Factors Affecting Graduate Competence in Independent Learning Policies Independent Campus

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ABSTRACT

Learning in the Merdeka Campus provides challenges and opportunities for the development of innovation, creativity, capacity, personality, and student needs, as well as developing independence in seeking and finding knowledge through realities and field dynamics such as ability requirements, real problems, social interaction, collaboration, self-management, performance demands, targets and achievements. Through an independent learning program that is well designed and implemented, students' hard and soft skills will be formed strongly. The tight competition in the world of work entering the industrial era requires university graduates to compete by equipping themselves with various skills. The competence of college graduates is one of the determining factors to be able to compete in the world of work. Higher education graduates are mainly required to be up to date with the development of science and technology so that they can become graduates who are ready to use and are competitive. It is undeniable, with the advancement of science and technology, the roles and functions of humans have begun to be replaced by information technology that was created to simplify and accelerate human work. This study aims to analyze the factors that influence the competence of college graduates, namely emotional intelligence, learning behavior and academic achievement. Graduate competence refers to the Graduate Competency Standards according to the National Higher Education Standards, namely Attitudes, Knowledge and Skills. The scope of the research is final semester students at the Raflesia Polytechnic with 120 respondents. Data collection techniques using a Likert scale 1-5 questionnaire. The analysis used statistical tests, namely the F test and t test with the help of SPSS. The results showed that simultaneously emotional intelligence, learning behavior and
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Introduction

The Independent Learning Policy-Independent Campus, is a policy of the Minister of Education and Culture, which aims to encourage students to master various sciences that are useful for entering the world of work. Merdeka Campus provides an opportunity for students to choose the courses they will take. The Independent Learning Policy - Independent Campus is in accordance with Permendikbud Number 3 of 2020 concerning National Higher Education Standards, in Article 18 it is stated that the fulfillment of the learning period and burden for students of undergraduate or applied undergraduate programs can be carried out: 1) following the entire learning process in the study program at tertiary institutions according to the period and study load;

Learning in the Merdeka Campus provides challenges and opportunities for the development of creativity, capacity, personality, and student needs, as well as developing independence in seeking and finding knowledge through realities and field dynamics such as ability requirements, real problems, social interaction, collaboration, self-management, performance demands, targets and achievements. (Free Guide to Learning Independent Campus, 2020)

The Independent Learning Policy-Independent Campus is expected to be the answer to these demands. Independent Campus is a form of learning in higher education that is autonomous and flexible so as to create a learning culture that is innovative, unfettered, and in accordance with the needs of students. This is in line with the concern expressed by Sundem (1993) is because there are still many educational programs centered on intellectual intelligence. Intellectual intelligence is measured from report cards and achievement index. A good report card score, a high achievement index, or frequent class winners are benchmarks for a person's success. This benchmark is not wrong but not one hundred percent justifiable. There are other factors that cause a person to be successful, namely the presence of emotional intelligence and spiritual intelligence. Student emotional intelligence also has an influence on Student Academic Achievement. Emotional intelligence is able to train the ability to manage their feelings, the ability to motivate themselves, the ability to be strong in the face of frustration, the ability to control impulses and delay momentary gratification, set a reactive mood, and able to empathize and
cooperate with others. This intelligence supports a person in achieving his goals and ideals. In addition to emotional intelligence (EQ), learning behavior while in college also affects a student's academic achievement. Student learning habits or behavior is closely related to the use of good time for studying and other activities. Roestiah (in Hanifah et al., 2001) argues that efficient learning can be achieved when using the right strategy, namely good timing in attending lectures, studying at home, in groups or taking exams. Good learning behavior can be realized if students are aware of their responsibilities as students, so that they can divide their time well between studying and activities outside of learning. Motivation and self-discipline are very important in this case because motivation is the direction for the achievement to be obtained and discipline is a feeling of being obedient and obedient to the values that are believed and doing the job properly if it is felt to be a responsibility.

The importance of Higher Education Graduates' Competencies, especially in facing the industrial era 4.0, is something that Higher Education must pay close attention to because the direction of lecture activities is now very much different when compared to a few years ago. Coupled with the Covid-19 pandemic, it also indirectly changes learning habits. This condition either directly or indirectly affects the condition of university graduates who face many challenges and competition in the world of work. By examining the factors that influence the competence of graduates, it is hoped that policy makers in higher education can take these influencing factors into consideration in making decisions related to graduate competencies.

