The Trend of Indonesian Language and Literature Education Study Program Universitas Negeri Medan Students in Choosing the Topic and Research Types of 2010 to 2017

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Abstract. This research is triggered by many research topics of the Indonesian Language and Literature Education Study Program (hereinafter referred to as PBSI) students which are the same and piled on certain research topics. Moreover, so far there has not been any study related to the research trends that have been conducted by PBSI students, that the preparation of the research roadmap conducted by the study program is not optimal. This study aims to analyze the trend of research topics for the final project of PBSI Study Program students from 2010 to 2017. A descriptive research method is used in this study. The results of this study indicate that the trend of the research topics for the students from 2010 to 2017 consists of: a) the studies on experimental models/methods/strategies of Indonesian language learning was 82%, b) the studies on learning media was 8%, c) the linguistic studies was 5%, meanwhile the other topics studies were 5%. Furthermore, the trend of the research type conducted by PBSI Study Program students is dominated by the type of experimental research that was 90%, then classroom action research, correlation research, and descriptive research were 10%.

Keywords: trend, research topic, PBSI study program.

1 Introduction

A study about how the trend of research topic on a study program is important. Nowadays, the research on this topic is currently being carried out and is attracting a great attention. This is caused by new trends and topics for many years emerge quickly and the researchers tend to rely on them as a means to structure the further research [1]. The changes in research topics in science and technology are interesting things for government, industry, education and science, especially for the study programs in formulating the policies related to the preparation of the research road maps.

The state of the art research is taken from several previous research examples as a guide or example for the current research. Some previous studies on the trend of research topics that have been carried out by previous researchers are as follows [2] a research entitled Analisis Trend Topik Penelitian pada Web of Science dan SINTA untuk Penentuan Tema Tugas Akhir Mahasiswa (Analysis of Research Topics Trend on the Web of Science and SINTA for Determining the Theme of the Student's Final Project). In this research, the data were collected by using web technology to collect information data from the Web of Science and SINTA. The research method used was the Cross Industry Standard Process for Data Mining (CRISP-DM). The researchers collected the data through a list of journals Web of Science and SINTA. To track the trends in research topics, they chose a time range from 2018 to 2019 and exported the data from the Web of Science Core Collection in April 2019. There were 38,162 publications that were successfully retrieved from the Web of Science category in Computer Science and Information Systems and 230 were taken from the SINTA website. The researchers only took 20 journals with the Highest H-Index in the Web of Science Core Collection at SINTA, they also took 20 journals with SINTA rankings 1 and 2. This study concluded that the most emerging research trends were learning, networking, analysis, systems, control, image data, optimization, systems, and neural.

Moreover, several other studies on trend analysis of research topics have been developed and used in Indonesia [3]. There is a strong interest in research to analyze topics in Laboratory Information Systems (LIS), that is some studies such as changing disciplinary frameworks [4]; [5], longitudinal study of research subjects [1]; journal categorization [6], emerging trends [7], publication patterns [8], and research topics of study in school librarianship [9], and knowledge management [10]. Even so, the researchers have good findings in several fields, research topics for determining the theme of the student's final project are still untouched by further investigation [2]. In this study, grouping was carried out by using the available manual meta data (not yet digitized) in the research range of students from 2010 to 2017. Through this analysis, it is hoped that it will be able to measure the trend of research topics and hope to obtain further research on trends in teaching Indonesian language and literature. For that reasons, by observing the development of the topic of the final project research produced by the students of the PBSI Study Program of 2010 to 2017 using data mining can contribute significantly to the PBSI Study Program, in an effort to formulate an umbrella for student research.

It is well known that as one of the graduation requirements and to apply the scientific method, each student is required to conduct research and write scientific papers in the form of a thesis for the undergraduate level, a thesis for the master level, and a dissertation for the doctoral level. In the initial process of research, each student must choose a topic or research problem according to his field of science. For students who have never done research activities, they will have difficulty in determining the topic or research problem. For this reason, every student before carrying out research should know what research has been and has not been studied by other students so that there is no duplication of the research.

So far, the phenomena that have occurred in the PBSI Study Program, especially when the students are writing their final assignments, they have difficulty in finding the topic of the research problem because the PBSI Study Program does not yet have a clear research umbrella and data on which research topics have been and are widely available analyzed by the students. In addition, the PBSI Study Program has not conducted digital documentation on research topics

either. Meanwhile, digital meta data for the student thesis owned by the Digital Library in digital form has only been available for the last 3 years.

