

Analysis of Student Difficulties in Completing the Final Project in Mathematics Education Study Program University of Labuhanbatu

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Abstract

This research is included in qualitative descriptive research. The purpose of this research is to analyze what difficulties occur when students complete their final project. The research subjects were 41 respondents who were working on their final project at the Labuhanbatu University Mathematics Education Study Program. The instrument in this study used a questionnaire/questionnaire distributed via google from which was given to students online via whatsapp. Furthermore, the collected data is analyzed for description. The results of the study can show that students have difficulty in completing their final assignments. Furthermore, this research was conducted to find out how important the final project is for students and whether students are more provoking their final project. The benefit of research is to provide knowledge for researchers to be even more enthusiastic about seeking insightful knowledge, motivation and self-development and to be humble and not arrogant in the environment. The benefits for the university are consideration of the learning carried out by students and determine whether the final research project is feasible or not. The benefit for other researchers is that other researchers have more scientific insight and more ideas, abilities and skills in completing research.

Keywords

Analysis of student difficulties; completing the final project



I. Introduction

A student is someone who continues his education at a higher education institution when his secondary education is complete, so as to achieve his goals. A student is a person who studies at a university, university, institute or academic Mina Syanti Lubis (2019).

In the development of the world of education, especially after the rolling reforms, new phenomena have arisen in educational institutions, which are schools that use the term Integrated Islamic Schools (Titik, 2010: 42). The school is essentially aimed at helping parents teach good habits and add good character, also given education for life in society that is difficult given at home. Thus, education in schools is actually part of education in the family, which is also a continuation of education in the family (Daulay in Ayuningsih, W. et al. 2020).

As a final student, you will face Tunga Akhri where this final project is a requirement to get a bachelor's degree. The final project is a fixed price for a student if the final project is not completed by the student then his final education will have problems. The ability of students in completing the Final Project/Skipi has certain factors, for example factors that arise from themselves, factors from friends and environmental factors and lack of motivation within themselves, therefore motivation in students plays an important role because with the motivation within students, then will be more enthusiastic

in completing the Final Task. Motivation is an internal and external drive within a person which is indicated by the existence of desires and interests, drives and needs.

Motivation comes from the Latin word *movere* which means drive or driving force. Motivation in management is only aimed at human resources in general and in particular subordinates (Purba and Sudibjo, 2020).

(Sadirman 2009) explains that those who want to achieve their goals, have goals and desire to achieve them optimally. Thesis is a scientific work in a field of study obtained by a student in accordance with the completion of the field of study that he has studied. Fields of study related to research, both in the environment and the problems that exist in the research, (Widharyanto and Herlina (2008)

Muhibbin Syah (2011:132) states that student difficulties are influenced by several factors as follows: (1) internal factors, namely factors that come from the students themselves; (2) external factors, namely factors that come from the environment outside the students themselves. Meanwhile, Martini Jamaris (2014) states that learning difficulties are a condition that has a heterogeneous nature that has basic psychological functions. Based on the factors above, it can be concluded that the researcher adopted the research title Analysis of Student Difficulties in Completing Final Project (TA). This research was conducted at the Labuhan Batu University Mathematics Education Study Program.

There are two factors inhibiting students in completing their final project, namely internal factors and external factors. Internal factors are factors that come from themselves (students), while external factors are factors that come from the environment outside of the students themselves. Internal factors have a very strong motivation to complete the Final Project, while external factors affect the environment, because students will be very influential on the environment if the environment is not at peace with the students themselves then that is one of the reasons for the difficulty of students completing the Final Project, because students who research will plunge into the field to research anything related to the Final Project. The factors that influence the process and learning outcomes are divided into two groups (Ibnu Soswanto 2015). First, factors that exist in a person himself, called individual factors. Individual factors include: maturity, physical and spiritual growth and development of a person, intelligence / intelligence, training and tests, motivation, personal factors (personal traits). Second, factors from outside the individual are family factors (parental income and education, and the atmosphere in the family), teachers and teaching methods, learning/teaching tools and equipment, social motivation, environment and opportunities.

Students' understanding of research methodology may not understand much. Most of the students writing research methodologies are nothing but looking at the research methodologies that have been listed in various studies, especially in the previous year's Final Project. Whereas in research methodology it is very important because it will be related to simplifying the student's Final Project, students will know what type of methodology is used during research and how to obtain data so that it will be compiled into Final Assignment material.

