THE INFLUENCE OF STUDENT ENGAGEMENT TOWARDS LEARNING ACHIEVEMENT OF CREATIVE INDUSTRY TELKOM UNIVERSITY BANDUNG

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Abstract

Education is a factor in building quality human resources. Student engagement in a university is important, because if student engagement is increased, the achievement of learning is increasing as well as, when the student engagement experiences a decline Learning was declining. This research aims to find out an influence of student engagement on student Faculty of Creative Industries Universitas Telkom Bandung with total population of 3,033 active students with samples 354 from the calculation result using the formula Slovin. The method used is a survey with the incidental sampling technique, this research data using simple linear regression tests, the results gained on this research show that student Engagement has no significant effect on the study achievement in active students of the Faculty of Creative Industries of Telkom University of Bandung. These results have been proven that the student engagement has no significant influence on the learning achievement with a percentage of 0.1%, and the remaining 99.9% can be caused by other factors not examined in this study.

Keywords: Student Engagement, Learning Achievement, Student

1. Introduction

Education is a major factor in building quality human resources (Susilawati et al., 2019 ). To achieve a successful education, so as to get a good achievement, it starts from learning, because learning is an effort made by students to obtain a new change in behavior as a whole, as a result of experience in interacting with the environment (Slameto, 2015). Learning achievement is an indicator of success in education, students have many educational challenges as a condition of graduation in the form of developing personal skills, and the ability to create creative ideas, so the need for student engagement in learning. Student learning achievement has to do with the achievement of a higher education. University achievements can be in the form of awards or other values, Telkom University has been named as a private tertiary institution (PTI) ranked number 1 in the university cluster in Indonesia in 2019 Kemenristekdikti: This is also supported by the recapitulation of Telkom University achievements in the period 2016 to 2018, which in 2016 a total of 144 achievements were achieved, and experienced an increase in 2017, which was 254 achievements, while in 2018 the achievements of Telkom University decreased, so that the achievements were only 211.
Aside from the achievements of Telkom University, it can be seen from the number of graduates each year. Following are the data of Telkom University graduates starting from the March-November 2018 period, and the April-August 2019 period as shown at Table 1.

Table 1. Number of Graduates of Telkom University in 2018

| Faculty                        | Graduates in 2018 | Graduates in 2019 |
|-------------------------------|-------------------|-------------------|
| Electrical Engineering        | 919               | 1,103             |
| Applied Science               | 817               | 934               |
| Creative Industries           | 748               | 834               |
| Economics and Business        | 687               | 760               |
| Informatics                   | 634               | 755               |
| Industrial Engineering        | 602               | 729               |
| Communication and Business    | 521               | 327               |

Source: BAA Telkom University, 2019

If observed in the graduation list in 2018 and in 2019 the faculty that occupies a permanent position is the Faculty of Creative Industries (FIK), in 2018 the Faculty of Creative Industries gained 748 graduates, while in 2019 there was an increase to 834 graduates, if determined within 2 years the creative industry faculty has produced as many as 1,582 graduates, as for the graduation requirements that must be implemented by students namely, students are challenged to develop self-skills in the form of completing the final project and create a creative idea in the form of work in accordance with the chosen study program, while the learning achievements of creative industry faculty students can be seen based on the GPA, the data are shown at Table 2.

Table 2. Average GPA Scores of FIK Students

| Departemen                  | 2015 | 2016 | 2017 | 2018 |
|-----------------------------|------|------|------|------|
| Craft Textile Fashion       | 3.46 | 3.52 | 3.56 | 3.59 |
| Product Design              | 3.37 | 3.36 | 3.4  | 3.41 |
| Visual Communication Design | 3.14 | 3.22 | 3.31 | 3.37 |
| Art                         | 2.9  | 3.21 | 3.22 | 3.25 |
| Design Interior             | 3.15 | 3.15 | 3.19 | 3.21 |

