

# The Effect of Microsoft Power Point Applications on Learning Outcomes of Machine Basics in Class X Department of Light Vehicle Engineering

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## ABSTRACT

The purpose of this study was to determine the effect of Microsoft Power Point Application on Learning Outcomes of Basic Machines in Class X Students of the TKR Department of Getsemani Christian Vocational School Manado. This research is included in experimental research. The number of respondents as many as 24 people. This experimental research includes Pre-Experimental (Pre-Experimental) with the type of The Static Group Comparison (Zainuddin Muhammad, 1997). The data used in this research is primary data, namely data obtained directly by researchers. The technique used in data collection is by measuring or evaluating in the form of tests on the basics of machines. The result is that there is a significant effect between the control group and the treatment group using the Power Point application in the learning process.

**Keywords:** *microsoft Power Point, learning outcomes, student*

## INTRODUCTION

During the years of education at school, you will never part with the word that we often know as "lecture". This is what students must find every time they come to school. Education is also not usually separated from technology, because technology has now become the most effective way to achieve a very satisfying goal. The technology that the author will apply in this research is

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computerized technology used by teachers to improve student learning outcomes. Of course, to use this technology requires special skills from the teaching staff. To be a comparison in the method that the author will apply is the learning method by means of lectures.

The method of using the power point application is very influential when conducting teaching and learning interactions in the classroom. With this method can increase students' interest in learning. The use of the Power Point method can streamline time and can easily provide descriptions of the problems discussed or materialized, using Power Point can make the teaching and learning process a little easier. Microsoft PowerPoint is a computer program for presentations developed by Microsoft in an application package. This application runs on the operating system. In power point, as with other presentation processing software. Such as text objects, graphics, video, sound and other objects that are positioned on several pages called slides. With this method, students can quickly understand the basics of machines, what is the basics of machines and how the basics of machines are. By understanding the material provided, student learning outcomes will also increase.

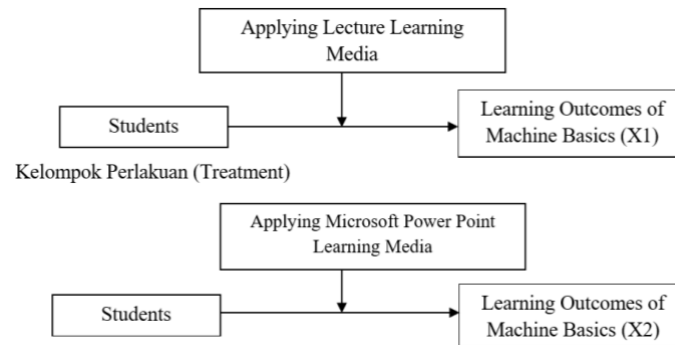
Based on the problems encountered by the author, so the author wants to do research on this learning method, namely by using the power point application which is a medium for student learning in the classroom, of course this method requires skills and experience in using power point from the teaching staff. To better understand the use of power point applications in the teaching and learning system, the author will conduct direct research in schools to get results from learning methods using power point applications. In this study, the author will also carry out by taking a sample of students who are research subjects in the light vehicle engineering department of Getsemani Christian Vocational High School Manado, in the field of basic mechanical expertise. Where the author will apply the learning method using power point and the test results will be taken from the students, to measure how far their understanding is when compared to the way of learning using the lecture method.

Therefore, from this explanation, the author will raise research related to learning methods using the power point application as a learning medium for students. In this study the authors raised the title: "The Influence of Microsoft Power Point Applications on Learning Outcomes of Basic Machines in Class X Students of the TKR Department of Getsemani Christian Vocational School Manado".

## METHOD

Based on the nature and problems, this research is experimental research. This experimental research includes Pre-Experimental (Pre-Experimental) with the type of The Static Group Comparison (Zainuddin Muhammad, 1997). And based on the data analysis, this research includes analytical research, meaning that in this study the data leads from the sample to the population to be generalized. The conceptual framework of experimental research can be seen in the figure 1.

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**Figure 1.** The conceptual framework of experimental research

The data used in this research is primary data, namely data obtained directly by researchers. The technique used in data collection is by measuring or evaluating in the form of tests on the basics of machines. And direct interviews about students' difficulties in participating in learning. The population of all students of class X light vehicle engineering which consists of 3 classes totaling 24 students. Samples were taken from the entire population with a total of 24 who took machine basics subjects.