**Competence of graduates**

Competence is a fundamental characteristic of an individual, namely the causes related to the criteria for effective performance. "A competency is an underlying characteristic of an individual that is causally related to criterion-referenced effective and/or superior performance in a job or situation. (Spencer et al., 1993:9). The underlying characteristic means that competence is part of a person's personality that has been embedded and lasts a long time and can predict behavior in various tasks and work situations. Causally related means that competence causes or predicts behavior and performance. Criterion-referenced means that competence actually predicts who does something well or poorly, as measured by specific criteria or standards. Competencies are thus a number of characteristics that underlie a person and indicate ways of acting, thinking, or generalizing situations appropriately in the long term. There are five types of competency characteristics, namely: (1) motives, something that is consistently thought and desired, which causes a person's actions; (2) traits (traits), physical characteristics and consistent responses to situations or information; (3) self-concept, attitudes, values or a picture of one's self; (4) knowledge (knowledge), information that a person has in a particular specific area; (5) skill, a person's ability to perform certain physical tasks or mental tasks.
Emotional Intelligence

Based on the traditional understanding, intelligence includes the ability to read, write and count which are word and number skills that are the focus of formal education (schools) and actually lead a person to achieve success in academics. But the definition of success in life is not only that. The new view that is developing says that there are other intelligences outside of intellectual intelligence (IQ) such as talent, social acumen, social relationships, emotional maturity and others that must be developed as well. The intelligence in question is emotional intelligence (EQ) (Melandy et al., 2006).

Learning Behavior

The concept or understanding of learning is very diverse and depends on the point of view of each person observing it. Learning is one of the interesting concepts in psychological and educational theories, so that experts give various understandings about learning. Learning is a particular individual activity (Suwarjono, 1991). Learning is a process of behavior change due to the interaction of individuals with the environment (Ali, 1992 in Hanifah and Syukriy) and is a process of effort made by individuals to obtain a new change in behavior as a whole, as the experience of the individual himself in interaction with his environment (Slameto, 2003). 1991 in Hanifah et al., 2001). Ahmadi (1993) in Hanifah et al. (2001) further states that learning is a change in humans.

Academic achievement

To get an achievement is not as easy as imagined, because it requires struggle and sacrifice with various challenges that must be faced. Assessment of student learning outcomes to find out how far they have achieved their learning goals is known as learning achievement. As said by Winkel (1997:168) that the learning process experienced by students produces changes in the fields of knowledge and understanding, in the areas of values, attitudes and skills. The existence of these changes can be seen in the academic achievements produced by students on questions, problems or assignments given by the teacher. Through Academic Achievement Students can find out the progress that has been achieved in learning. Meanwhile, Marsun and Martaniah in Sia Tjundjing (2000: 71) argues that academic achievement is the result of learning activities, namely the extent to which students master the subject matter being taught, which is followed by the emergence of a feeling of satisfaction that he has done something well. This means that academic achievement can be known if an assessment of student learning outcomes has been carried out. According to Poerwodarminto (Ratnawati, 1996: 206) what is meant by achievement is the result that has been achieved, done or done by someone. While Academic Achievement itself is defined as the achievement achieved by a student in a certain period of time and recorded in the Study Results Card (KHS). followed by a feeling of satisfaction that he has done something well. This means that academic achievement can be known if an assessment of student learning outcomes has been
carried out. According to Poerwodarminto (Ratnawati, 1996: 206) what is meant by achievement is the result that has been achieved, done or done by someone. While Academic Achievement itself is defined as the achievement achieved by a student in a certain period of time and recorded in the Study Results Card (KHS). followed by a feeling of satisfaction that he has done something well. This means that academic achievement can be known if an assessment of student learning outcomes has been carried out. According to Poerwodarminto (Ratnawati, 1996: 206) what is meant by achievement is the result that has been achieved, done or done by someone. While Academic Achievement itself is defined as the achievement achieved by a student in a certain period of time and recorded in the Study Results Card (KHS).

Method
This research is a quantitative descriptive study using statistical tests. The test tool used is the effect test using multiple linear regression. Proving the hypothesis using the F test, t test and R test. Respondents in this study were final year students at the Raflesia Polytechnic for Accounting, Mechanical Engineering, Electrical Engineering and Civil Engineering study programs with a total of 66 respondents. The data collection technique used a Likert scale 1-5 questionnaire which was distributed online using a google form.

Results and Discussion

Multicollinearity Test Results

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.679</td>
<td>0.461</td>
<td>0.435</td>
<td>2.40633</td>
</tr>
</tbody>
</table>

It can be seen that the R Square value is quite high at 68% indicating a value greater than = 5% and the overall VIF value above 10% indicates the absence of multicollinearity symptoms.