Source: Internal Data of FIK, 2019

If it is observed from 2015 to 2018, the Interior Design study program has only been improved not too far away. If seen as a whole the Faculty of Creative Industries in its learning achievements is categorized very good because it has a GPA of more than 3.0 on average. Based on the phenomena that have been explained, in order to find out more about student engagement, this study has conducted a survey by distributing questionnaires containing statements to students of the Faculty of Creative Industries in 2016, 2017 and 2018.
Table 3. Preliminary Student Engagement Results

| Statement | Respond | Total Score | Overall Total Score | % |
|-----------|---------|-------------|---------------------|---|
|           | Strongly Disagree (1) | Disagree (2) | Agree (3) | Strongly Agree (4) | | |
| I am proud to study here | 3 | 7 | 58 | 34 | 327 | 80% |
| I like the department I choose | 1 | 1 | 60 | 40 | 343 | 84% |
| I looked for material before class began | 1 | 8 | 58 | 35 | 331 | 81% |
| I feel satisfied with the value obtained | 2 | 31 | 48 | 23 | 300 | 73% |
| I follow the learning activities well | 3 | 24 | 40 | 35 | 311 | 76% |
| I am active in activities organized by the campus | 0 | 11 | 39 | 52 | 347 | 85% |
| Campus facilities and infrastructure support learning achievements | 2 | 22 | 57 | 21 | 301 | 74% |
| Total | 2,260 | 408 | 79% |

Source: Processed by Authors, 2020

Based on the preliminary results obtained about 7 items of student engagement statements, it can be concluded that the highest percentage value obtained in item 6, with 85% results means that students of the Faculty of Creative Industry are active in participating in activities organized by the campus, and for the lowest percentage value obtained at item 4, which means that 73% of the results mean that students are not satisfied with their grades. Student Engagement and learning achievements will be interconnected because basically when a good student engagement will produce good achievements. Like the research that has been done by Utami & Kusdiyati (2015), the results of this study are that student engagement influences learning achievement or what is called a positive correlation between the two variables (Utami & Kusdiyati, 2015). Based on the background, learning achievement and student engagement of FIK Telkom students can be said to be good.

2. Literature Review

2.1 Engagement

Engagement is an investment and psychological effort directed at learning, understanding or mastering the knowledge, skills and crafts that academic work wants to promote (National Academy, 2004). According to The National Survey on Student Engagement in Barkley & Elizabeth (2010) involvement as a frequency to represent patterns of interaction in various effective activities. Engagement is a condition in an organization when employees present their potential and capabilities more than what is requested (Arifin, 2019).
2.2 Student Engagement

Student engagement is a student's thinking skill in learning, doing assignments, and solving problems, so they have the passion and desire to learn so they can understand what they are learning (Barkley & Elizabeth, 2010). Student engagement provides valuable perspectives on student experiences, capturing and uniting various kinds of educational interactions between students and universities (Coates & Hamish, 2006). Fredrick et al. (2004) said that student engagement has three dimensions, namely behavior, affective, and cognitive, which are useful for measuring the factors that can influence student engagement.

2.3 Learning Achievement

Learning is a business process carried out by individuals consciously to obtain changes in behavior such as mental and psychological activities that take place in active interactions with the environment, resulting in changes in knowledge, understanding, skills and values, and attitudes (Husamah, et al., 2018). Learning is a change in a person that can be expressed by the assignment of new greeting patterns, understanding, skills, and attitudes as a result of the experience process experienced (Suardi, 2018). Learning is an activity carried out by a person intentionally in a conscious state in order to gain new concepts, understanding, or knowledge (Susanto, 2016).

Learning achievement is a learning outcome in which there is an increase in knowledge, improved attitudes, and increased skills possessed by students, so that learning achievement cannot be separated from the abilities obtained by students through learning activities (Alamanda et al., 2019). Programmed and controlled learning activities, aim to achieve success in learning (Pratiwi, 2015). Learning achievement is a measure of success obtained by students while studying (Mabun, 2018) Learning achievement is the result achieved by someone through the learning process Toshiana in (Gunadi & Gunawan, 2014).