Based on the difficulties experienced by students, it can be said that students still experience many difficulties in completing their Final Projects, difficulties in writing scientific papers in the form of theses. These difficulties include difficulties in identifying problems (Pasariibu et al 2016), difficulties in retrieving research data and difficulties in finding references or literature (Ayu 2020). In addition, students also experience difficulties in formulating problems, writing theoretical foundations, compiling a framework of thinking and research hypotheses as well as difficulties in compiling research methods (Susetyo & Noemanzah, 2020)

Sari and Putra (2019) show that many students experience difficulties in completing their Final Projects, one of which is difficulty in explaining the problems contained in the background in detail, difficulties in explaining the importance of conducting research, there are problems that have been found, difficulties in presenting studies theory (Sari & Putra, 2019). The components that must be considered in writing a research final project are: (1) problem identification based on data and facts in the field, or it can also be done through previous research; (2) switching themes or problems that have been identified; (3) presentation of reasons why the problem should be investigated; (4) previous studies with similar topics; (5) analysis of the shortcomings of previous studies; (6) analysis of differences between previous studies and research from the researchers themselves. Then if it is not arranged properly and correctly, it will be worried that there will be problems with the Final Project.

II. Research Method

This research is classified as a qualitative descriptive research. This research aims to analyze and describe a condition of any data collected, in the form of the results of interviews or observations about problems that exist in the field of the Labuhanbatu University Mathematics Education Study Program. Sugiyono (2019:18) qualitative research method is a research method based on the philosophy of postpositivism, used to examine the condition of natural objects, (as opposed to experiments) where the researcher is the key instrument, data collection techniques are carried out

The location of the research was carried out in one of the faculties of the mathematics education study program at the Labuhanbatu University. The population in a study is a collection of individuals or objects in the form of general characteristics. Arikunto (2010:173) explains that "the population is the entire research subject". Meanwhile, according to Sugiyono (2010: 80) population is a generalization area that stands for objects or subjects that have certain qualities and characteristics set by researchers to be studied and then drawn conclusions. So, the population in this research is the faculty of mathematics education study program class 2018, the population used in this study was 112 students and the sample used was 41 students.

The instrument in this research is using Slaka Liket. The Likert scale is used to measure the level of difficulty of students in completing the final project, understanding, and activeness of students in doing the final project. Data collection techniques were distributed through questionnaires in the form of google form which were distributed to students via online whatsapp, then the collected data would be analyzed and described. Documentation is a technique or step in collecting data through collecting documents in the form of files or photos that are needed and those related to the problem so that it can be understood in detail so that it can provide accuracy in proving the problem.

Sugiyono (2012:137) research data sources are divided into two, namely primary data sources and secondary data sources. Primary data sources are data sources that directly provide data to data collectors, and secondary data sources are sources that do not directly provide data to data collectors.

The source of data in this research is primary data, namely data sources that directly provide data for data collection. The primary data source in this study was obtained directly from the google form questionnaire which would be measured using a Liket scale.

The data collection technique uses a problem technique in addition to the data carried out by the researcher, namely by using a questionnaire. Then the research was carried out on a sample of 41 students within 45 minutes, respondents were able to fill out the questionnaire properly. Considering that the respondent's job is to only put a check mark (✓) on the .SS tag for the question strongly agree, S. For the question agree, RR. For undecided questions, TS. For questions disagree and, STS. To the question strongly disagree.

III. Result and Discussion

The results of the questionnaire research analysis which started from descriptive qualitative related to research data using a Likert scale (including general descriptions of respondents, descriptive analysis of questionnaire research using a Likert scale).

3.1 Overview of Respondents

a. Characteristics of Respondents Based on Age

Table.1 Characteristics of Respondents' Age

No	Age	Amount	Percentage (%)
1	15 – 20 years old	6	9.40
2	21 - 25 years old	35	87.50
3	26 - 30 years old		
Amount		40	100

It can be seen from the table in Figure 1 regarding the characteristics of the respondents in terms of the most dominant age coming from the age of 15 - 20 years as many as 6 people or 9.40%; age over 21 -25 years as many as 35 people or 87.50%. some can be seen from the graph.