Based on the above phenomena, it is realized that in the following years the administrative work related to the thesis submission can no longer rely on human labor, but must transform into digital form, relying on artificial intelligence information technology. Therefore, the data generated in this study can later be used as a preliminary study in developing an information system for submitting the student final assignments at the PBSI Unimed Study Program.

Based on the background of the problem above, the urgency of this research is the need for study programs to have authentic data on the student research topics, so that they can develop a research road map based on a scientific study. Therefore, the formulation of the research problem is how the trend of topics and types of research for PBSI Study Program students of 2010 to 2017.

Related to the research on the research topic trends, [11] this research trend detection model is classified into two categories, they are text-based and bibliometric approaches. In the text-based approach, the keywords and terms representing the core topics have been the focus of the study. Furthermore, the main purpose of this research is to get overviews of the research topics trend that have been conducted by the Unimed PBSI Study Program students. The next stage is the results of this research that can be developed to formulate the research umbrella of the institution/study program and the data from this research can be used as a data bank in developing an online thesis submission application system for the PBSI Study Program students in the following year. To achieve that goal, this research will focus on the student research from 2010 to 2017. The focus of the data analyzed is related to the topic of the student research and the types of research methods applied by students in that batch range.

2 Research Method

This research is a descriptive research. The data source is in the form of a thesis written by the PBSI Unimed S-1 Study Program students of 2010 to 2017. The research data is in the form of the topics studied and the types of research applied in the students' thesis. The data were collected by recording from the students' thesis documents and then inputted into Microsoft Excel. The data collected is then analyzed. The data are in the form of the topics studied and the types of research applied in the students' thesis. The data were collected by using documentation techniques, observation techniques, and note-taking techniques. The data analysis technique used is a qualitative descriptive technique and a percentage technique with the formula:

$$\frac{Total\ Score}{Criterum\ Score} \times 100\ \% = P$$

3 Research Results and Discussion

3.1 Research Results

The results of the research are presented in this section to answer the research problems. The research data presented include (a) research topics; and (b) the research type; (c) trend of topics and types of student research from 2010 to 2017 by PBSI FBS Unimed S-1 Study Program.

3.1.1 Research Topics of the PBSI FBS S-1 Study Program Students' Thesis of 2010 to 2017

Based on the data sources used in this study, the results of research on research topics of seven years (2010, 2011, 2012, 2013, 2014, 2015, 2016, and 2017) the students of the Indonesian Language and Literature Education Study Program FBS Unimed are: 1) model/learning methods, 2) learning media, 3) linguistic studies, 4) literature studies, 5) evaluation of learning outcomes, 6) teaching materials, and 7) curriculum studies. In detail, the research topics are presented in full as follows:

The PBSI FBS Unimed S-1 Study Program students in 2010 were 145 students. There were 119 theses written on the research topics about models, methods, and strategies, 14 students wrote theses about learning media, 5 students wrote theses about linguistic studies, 4 students wrote essays about literary studies and 3 students wrote a thesis about learning evaluation. Look at table 1 below.

Table 1. Research Topics for S1- The Indonesian Language and Literature Education Study Program Students of 2010

Year	Research Topic	Amount	Percentage
	Learning methods/models/strategies	119	82.06%
	Learning Media	14	9.65%
2010	Linguistic studies	5	3.4%
	Literature studies	4	2.75&
	Evaluation	3	2.06%
	amount	**145**	**100%**

The PBSI FBS Unimed S-1 Study Program students in 2011 were 185 students. There were 126 thesis written on research topics about models, methods, and learning strategies, 32 students wrote essays about learning media, 20 students wrote essays about linguistic studies, 5 students wrote essays about language skills, and 1 student wrote a thesis about the evaluation of learning and the topic of teaching materials. Look at the following table.

Table 2. Research Topics for S1- The Indonesian Language and Literature Education Study Program Students of 2011

Year	Research Topic	Amount	Percentage
	Learning methods/models/strategies	126	68.10%
	Learning Media	32	17.29%
2011	Linguistic Studies	20	10.81%
	Language Skills	5	2.70%
	Learning evaluation	1	0.55 %

Teaching materials		1	0.55 %
amount		**185**	**100%**

The PBSI FBS Unimed S-1 Study Program students in 2012 were 172 people. There were 72 thesis titles on the research topic about models, methods, and learning strategies, 41 students wrote theses about linguistic studies, 29 students wrote about learning media, 14 students wrote theses about language skills, 9 students wrote about teaching materials, 5 students wrote a thesis about literature studies, and 2 students wrote about on learning evaluation. Look at the following table.