3 Research Methodology

3.1 Population, Samples and Research Instruments

This research was conducted with quantitative methods to test hypotheses. The selected population were students of the Faculty of Creative Industries, Telkom University Bandung. The sample size used was 354 respondents from 3,033 populations, this was taken in accordance with the results of the calculation of Slovin formula (Suliyanto, 2018). Determination of the respondent is done by incidental sampling which means that the respondent was chosen by chance but on condition that the active student of the Faculty of Creative Industries, Telkom University Bandung. For the research instrument selected survey techniques using a questionnaire with a Likert scale (Table 4).

| Table 4. Scale of Measurement |
|-----------------------------|
| **Answer** | **Weight Value** |
| Strongly Agree | 4 |
| Agree | 3 |
| Disagree | 2 |
| Strongly Disagree | 1 |
3.2 Data Collection Techniques and Data Analysis

Secondary data collection is done by starting to look for internal data to BAA Telkom University and LAA Faculty of Creative Industries, while for primary data is by distributing questionnaires to prospective respondents. After the data is collected, the validity and reliability of the test will be carried out to determine whether the questionnaire can measure what should be measured accurately and reliably.

4 Result and Discussion

4.1 Analysis of Respondents

This research was conducted on the students of the Faculty of Creative Industries Telkom University. With a population of 3,033 students and the sample in this study amounted to 354 who are expected to be able to represent the existing population. Data obtained through questionnaires distributed through sampling methods using nonprobability sampling techniques while the sampling technique uses accidental random sampling techniques. Demographic details are shown at Table 5.

Table 5. Respondents’ Profile

| Demographics     | Classification | Respondents | %  |
|------------------|----------------|-------------|----|
| Gender           | Male           | 157         | 44%|
|                  | Female         | 197         | 56%|
| Generation       | 2016           | 57          | 16%|
|                  | 2017           | 211         | 60%|
|                  | 2018           | 86          | 24%|
| Departement      | Design interior| 69          | 20%|
|                  | Virtual Communication Design | 132 | 37%|
|                  | Product Design | 41          | 11%|
|                  | Craft Textile Fashion | 76 | 22%|
|                  | Art            | 36          | 10%|

4.2 The results of analysis Student Engagement and Learning Achievement variables

Student engagement variables in this study have three different dimensions, namely affective / emotional, behavioral, cognitive. Affective/ emotional has two sub dimensions, namely, liking for learning and liking for school. Behavioral dimension has two sub dimensions, namely effort & preistance and extracurricular. Whereas the cognitive dimension does not have sub dimensions.

Table 6. Category of Student Engagement

| Dimension                  | Percentage | Category |
|----------------------------|------------|----------|
| Affective: Linking for Learning | 80%        | High     |
| Affective: Linking for School     | 74%        | High     |
| Behavioral: Effort and Presistance | 72%        | Low      |
| Behavioral extracurricular      | 67%        | Low      |
| Cognitive                    | 76%        | High     |

It can be concluded that in the student engagement variable, the overall total score of 30 indicators is 31,067, with an ideal total score of 42,480, or equivalent to 74%, meaning
that student engagement in faculty of creative industries students can be categorized high. The learning achievement variable in this study has one variable dimension namely academic value which is the standard used by every tertiary institution in Indonesia. The dimensions of the explanation are learning achievement values obtained using secondary data on student GPA scores. Based on secondary data from 354 respondents it was found that the majority of the academic GPA scores of students in the Industrial Engineering Study Program at Telkom University were in the range of 2.51-3.00 with a mean value of 3.25. The mode for student GPA is 4. The average GPA score is 3.00 when viewed based on the continuum line the average student GPA scores into a good predicate (Figure 1).

![Figure 1. Continuous Line of Learning Achievement Variables](image)

### 4.3 Simple Linear Regression Test Results and Hypothesis Testing

The Simple linear regression or simply called simple linear regression is a statistical method that functions to test the extent of the causal relationship between the causal variables (X) to the effect (Y), so simple linear regression analysis is used to determine the effect of one independent variable with one variable dependent (Herlina, 2019).

| Model       | b    | Sig  |
|-------------|------|------|
| (Constant)  | 2.540| .000 |
| Student Engagement | 0.004| .495 |

Based on Table 7 above, it can be seen the results of simple linear regression are:

a) a constant value of 2540, meaning that if the student engagement variable is worth 0, then the learning achievement is worth 2,450.