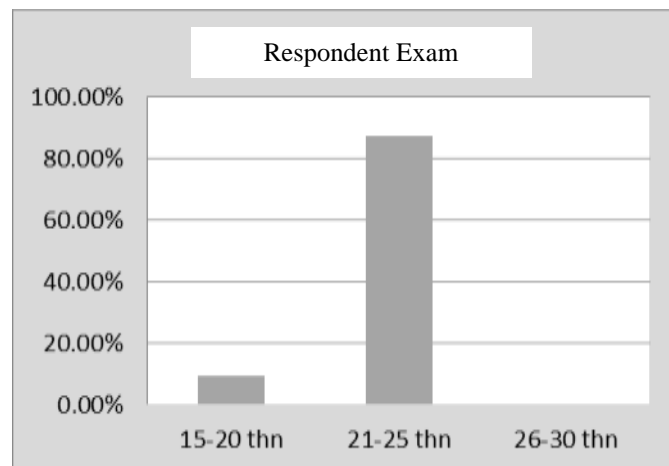


Figure 1. Respondent based on Gender Age

b. Characteristics of Respondents Based on Gender

Table 2. Gender Characteristics of Respondents

No	Gender	Number of people	Percentage (%)
1	Man	4	12.50
2	girl	37	90.60
	Amount	41	100

It can be seen from table 2 regarding the characteristics of the respondents in terms of gender, the most dominant being from women as many as 37 people or 90.60% compared to male sex as many as 4 people or 12.50 percent. As shown in Fig.2



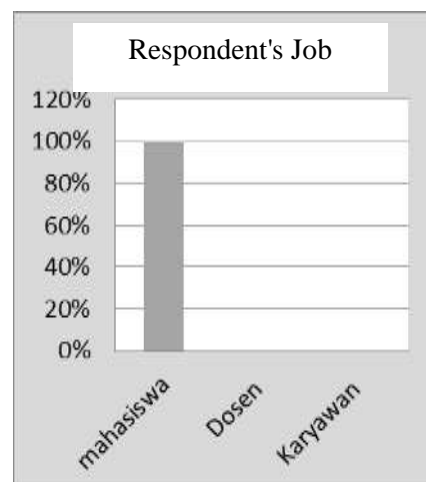
Figure 2. Respondent based on Gender

c. Characteristics Based on Respondents' Job

Table. 3 Characteristics of Respondents' Jobs

No	Work	Number of people	Percentage (%)
1	Student	41	100
2	Employee	-	-
3	Lecturer	-	-
	Amount	41	100

It can be seen from table 3 that the dominant students came from 41 people or 100%. As can be seen in the graph.



3.2 Descriptive Analysis of Questionnaire Research

Table 4. Interval score of data processing results

No	CATEGORY	INTERVAL
1	VERY GOOD	60 < SCORE 75
2	GOOD	45 < SCORE 60
3	CURRENTLY	30 < SCORE 45
4	NOT GOOD	15 < SCORE 30
5	NOT GOOD	15

Table 1. Above we can see that there are five levels of categories for each interval. Scores between 60 and 75 are categorized as very good, scores between 45 and 60 are categorized as good, scores between 30 and 45 are categorized as moderate, scores between 15 and 30 are categorized as poor, and scores with a total of 15 are categorized as bad.

Table 5. Category Level Result Data

No	Category	Number Of Respondents	%
1	Very Good	11	19%
2	Good	25	43%
3	Currently	4	3%
4	Not Good	-	-
5	Not Good	-	-
Total Respondents		41	100%

Based on Figure 2. Above, we can see the results of the management of respondent categories presented in the table that out of 11 respondents were categorized as very good with a level (19%), 25 respondents were categorized as good with a level (43%), 4 respondents were categorized as moderate with a level (3 %) and respondents are not good or not good (0%). As we can see in the graph below.

