Differences in Achievement of Learning by Varying Academic Provenance

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ABSTRACT
The difference in school origin often becomes a scapegoat when students fail in some study programs. Learning achievements decline, forcing students to drop out of school. So research needs to be done to analyze differences in student learning outcomes in the origin of schools. The design used for research was ex post facto. The research sample resulted through culinary education undergraduate participants, a second-year class of 73 total number of students. The range of the schools evaluated was limited to senior high schools (SHS), Islamic schools (IS), and vocational high schools (VHS). The methodology used for the data analysis is descriptive analysis to quantify gender gaps and variations in the origin of the school. While the F test is applied to measure differences in student achievement. The findings of the study indicate that academic performance disparities are based on variations in school origin. In comparison, the average student learning achievement with SHS = 75.47, IS = 75.25 and student learning achievement with VHS = 79.12. So, it can be concluded that there is no difference in learning achievement between SHS and IS background, but there are differences in student learning outcomes from VHS with "high" learning achievement criteria.

Keywords: Learning achievement, Academic provenance, SHS, VHS, IS

1. INTRODUCTION

Education is a significant strategy in educating people. Learning is essentially an integrated process in manufacturing quality human resources. Each is expected to develop their potential through education [1]. One way of developing this potential is through study at college. Higher education represents Indonesia's highest level of education. Achievement by taking the education stage below, namely secondary school. There are three types of secondary schools broadly speaking, that senior high schools (SHS), vocational high schools (VHS), an Islamic school (IS). At the highest level of education, it is expected students will be able to arrange programs following the development of science and technology that is developing by the era [2]. Tertiary-level teaching and learning activities are different from secondary-level. It's also different from previous education to see the level of success studying in college. Learning results

can be seen at tertiary institutions through the grade point average (GPA).

The higher the number, the better the learning outcomes. Thus, each student must develop its potential by fostering a disciplined attitude, being independent in learning, having a strong motivation to learn, and complete assignments given by the lecturer [3]. Internal and external factors affect the achievement of successful academic performance [4]. Learning experiences are another aspect that may be related to learning achievement. Optimal learning experiences from students are required in the process of teaching and learning. It is planned to get positive learning achievements from these students with good learning activities. Hence, lecturers need to be innovative in teaching to improve student learning activities. It is in line with the study [5] that successful learning is which offers opportunities for self-study or self-activity. Learning tasks may involve paying attention, taking

notes, doing homework, answering questions, asking opinions or asking questions, reading, summarizing, and having discussions. If students lack discipline and independence during the lectures, it will reduce learning achievement. Since students are no longer completely directed by the teaching staff at this level of higher education but teachers only provide course content, the majority of the students are expected to find their material independently.

A report issued by [6] shows that the direction of acceptance affects student achievement, where student achievement is stronger than internal paths obtained through external channels. Whereas according to [7] the school's origin has an impact on student achievement where SHS / VHS student achievement is higher than IS, plus there is no relationship between the two variables that affect student achievement. However, a study needs to be established to verify the research findings. Where the type of study program being followed is various, contradictory experiences may occur. An example is a technical expertise requiring perseverance and hard skills to measure differences in learning outcomes based on school origin differences. Meanwhile, according to research findings [8] states that the path of entry selection, family environment, and motivation for learning affect the performance of the student. Parents' suggestions are intended to give attention and support to students, so they can be inspired to improve their academic work and increase their motivation to learn.

This research must be conducted as a guide for lecturers to establish different learning strategies and media. By recognizing student achievement based on their school's provenance, specific interventions are required to be offered so that the final aim of the course can be achieved. Especially in the engineering field, this is important to do. One of the reasons is the varying initial awareness. To be technologically qualified, strong initial awareness must be supported.

This research was conducted to analyze the difference in the level of academic achievement among students based on the type of senior high schools (SHS), vocational high schools (VHS), an Islamic school (IS). Researchers believe that affecting student performance when studying at the university level would impact the effectiveness of various social contexts and learning environments at each education level.

2. METHOD

2.1. Research Design

The research design used is ex-post-facto, that study aimed at examining previously occurring events and analyzing factors that can currently influence events [9]. This study was conducted to determine whether differences in school origin have an impact on learning achievement among undergraduate students in the program of culinary education, engineering faculty, Universitas Negeri Surabaya.

2.2. Research Subjects

The sample of the study came from undergraduate students in culinary education courses, the second-year class of 2019, through 73 participants. Learning achievement is only limited to the results of assignments including practicum scores, midterm scores, and final semester grades. This value was obtained after taking a course on Indonesian food preparations. Besides, to support the information on learning achievement, respondent information was collected by giving a closed questionnaire.

2.3. Measurement and Analysis

The technique used for measuring the data is descriptive analysis. The ordinal type of data is for factors of academic achievement while the nominal type of data is for variations in gender and discrepancies in school origin. While the F test is applied to measure student achievement differences [10]. Three hypotheses were determined in this study. First, student learning outcomes vary according to tertiary education. Second, student learning outcomes differ by gender. Finally, there is a relationship between the level of education from students' schools and gender in determining learning outcomes. Likert scale is used to determine the scale of measurement of learning outcomes, measured starting from the criteria of 'low,' medium ', and' high '.