Table 3. Research Topics for S1- The Indonesian Language and Literature Education Study Program Students of 2012

Year	Research Topic	Amount	Percentage
2012	Learning methods/models/strategies	72	41.86%
	Linguistic Studies	41	23.84%
	Learning Media	29	16.86%
	Language Skills	14	8.14%
	Teaching materials	9	5.23%
	Literature Studies	5	2.9%
	Evaluation	2	1.16%
	amount	172	100%

The PBSI FBS Unimed S-1 Study Program students in 2013 were 185 students. There were 35 students wrote theses about learning media, 70 students wrote thesis about linguistic studies, 26 students wrote theses about language skills, 8 people students wrote theses about evaluation, 3 students wrote theses about curriculum studies, 5 students wrote theses about literary studies, and 11 students wrote theses about teaching materials. Look at the following table.

Table 4. Research Topics for S1- The Indonesian Language and Literature Education Study Program Students of 2013

Year	Research Topic	Amount	Percentage
2013	Learning methods/models/strategies	35	19%
	Learning Media	27	14.60%
	Linguistic Studies	70	37.84%
	Language Skills	26	14.06%
	Evaluation	8	4.32%
	Curriculum Studies	3	1.62%
	Literature Studies	5	2.70%
	Teaching materials	11	5.95%
	amount	**185**	**100%**

The PBSI FBS Unimed S-1 Study Program students in 2014 were 112 students. There were 28 thesis written on the research topic about language skills, 40 students wrote theses about learning models, methods, and strategies, 17 students wrote theses about linguistic studies, 8 students wrote theses about curriculum studies, 6 students wrote theses about learning media, 5 students

wrote theses about evaluation, 4 students wrote theses about teaching materials, and 4 students wrote theses about literary studies. Look at the following table.

Table 5. Research Topics for S1- The Indonesian Language and Literature Education Study Program Students of 2014

Year	Research Topic	Amount	Percentage
2014	Language Skills	28	25%
	Learning methods/models/strategies	40	35.7%
	Linguistic Studies	17	15.18%
	Curriculum Studies	8	7.14%
	Learning Media	6	5.37%
	Evaluation	5	4.46%
	Teaching materials	4	3.57%
	Literature Studies	4	3.57%
	amount	**112**	**100**

The PBSI FBS Unimed S-1 Study Program students in 2015 were 151 people. There were 83 theses written on research topics about models, methods, and learning strategies, 30 students wrote theses about learning media, 12 students wrote theses about language skills, 10 students wrote theses about teaching materials, 9 students wrote theses about linguistic studies, 3 students wrote theses about curriculum studies, 3 students wrote theses about evaluation, and 1 student wrote a thesis about literary studies. Look at the following table.

Table 6. Research Topics for S1- The Indonesian Language and Literature Education Study Program Students of 2015

Year	Research Topic	Amount	Percentage
2015	Learning methods/models/strategies	83	54,9%
	Learning Media	30	19.87%
	Language Skills	12	7.95%
	Teaching materials	10	6.62%
	Linguistic Studies	9	5.96%
	Curriculum Studies	3	1.99%
	Evaluation	3	1.99%
	Literature Studies	1	0.66%
	amount	**151**	**100**

The PBSI FBS Unimed S-1 Study Program students in 2016 were 136 students. There were 96 theses written on research topics about models, methods, and learning strategies, 9 students wrote theses about learning media, 3 students wrote theses about linguistic studies, 5 students wrote theses about language skills, 11 students wrote theses about evaluation, 4 students wrote theses about teaching materials, 4 students wrote theses about curriculum studies, and 3 students wrote theses about literary studies. Look at table 1 below.

Table 7. Research Topics for S1- The Indonesian Language and Literature Education Study Program Students of 2016

Year	Research Topic	Amount	Percentage
2016	Learning methods/models/strategies	96	70.5%
	Learning Media	9	6.61%
	Linguistic Studies	3	2.20%
	Language Skills	5	3.68%
	Evaluation	11	8.09%
	Teaching materials	5	3.68%
	Curriculum Studies	4	2.95%
	Literature Studies	3	2.20%
	amount	**136**	**100%**

The PBSI FBS Unimed S-1 Study Program students in 2017 were 145 people. There were 2 theses written on the topic of research about learning methods/models, 20 students wrote theses about learning media, 42 students wrote theses about linguistic studies, 13 students wrote theses about language skills, 13 students wrote theses about evaluation, 19 students wrote theses about teaching materials, 3 students wrote theses about curriculum studies, and 33 students wrote theses about literary studies. Look at table 1 below.