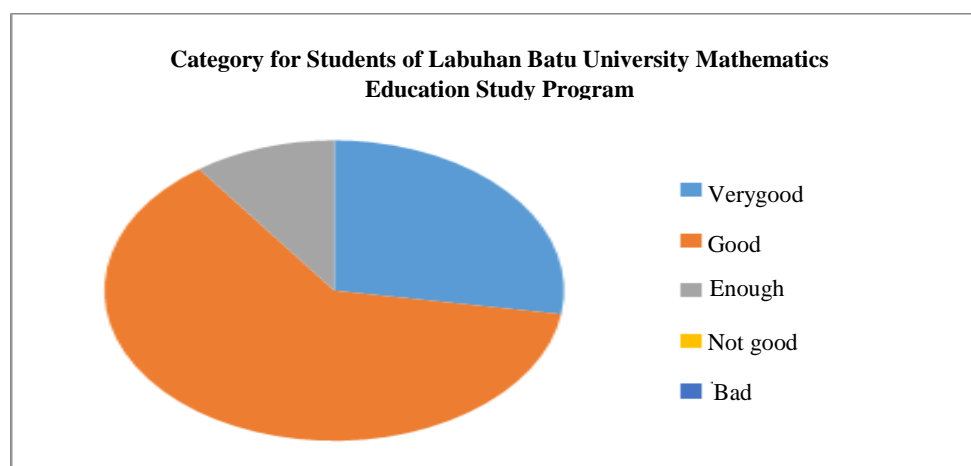


Figure 4. Result of Student Respondent Category Level

The graph above shows that there are five available categories (very good), (good), (moderate), (poor), (not good), then after the data collection is processed and described, what is there are (very good), (good), and (medium).

Table 6. Percentage of student difficulties

Difficulty Analysis Indicators	Percentage (%)
Student Difficulties	58.54%
Thesis	87.81%

Based on the table above, we can see the results of the diagram in the image below

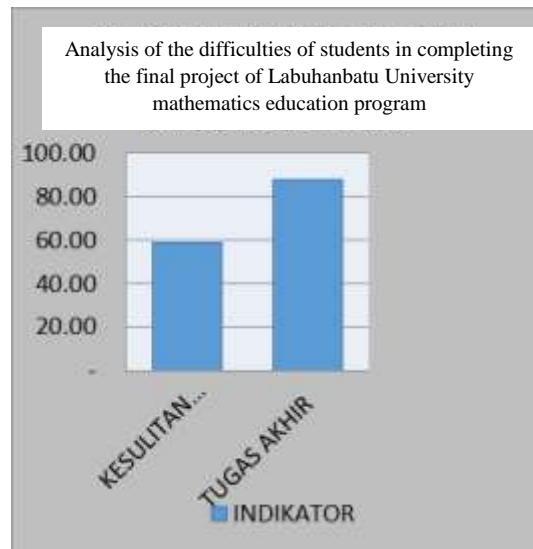


Figure 5. The level of analysis of student difficulties in completing final assignments for students of mathematics education study program

Based on the description of Figure 2 above, we can see the level of difficulty of students in completing the final project. It shows that the results of the percentage of students' difficulty level are 58.54%, and the final task level is 87.81%. In this study, it was found that there were still many students having difficulty in completing their final assignment, because they were not able to find information related to the final project, resulting in errors when writing the topic in the title of the final project. Wang Xia (2012) explained that difficulties in choosing research topics, designing research proposals (research proposals), grouping genres or types of thesis proposals, and lacked literature. The ability of students to complete the final project has a major factor in how fast or long students complete their final project, such as students being able to make journals, make articles or make reports during internships so that when completing their final assignments students do not have problems with their final assignments because they are used to writing. It can be seen with the many negative levels of difficulty in writing the final project, this problem cannot be considered protracted. How the problem of difficulty in writing is not in accordance with the time when completing the student study period through writing scientific papers, but will be related to the learning process on campus. You can imagine how the quality level of graduates produced in writing, if the students themselves are not capable of writing a scientific journal.

In connection with that the campus must know what factors cause students difficulties in completing the final project. The researcher conducted this research in order to find out the causes of students' difficulties in completing the final project.

IV. Conclusion

Based on the data analysis and discussion described above, it can be concluded that the student's difficulties are:

1. Difficulty in finding titles
2. Difficulty finding the right instrument in research
3. Difficulty in mastering research methodology
4. Difficulty in determining the place/location of research
5. Difficulty in dividing lecture time with guidance
6. Formulate problems, write theoretical foundations for research
7. Difficulty in finding literature/library materials
8. Difficulty in expressing the right ideas
9. Difficulty in mastering spelling writing procedures, proper vocabulary
10. Difficulty in analyzing research data
11. Length of time doing research

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