Heteroscedasticity Test Results
The scale plot graph above shows that the points do not spread randomly either below the number 0 on the Y axis. This concludes that there is a regression model heteroscedasticity. So the data that we use meets the requirements for Multiple Regression.

Normative Test Results
The graph above confirms that the regression model obtained is normally distributed, where the data distribution is around the diagonal line
Multiple Linear Regression Test

Multiple Linear Test is conducted to predict whether variable X affects variable Y and how much influence the two independent variables have on the dependent variable Y, Multiple Linear Regression Test consists of Simultaneous Test (F Test) and Partial Test (T Test).

F Test

The F test is used to determine whether the independent variables simultaneously have a significant effect on the dependent variable. The degree of confidence used is 0.05. If the calculated F value is greater than the F value according to the table, then the alternative hypothesis is that all independent variables simultaneously have a significant effect on the dependent variable. The output is as follows:

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>307,434</td>
<td>3</td>
<td>102,478</td>
<td>17.698</td>
<td>0.0003</td>
</tr>
<tr>
<td>Residual</td>
<td>359,005</td>
<td>62</td>
<td>5,790</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>666,439</td>
<td>65</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The F' test shows that the Fcount value is 17.698 with a (sig) level of 0.000 or a significance value of 0.000 is smaller than the probability value of 0.005. This proves that simultaneously there is a significant influence between the variables of Emotional Intelligence, Learning Behavior and Academic Achievement on Graduate Competencies.

t Test

The t-test is used to determine whether the independent variables partially have a significant effect or not on the dependent variable. The degree of significance used is 0.05. If the significant value is less than the degree of confidence, then we accept the alternative hypothesis, which states that an independent variable partially affects the dependent variable. The output is as follows

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.538</td>
<td>3.276</td>
</tr>
<tr>
<td>Emotional Intelligence</td>
<td>0.373</td>
<td>0.179</td>
</tr>
<tr>
<td>Learning Behavior</td>
<td>0.037</td>
<td>0.148</td>
</tr>
<tr>
<td>Academic achievement</td>
<td>0.561</td>
<td>0.110</td>
</tr>
</tbody>
</table>

The t test shows:
1. Emotional Intelligence ($X_1$) shows a significance value (Sig) of 0.041 with a value (degree of significance) 0.05 meaning 0.041 < 0.05 or there is a significant influence between Emotional Intelligence and Graduate Competence

2. Learning Behavior ($X_2$) shows a significance value (Sig) of 0.805 with a value (degree of significance) 0.05 meaning 0.805 > 0.05 or there is no significant effect between Learning Behavior and Graduate Competence

3. Academic Achievement ($X_3$) shows a significance value (Sig) of 0.000 with a value (degree of significance) 0.05 meaning 0.000 < 0.05 or there is a significant influence between Academic Achievement and Graduate Competence

R Test
The coefficient of determination is used to find out how big the relationship of several variables is in a clearer sense. The coefficient of determination will explain how much change or variation in a variable can be explained by changes or variations in other variables. In everyday language it is the ability of the independent variable to contribute to the fixed variable in percentage units.

**Table 4. R Test Results**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.679</td>
<td>0.461</td>
<td>0.435</td>
<td>2.40633</td>
</tr>
</tbody>
</table>

The determination test shows that the value (R Square) is 0.461, this shows that Emotional Intelligence, Learning Behavior and Academic Achievement have an effect of 46.1% on Graduate Competence and the remaining 53.9% is influenced by other variables not examined.

Multiple Linear Regression Analysis
Multiple regression analysis was used to examine the effect of the independent variables, namely Emotional Intelligence, Learning Behavior and Academic Achievement on Graduate Competencies. The estimation of this multiple linear regression model uses SPSS software and the following output results are obtained:

**Table 5. Multiple Linear Regression Analysis**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Correlations</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.538</td>
<td>0.3276</td>
<td>0.164</td>
</tr>
<tr>
<td>Emotional Intelligence</td>
<td>0.373</td>
<td>0.179</td>
<td>0.249</td>
<td>2.087</td>
</tr>
<tr>
<td>Learning Behavior</td>
<td>0.037</td>
<td>0.148</td>
<td>0.029</td>
<td>0.248</td>
</tr>
<tr>
<td>Academic achievement</td>
<td>0.561</td>
<td>0.110</td>
<td>0.524</td>
<td>5.088</td>
</tr>
</tbody>
</table>

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1. The value (constant) shows a value of 3.279, meaning that if the independent variable (free) is not used, the value of the dependent variable (bound) is 3.279, in this case if Emotional Intelligence, Learning Behavior and Academic Achievement are used, the Graduate Competence will increase by 3% (rounding up).