3. RESULTS AND DISCUSSION

3.1. Result

The findings of the study indicate that academic performance disparities are based on variations in school origin. The coefficient F = 8.879 with P = 0.000 < α 0.05 is based on the analysis of the ANOVA test, so there are differences in learning achievement between male and female undergraduate courses in culinary education.

More in detail, male learning achievement standard deviation = 1,718 and female learning achievement = 2,148. The analysis results show that there are differences in gender learning achievement. Differences in gender-based learning performance due to differences in student activity as regards pursuing learning achievement through independent learning or group learning with friends. Also, the extent of involvement in demanding lecturers and finding references for research or actively reading books on lecture content. These activities will directly promote high learning outcomes.

Whereas Fig 1. shows a comparison of the number of male and female students in undergraduate courses in culinary education. Seen in the picture there is a very significant difference. As many as 86% of students are dominated by women, while only 14% of students are male students. This situation occurs because the majority of the community still thinks that the field of cooking is identical to women's gender.
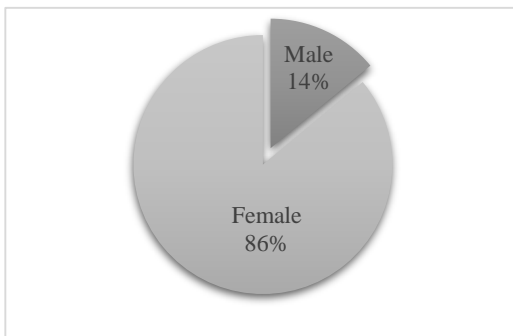

Figure 1 Gender-based student composition

Depending on the results of the study with the F test obtained a coefficient of F = 4,457 with P = 0.015 < α 0.05, and there is a disparity between students in academic performance based on deviations from IS, SHS and VHS. This can also be seen that the average student learning achievement with a background in SHS = 75,47, while the average student learning achievement with IS = 75,25) and VHS = 79,12. So it can be concluded that there is no difference between students with IS and SHS, However, student learning outcomes differ from vocational schools with "high" criteria for learning achievement.

The findings of the study show that, with a standard deviation = 0.535 (80.14), the average learning performance of undergraduate students in the culinary education program is included in the "high" criterion.

More precisely, the results obtained show that none of the students from each school origin were given a "weak" criterion on the assignment score. Nonetheless, on the final semester exam scores, there is 14 percent of SHS students receiving the 'low' criteria, the rest earning midterm scores on the 'big' criteria. Whereas VHS students usually get the same score on the importance of the task, mid-term, and final semester exams with a range of 77 to 80. Whereas, the study results showed that, depending on learning achievement criteria with the respondents' educational history, there were no students who received the 'low' and 'high' criteria with SHS and IS educational background. Although there are 87 % of students with a VHS history with 'moderate' requirements, just 13 % have the 'high' requirements as well.

Eventually, the criteria for learning achievement with the respondents' gender reported that students with male identity considered the learning outcome criteria 'weak' as much as 15% of SHS school origin and 5% of IS school origin. While the 'high' requirements are 85 % for female SHS students and 95% for female IS students. Meanwhile, female students from VHS schools obtained the 'low' and 'high' criteria, and only one male student from the same school obtained the 'medium' criteria.
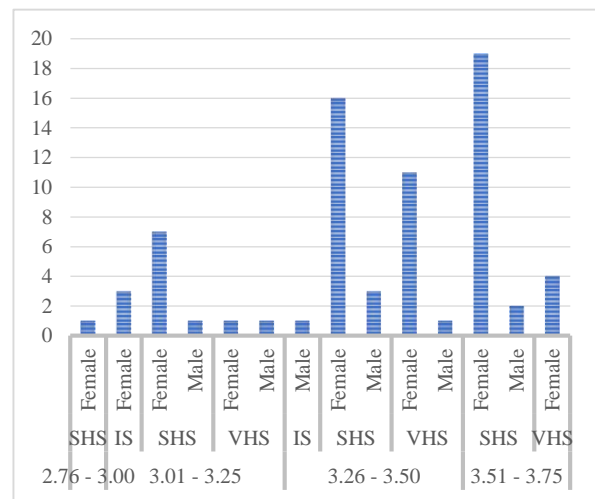

Figure 2 GPA is focused on gender and origin of the school

3.2. Discussion

The findings in this study relate to factors described in research [11], which showed that learning success is affected by internal factors and external factors. External

factors influencing the achievement of learning based on gender disparities in physiological and psychological skills. These factors will directly influence the achievement of learning outcomes. While the social environment is a differentiator for learning achievement in terms of external factors. The situation is thought to cause students to become less active in learning. Besides, association outside the school environment reduces the desire to learn. Research currently being carried out requires a more detailed analysis to measure the extent of the relationship. The development of student learning strategies, methods, and learning styles used to have a good influence on student learning outcomes. These factors have a direct impact on student achievement, so that a good environment and student readiness, including strategies, methods and learning styles, are needed so that they can influence the learning achievement that will be generated.

