the vision of the organization can run according to plan. Company leaders are people who have goals for the future of the company (Ryan & Kodrat, 2018). The presence of leadership and personal skills courses at the PGRI Banyuwangi College of Computer Science is based on several studies that analyze the critical success factors of IT projects, where researchers are increasingly aware that non-technical factors, such as managerial, organizational and cultural issues, play an important role in determine the success or otherwise of a project (Dervin, 1995; Lowry GR, Morgan GW, 1996; Thite, 2000). For that, the role of leadership is very important for each group. It is generally recognized that an IT professional lacks the leadership skills to manage a group of people effectively. While there is a dearth of empirical research in the project management literature that focuses on leadership as a critical success factor, leadership researchers have also neglected the unique personality and job characteristics of technical leaders (Thite, 2000).

RESEARCH METHODS

This type of research is descriptive evaluative, where evaluative research in this case is related to the objectives of the activity which are then assessed using the evaluation method (Roysa et al., 2021). Evaluation is an activity or process to measure and then assess, to what extent the objectives that have been formulated can be implemented (Torres et al., 2020). If the objectives that have been formulated are planned to be achieved in stages, then with continuous evaluation it will be possible to monitor which stages are not in accordance with the plans or objectives. In its implementation the Leadership and Personal Skills courses have so far been implemented in the form of courses in overcoming the problems faced by today's information technology engineers. In addition, the courses organized by STIKOM PGRI Banyuwangi aim to provide skills/soft skills to informatics engineering students in order to increase the competence of the students themselves. In order to find out whether the learning program has been running as planned, it is necessary to have an evaluation that can be used as a basis for making decisions regarding the continuation of this training program.



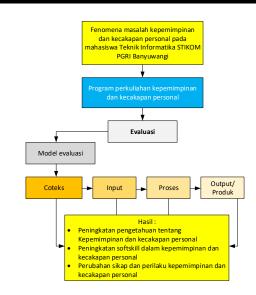


Figure 1. Research thinking framework

Respondents in this study were 49 students of the Informatics Engineering study program at the PGRI Banyuwangi High School of Communication. This exploratory case study was designed through direct student observation, complemented by documentation analysis. The data source used is in the form of performance records for the stages of achieving learning outcomes which include aspects of attitudes, knowledge, and skills. Furthermore, data sources were analyzed according to the initial, process, and final learning outcome evaluation instruments using a checklist

RESULTS AND DISCUSSION

The leadership and prowess of an engineer today cannot be denied, even soft skill competencies with high demand occur in most jobs (Karim, 2016). Thus, the challenge of how to teach future technical scholars to become capable and innovative leaders depends on how a teacher provides the necessary technical skills without suppressing the creativity of his students (Mayhew, M., Simonoff, J., Baumol, W., Wiesenfeld, B. ., & Klein, 2012). In the case studies found at STIKOM PGRI Banyuwangi, these challenges are overcome by creating leadership learning activities that focus on business development innovations or information technology projects that are increasingly progressive.

Based on the results of observations, in the learning process in cycle I the results of the measurement showed that students' leadership abilities and skills were at the "less" level (K). The course learning achievement targets are designed where (1) students are able to define leadership (2) students are able to explain leadership models (3) students are able to practice individual and group communication. Learning activities are supported by modules and videos that are applied in learning. Even though there are still various deficiencies, these are immediately resolved to achieve the desired learning target. Cycle I describes the level of understanding that is not perfect, this is due to the large number of students who are not used to communicating in public so that skills in using language and choosing words are still relatively far from the right words. This can be seen from the results of the evaluation test which shows the average value of leadership abilities and personal skills equal to the "Less" level of 75% or as many as 36 people, 4



people get very "sufficient" qualifications, 4 people get "good" qualifications, and 4 people are in less qualifications. For more details will be shown in the following table.

Qualification	Mark	Freq	Percent (%)
Very good	85-100	0	0.0
Good	70-84	4	8,3
Enough	55-69	4	8,3
Not enough	46-54	36	75.0
Very less	0-45	4	8,3
Amount		48	100%

Whereas in cycle II testing, the level of student understanding of forms of leadership and personal skills has increased. This is due to the pattern of habituation in the form of the assignments given. In addition, students experienced a better increase in self-confidence which had an impact on their performance in personal and group communication practices.

This can be seen from the results of the evaluation tests which show that the average value of leadership abilities and personal skills increases to a "very good" level of 16.7% or as many as 8 people, 30 people get very "good" qualifications, 6 people get "good" qualifications. sufficient", 4 people are in less qualifications, and there are no students with "very poor" or 0% qualifications. Improved learning outcomes in cycle II can be seen in the measurement results table as follows.

Qualification	Mark	Freq	Percent
			(%)
Very good	85-100	8	16,7
Good	70-84	30	62.5
Enough	55-69	6	12.5
Not enough	46-54	4	8,3
Very less	0-45	0	0.0
Amount		48	100%

Table 1. Conditions of test results in cycle II

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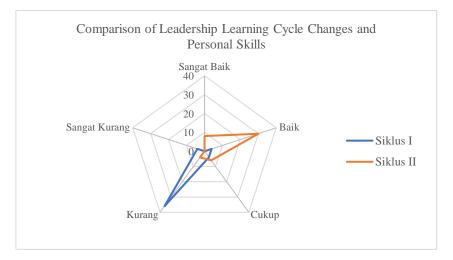


Figure 2. Graph of changes in leadership learning and personal skills in cycles I and II

The process of learning leadership and personal skills has proven to be effective enough to be applied in improving the performance of soft skills in information engineering students at STIKOM PGRI Banyuwangi. As shown in Figure 2, where the level of student qualifications increases between conditions during cycle I to measurements in cycle II. There are several factors that influence the increase in learning performance which includes instructor factors, learning materials & media, methods, and instruments (Dimyanti, 2002) . Increasing students' personal skills is also a desired part of this learning achievement. Engineering students who generally experience difficulties in communicating in public will affect their leadership abilities in the future. Personal skills can serve as a basis for further learning and are transferable or taught so that students can learn other life skills (Agustina, P., & Saputra, 2012).

Seeing the success indicators set from the activity objectives, it can be stated that this research has been successful, where in cycle II the planned indicators have been fulfilled. This shows that students have implemented leadership learning procedures and personal skills in learning.

CONCLUSION

Increasing leadership abilities and personal skills through learning in informatics engineering students with learning from cycle 1 to cycle 2 increases at a significant level. Leadership ability is an integral aspect of an organization's journey. Through good leadership will make the organization run according to its goals. The ideal leadership is inseparable from the personal skills inherent in students. The aspect of personal skills in this case is the student's ability to express concepts or ideas clearly. From this study it can be seen that all aspects have increased, only 8.3% of students experienced an increase from the level of "very poor" to "poor", this may be due to issues related to personal background.

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