2. The value of the Emotional Intelligence variable shows a positive sign assessed (0, 373) meaning that every increase of 1 (one) value on the Emotional Intelligence variable, in this case increasing 1% Emotional Intelligence will increase the value of the Y variable (Graduation Competence by 37%).

3. The value of the Learning Behavior variable also shows a positive sign (0.037) which means that every 1 (one) increase in the value in the Learning Behavior variable will increase the value of the Y variable, in this case every 1% increase in Learning Behavior will increase Graduate Competence by 3.7%.

4. The value of the Academic Achievement variable also shows a positive sign (0.561), which means that every increase of 1 (one) value in the Academic Achievement variable will increase the value of the Y variable, in this case every 1% increase in Academic Achievement will increase Graduate Competence by 56%.

The rapid development of science and technology today has brought very rapid changes in various aspects of life. Jobs and the way we work are changing, jobs are being lost, and new jobs are emerging. Economic, social, and cultural changes also occur at a high rate. In this very dynamic period, universities must respond quickly and appropriately. Learning transformation is needed to be able to equip and prepare higher education graduates to become a superior generation. A generation that is responsive and ready to face the challenges of its era, without being uprooted from its nation's cultural roots. Currently, creativity and innovation are important keywords to ensure Indonesia's sustainable development. Students who are currently studying in higher education institutions must be prepared to become real learners who are skilled, flexible and tenacious (agile learners). The Independent Learning Policy-Independent Campus launched by the Minister of Education and Culture is a framework to prepare students to become strong scholars, relevant to the needs of the times, and ready to become leaders with a high national spirit.

The Independent Learning Campus Independent Policy (MBKM) initiated by the Ministry of Research and Technology opens up as many opportunities as possible for students to develop their potential not only in the form of hard skills but also soft skills. The expected outcome of the Independent Learning Campus Independent Policy (MBKM) is university graduates who are competent in their fields and have competitiveness in facing the industrial era 4.0.

The competence of university graduates is influenced by many factors. These factors are internal and external. This study raises the variables in the form of Emotional Intelligence,
Learning Behavior and Academic Achievement as factors that influence the competence of graduates. Based on the results of the study, the following conclusions can be drawn:

a. Emotional Intelligence ($X_1$) has a positive effect on the competence of Graduates ($Y$). The results of this study are in line with several previous studies, namely: Trisnawati and Suryaningsum (2003) in Dwi Hastuti (2003) state that innate academic ability, report cards and predictions of college graduation do not predict how well a person is working or how successful he is. On the other hand, he argues that a specific set of skills such as empathy, self-discipline and initiative can distinguish successful people from those with mediocre achievers (emotional intelligence/EQ factor).

b. Academic Achievement ($X_2$) has a positive effect on the competence of Graduates ($Y$). The results of this study are in line with several previous studies where according to Simamora, Academic achievement is the mastery of knowledge or skills developed by subjects which are usually indicated by test scores or scores given by the teacher (Simamora, 2014), while graduate competence according to SN Dikti includes mastery of knowledge and skills both in general and specifically, so that the better the academic achievement students, their competence as college graduates will also be good.

c. Learning behavior ($X_3$) has no significant effect on graduate competence ($Y$) because learning behavior is closely related to student study habits in order to gain understanding in the learning process. This is of course influenced by many factors, one of which is the method used by lecturers to conduct lectures, where the learning process during the pandemic is mostly done online or outside the network. This condition also indirectly affects student learning behavior, especially during the pandemic.

Conclusion

The Conclusion of this study are expected to provide input for policy makers at the Raflesia Polytechnic in making decisions related to Graduate Competencies and the variables that influence it in this case are Emotional Intelligence and Academic Achievement. This can also be taken into consideration, especially in the implementation of the Ministry of Research, Technology and Higher Education’s policy on Merdeka Learning Campus Merdeka (MBKM), which is currently being actively implemented. The learning process in the Merdeka Campus is one of the most essential manifestations of student centered learning. Learning in the Merdeka Campus provides challenges and opportunities for the development of innovation, creativity, capacity, personality, and student needs, as well as developing independence in seeking and finding knowledge through realities and field dynamics such as ability requirements, real problems, social interaction, collaboration, self-management, performance demands, targets and
achievements. Through an independent learning program that is well designed and implemented, students' hard and soft skills will be formed strongly.

References

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Government Regulation Number 4 of 2014 concerning the Implementation of Higher Education and Management of Higher Education (State Gazette of the Republic of Indonesia of 2014 Number 16, Supplement to the State Gazette of the Republic of Indonesia Number 5500)