Table 8. Research Topics for S1- The Indonesian Language and Literature Education Study Program Students of 2017

Year	Research Topic	Amount	Percentage
2017	Learning models/methods	2	0.013%
	Learning Media	20	13.80%
	Linguistic Studies	42	28.97%
	Language Skills	13	8.97%
	Evaluation	13	8.97%
	Teaching materials	19	13.10%
	Curriculum Studies	3	2.06%
	Literature Studies	33	22.75%
	amount	**145**	**100%**

3.1.2 Types of Thesis Research of S-1 Study Program PBSI FBS Unimed Students 2010 to 2017

This subtitle is the results of the research on the selected types of research and conducted by the PBSI FBS Unimed Study Program students from 2010 to 2017. The types of research per batch are presented below. There were 145 students of PBSI FBS Unimed Study Program of 2010. The research types that were chosen and conducted were: a) 132 students in experimental, b) 4 students in correlation research, c) 7 students in descriptive. The results of calculations using the percentage formula for each type of research are presented in the following table.

Table 9. Research Types for S1- The Indonesian Language and Literature Education Study Program Students of 2010

Year	Research Type	Amount	Percentage
2010	Experimental	132	91.03%
	Correlation	4	2.75%
	Descriptive	7	4.82
	Classroom action research	2	1.38%
	amount	**145**	**100%**

In 2011, there were 185 students of PBSI FBS Unimed Study Program. The research types that were chosen and conducted were: a) 158 students in experimental, b) 17 students in correlation research, c) 4 students in descriptive, d) 6 students in classroom action research. The results of calculations with the percentage formula for each research type are presented in the following table.

Table 10. Research Types for S1- The Indonesian Language and Literature Education Study Program Students of 2011

Year	Research Type	Amount	Percentage
2011	Experimental	158	85.40%
	Correlation	17	9.19%
	Descriptive	4	2.17%
	Classroom action research	6	3.24%
	amount	**185**	**100%**

In 2012, there were 172 students of PBSI FBS Unimed Study Program. The research types that were chosen and conducted were: a) 105 students in experimental, b) 35 students in correlation, c) 27 students in descriptive, d) 4 students in classroom action, and e) 1 student in research and development. The results of calculations using the percentage formula for each type of research are presented in the following table.

Table 11. Research Types for S1- The Indonesian Language and Literature Education Study Program Students of 2012

Year	Research Type	Amount	Percentage
2012	Experiment	105	61,04%
	Correlation	35	20,34%
	Descriptive	27	15,70%
	Classroom Action	4	2,32%
	Research and Development	1	0,60%
	amount	**172**	**100%**

In 2013, there were 185 students of PBSI FBS Unimed Study Program. The research types that were chosen and conducted were: a) 42 students in experimental, b) 20 students in correlation, c) 117 students in descriptive, d) 1 person in classroom action research, e) 5 students in Research and Development. The results of calculations using the percentage formula for each type of research are presented in the following table.

Table 12. Research Types for S1- The Indonesian Language and Literature Education Study Program Students of 2013

Year	Research Type	Amount	Percentage
2013	Experiment	42	22.70%
	Correlation	20	10.8%
	Descriptive	117	63.24%
	Classroom Action	1	0.54%
	Research and Development	5	2.70%
	amount	**185**	**100%**

In 2014, there were 185 students of PBSI FBS Unimed Study Program. The research types that were chosen and conducted were: a) 83 students in descriptive, b) 20 students in experimental, c) 5 students in Research and Development, d) 2 students in correlation, and e) 2 students in classroom action. The results of calculations using the percentage formula for each type of research are presented in the following table.

Table 13. Research Types for S1- The Indonesian Language and Literature Education Study Program Students of 2014

Year	Research Type	Amount	Percentage
2014	Descriptive	83	74.10%
	Experimental	20	17.86%
	Research and Development	5	4.46%
	Correlation	2	1.79%
	Classroom Action	2	1.79%
	amount	**112**	**100%**

In 2015, there were 151 students of PBSI FBS Unimed Study Program. The research types that were chosen and conducted were: a) 91 students in experimental, b) 46 students in descriptive, c) 10 students in Research and Development, d) 2 students in correlation, and e) 2 students in Classroom Action. The results of calculations using the percentage formula for each type of research are presented in the following table.