As stated by [12] states that there are two factors influencing learning achievement, firstly, learning achievement can be influenced by student self's external and internal factors. A successful adaptation process can decide the achievement of good results and high student motivation will have a direct effect on student achievement during college. Second, the curriculum being introduced, equipment, and facilities supporting teaching and learning programs, as well as professional lecturers have the same impact on producing students with strong knowledge and high learning achievements. Influence from within a student is a major driver of high achievement for students.

There are significant differences in gender learning achievement. This implies the need for academic supervisors to monitor student learning outcomes. So that students are more encouraged to achieve the best performance and are not easily influenced by the student's social environment. The results of this study have shown that the learning achievement of female students is higher than that of male students. Therefore, necessary to have a small study group, each consisting of male and female students, to create more meaningful communication variations and be able to provide material understanding through discussion activities. Supported by the study [13] that reports that VHS students are superior to SHS students. This situation may arise because the learning stimulus theory received by students who come from VHS is different from students who come from SHS / IS so that they give different answers. More in detail, VHS students focus more on hard skills, while SHS students focus more on soft skills.

There are major gaps in student academic performance based on variants of origin from SHS, VHS, and IS. The implication of the results of this study is the need for teacher support to sustain student motivation to always learn and adapt, in more detail, by showing progress in their learning accomplishments, students should strive completely and appropriately for their choice of study. It is important to further improve the implementation of a holistic learning strategy and the learning technologies used by lecturers since students from each different school have different levels of intelligence. Based on research conducted through group learning activities [14], it can be a choice to enable students to share their educational skills and competencies acquired in previous schools. Education is a crucial process for individual development and the development of communities. The evolution of a society can be seen in educational development.
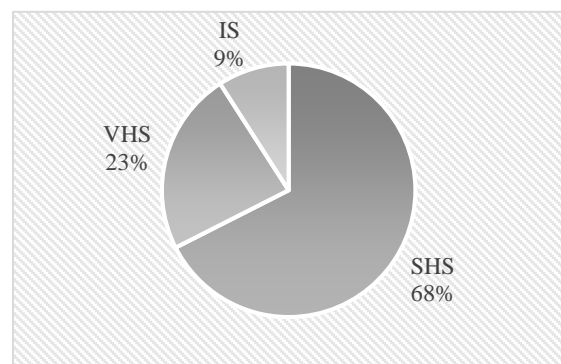

Figure 3 The provenance of the culinary education undergraduate students

In the meantime, Figure 3 indicates that the majority of undergraduate students in culinary education courses are from SHS. While the study program specifically accommodates students in acquiring teaching and hospitality skills. Thus, the results of this study demonstrate that there are gaps in learning outcomes, particularly the capacity of hard skills. Contrary to the analytical results shown by the students with VHS schools. In general, VHS students find changing the lecture content easier. Nevertheless, it is inversely proportional to the comparison of students from the school of origin shown in the above figure. The method of learning activities, therefore, needs to be carefully assessed. Seeing the makeup of the school's roots, a learning approach was required that could meet the

needs of special students for SHS and IS. In adopting a certain method of learning, students from both schools are required to be able to perform suitably according to VHS students' skills. Of course, students do need to study in groups as well as individually.

According to [15], the purpose of education is to prepare students, wherein essence students are not ready and need to be prepared and are preparing themselves. This refers to the process before the students are willing to move on to real life. Schools as formal educational institutions are a means of attaining the function of education. Students learn different things through school. Training is a learning procedure that someone carries out to create a new shift in actions as a whole, as a result of his own experience of contact with the environment [16]. Attention is the concentration of all actions that are focused on an object or group of objects [17]. Depending on the above assumptions, further supervision is provided to students living with the child's parents, since supervision by parents is likely not to work properly in the upbringing of students. According to research findings conducted by [18], it could be said that it is really critical to measure the origin of schools and residences to achieve full results on student learning, in which step by step guide offers direct action to change anything that is different from student rules and disciplines and, in particular, is performing the learning process.

4. CONCLUSION

Undergraduate students in culinary education can figure out that discrepancies in educational backgrounds are not a high achievement issue. Students should increase their knowledge and commitment to obtain references or information from different media, and be more involved in communicating with academic advisors so that any issues faced by students can be well discussed and not affected by friends and social atmosphere that may impede their learning. During college, students should have a high degree of personal accountability, have learning goals such as graduating with good grades, have a detailed plan or study program, and strive to achieve their learning goals, and have practical input in all activities undertaken. There are still limitations to the research object in this research. The results of this study only examine the learning outcomes of students in semesters 1 and 2. To give an overview of the academic abilities of the student before entering higher education, it is expected to do better research by

developing this research to examine learning outcomes before students are enrolled.

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