b) regression coefficient of 0.36 which means that the variable x (student engagement) has a direct relationship with the variable y (learning achievement) each increment of one-unit variable student engagement will affect the increase in learning achievement variables (Y) of 0.36

When seen from the significance value of 0.495 which means > 0.05 means that the independent student engagement variable has no significant effect on the dependent variable of learning achievement. However, it has a linear effect between the two variables studied, which the better the student engagement at the FIK students of Telkom University Bandung, the better the learning achievement, but not significantly.
T test (simple regression coefficient test) is used to determine whether the independent variable (X) has a significant effect on the dependent variable (Y). Significant means the influence that occurs can apply to the population or can be generalized (Herlina, 2019). From the above analysis it can be concluded, the value of $t_{\text{count}}$ is 0.683 and, $t_{\text{table}}$ value is 1.966, then the value of $t_{\text{count}} < t_{\text{table}}$, meaning that $H_0$ is accepted and $H_a$ is rejected, it can be concluded that student engagement has no significant effect on learning achievement faculty of creative industry students at Telkom University Bandung.

4.4 Discussion

Based on Table 5, this study was conducted on 354 students of the Faculty of Creative Industries Telkom University Bandung. For the characteristics of research based on gender dominated by women, which is a number of 197 respondents or equivalent to 56% while men as many as 157 respondents or equivalent to 44%. Furthermore, for the characteristics of respondents by force, it is dominated by 2017 as many as 211 or 60%, and when viewed according to the study program, it is dominated by visual communication design study programs as much as 132 or equal to 37%.

Student engagement in creative industry Faculty students has a score of 74%, it can be interpreted that student engagement in Creative Industry Faculty students, including high categories, while for learning achievement, seen based on the GPA, that the highest GPA in Creative Industry Faculty students is in figure 3.00, this can be interpreted that the learning achievements of creative industry faculty students are satisfactory.

Hypothesis testing conducted aims to determine whether student engagement has an influence on student achievement in the Faculty of Creative Industries, Telkom University. Based on the $t$ value, it can be seen that $0.683 < t_{\text{table}} 1.966$, therefore it can be seen that the student engagement variable (X) does not affect the learning achievement variable (Y). The significance value obtained is 0.495 which means $>0.005$ meaning $H_0$ is accepted. Whereas from the simple linear regression equation, the constant value of the obtained student engagement variable means that the coefficient is positive. Because $H_0$ was accepted, it was found out that student engagement had no effect on student achievement at the Faculty of Creative Industries Telkom University Bandung.

5. Conclusions and Recommendations

5.1 Conclusions

Based on data processing and analysis that has been done, researchers draw some conclusions; Student engagement of Telkom University Creative Industry Faculty students is included in the high category with a percentage of 74%. This is indicated by the value of indicators that have a very high percentage of 89% and 80% which states that students of the Faculty of Creative Industries Telkom University like what is learned in campus so students try hard to do their best in campus. Student achievement at the Faculty of Creative Industry, Telkom University entered into the title of satisfactory with an average GPA of 3.00. These results indicate that the students of the Faculty of Creative Industries Telkom University have a satisfying achievement; Based on research results obtained that student engagement has no effect on student achievement in the Faculty of Creative Industries Telkom University.
5.2 Recommendations

Based on the results of this study, it is expected that the Faculty of Creative Industries is able to find out what factors are low in order to increase high student engagement among students. Although in this study student engagement on the Creative Industry Faculty students did not have an influence on learning achievement, this should still be a concern of the faculty because if student engagement is low then learning achievement will be low. This research is also expected for Creative Industry students to find out which indicators are already high and which indicators are still low, in order to improve and optimize indicators that are already high to very high, low to high. This research is expected to the Telkom University to make an extracurricular program that is attractive to students so that students feel honed with extra-campus organizations such as associations, BEM or UKM. Because this can be seen in the behavioral dimension: extracurricular activities get the lowest percentage of 67% which means that there are students who are less interested in extracurricular activities resulting in students being inactive and have no interest in the organization provided by the campus.

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