Table 14. Research Types for S1- The Indonesian Language and Literature Education Study Program Students of 2015

Year	Research Type	Amount	Percentage
2015	Experimental	91	60.27%
	Descriptive	46	30.46%
	Research and Development	10	6.63%
	Correlation	2	1.32%
	Classroom Action	2	1.33%
	amount	**151**	**100%**

In 2016, there were 136 students of PBSI FBS Unimed Study Program. The research types that were chosen and conducted were: a) 96 students in experimental, b) 1 student in correlation, c) 34 students in descriptive, d) 5 students in Research and Development. The results of

calculations using the percentage formula for each type of research are presented in the following table.

Table 15. Research Types for S1- The Indonesian Language and Literature Education Study Program Students of 2016

Year	Research Type	Amount	Percentage
2016	Experimental	96	70.59%
	Correlation	1	0.73%
	Descriptive	34	25
	Research and Development	5	3.68%
	amount	**136**	**100%**

In 2017, there were 145 students of PBSI FBS Unimed Study Program. The research types that were chosen and conducted were: a) 3 students in experimental, b) 14 students in correlation, c) 97 students in descriptive, d) 31 students in Research and Development. The results of calculations using the percentage formula for each type of research are presented in the following table.

Table 16. Research Types for S1- The Indonesian Language and Literature Education Study Program Students of 2017

Year	Research Type	Amount	Percentage
2017	Experimental	3	2.07%
	Correlation	14	9.66%
	Descriptive	97	66.90%
	Research and Development	31	21.37%
	amount	**145**	**100%**

3.2 Discussion of Research Results

3.2.1 The Trends in Thesis Topics and Types of S-1 Study Program PBSI FBS Unimed Students 2010 to 2017

Based on the description of the subtitles of the research results above which is related to the research topics and types of the thesis research conducted by the students of the PBSI FBS Unimed Study Program, the trend of research topics and types conducted by the PBSI FBS Unimed Study Program students from 2010 to 2017 are described as follows.

The trend of research topics chosen by the students in 2010 is about testing the effectiveness of a learning method, learning model, and/or strategy for learning Indonesian language and literature to junior high/equivalent and senior high school students. The research topic has the highest percentage that is 82.06% or 119 research titles. In the second place for the research topics chosen by the students of 2010 and 2011 were the use of Indonesian language and literature learning media in which 14 research or 9.65%. Meanwhile, the other researches were about linguistic studies, literature studies, and evaluation of Indonesian language and literature learning.

The trend of research topics chosen by the students from 2012 to 2014 began to vary, not only dominated by the research topics about the effect and test the effectiveness of a

model/method/strategy for learning Indonesian language and literature, but has spread to research topics on the study of the application of learning media, studies on language skills, and linguistic studies. For year 2012 to 2014, the percentage of research topics is mentioned above, the number of variations is not much different that is the research topics about learning methods was 19%, learning media was 14.6%, and linguistic studies was 30%.

The trend of research topics from 2015 to 2016 returns to the topic of research about testing the effectiveness of models/methods/strategies for learning Indonesian language and literature in junior and senior high schools. The percentage of research topics in that year amounted to more than 70% each year. In contrast to the 2017 in which the trend of research topics changed. In this year, the research topics related to learning media and linguistic studies were dominant that was 20% and 40%.

4 Conclusion

Based on the presentation of the results of data analysis and discussion, it can be concluded that the topics chosen by the students of class 2010, 2011, 2012, 2013, 2014, 2015, 2016, and 2017 were: education, linguistics, and (literature). Educational topics include: the use of media in learning Indonesian, the use of methods in learning Indonesian. Linguistic topics include: language errors, pragmatics, sociolinguistics, language skills. Literary topics include stylistics, appreciation of literary works. Furthermore, the types of research selected and carried out by students of the PBSI Unimed S-1 Study Program for the 2010-2017 period include: educational research, experimental research, research and development, and correlation research, and descriptive research. The final conclusion is that the trend of selecting research topics and types of research go hand in hand. In this case the selection of Indonesian language learning topics is dominated by research topics on the use of media and Indonesian language learning methods and the type of research used is experimental research.

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