The research variables in this study are 2 independent variables, namely learning outcomes using lecture learning media (X1) and learning outcomes using Microsoft power point learning media (X2). To analyze the data in this study used statistical inference test with 2 independent samples (Two Independent Samples) with the T-Test test (Test -T). To calculate these statistics, SPSS (Statistical Product and Service Solutions) Version 16 is used.

## RESULTS AND DISCUSSION

The basics of machines are the basic subjects in the light vehicle engineering department and the basics of machines are very decisive for students' competence. By mastering the basics of machines, students will easily learn other subjects. Therefore, the seriousness and all the factors that students have in participating in lessons are very necessary. According to Gordon in a book written by Mulyasa E (2006) factors of knowledge, understanding, abilities, values, attitudes and interests are a way that can shape the competence of students in learning all the lessons given at school.

The supporting factors possessed by students, as stated by Gordon in his book Mulyasa, are not merely a determinant of students' success in achieving good learning outcomes. However, the role of an educator is also needed for the success of students participating in learning activities. The very important role of educators is when an educator can transfer their knowledge to students easily.

The ease of an educator can be seen from his creative use of learning media. The right learning media when used by an educator will make it easier for students to master the knowledge taught by an educator.

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The results of this study indicate that there is a good effect by applying the Microsoft Power Point application to student learning outcomes in the basics of machine subjects.

The results of this study indicate that student learning outcomes in the teaching and learning process applied by the lecture method obtained an average learning result of machine basics ( ) of 66.67, while the learning outcomes applied by the microsoft power point application showed the average learning outcomes of basic- the basis of the machine is better, namely ( ) = 75.

And after the Ui-T test was carried out to find out whether there was a difference from the average of the two learning outcomes, it turned out that from the two learning outcomes there was a significant difference, with the T-Test calculation result being -2.159.

This conclusion shows that the influence of the Microsoft Power Point application has a large effect on increasing machine learning outcomes. And this influence can also be seen from the percentile value obtained (see attachment), for teaching that applies the lecture learning media 50% of the students studied get a value (50.00 to 70.00), while teaching that applies the Microsoft Power Point application 50% the students studied got a score (60 to 75).

Observing the results of this study, learning using the microsoft power point application is good for use in the teaching and learning process for basic machine subjects. And the researcher sees that the Microsoft Power Point application method has its own advantages, because students' absorption of subject matter is not seen as the same but student absorption is seen as different (differential). The magnitude of the influence of the Microsoft Power Point application in improving student learning outcomes in this study is reinforced by the findings of Desi Sri Lestari (2011) which states that there is an effect of the Power Point application on the ability to remember and also students have a positive response to learning by using the Power Point application with a percentage The results of the attention response, relatedness, having confidence, and satisfaction in students are 50.68%.

## CONCLUSION

This study concludes that the influence of the Microsoft Power Point application has a large effect on increasing machine learning outcomes. And this influence can also be seen from the percentile value obtained (see attachment), for teaching that applies the lecture learning media 50% of the students studied get a value (50.00 to 70.00), while teaching that applies the Microsoft Power Point application 50% the students studied got a score (60 to 75).

## REFERENCES

- Arsyad, A. 2002. Media Pembelajaran, edisi 1. Jakarta: PT. Raja Grafindo Persada.
- Arsyad, Azhar. 2012. Media Pembelajaran. Jakarta: Rajawali Press. <http://ikanurjanah-ikanurjanah.blogspot.com/2012/03/hubungan-penggunaan-media-power-point>.
- Arikunto Suharsimi.2002. Prosedur Penelitian Suatu Pendekatan Praktek. Jakarta: Rineka Cipta.
- Desi Sri Lestari, Pengaruh Penggunaan Media Power Point Terhadap Hasil Belajar Siswa Kelas X

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SMAN I Depok Tahun Ajaran 2010/2011 Pada Pokok

- Dimiyati, dkk. 2002. Belajar dan Pembelajaran. Jakarta. Rineka Cipta ericson damanik April 2015.  
<http://globallavebookx.blogspot.com> Pengertian Media Pembelajaran Power Point Menurut Ahli
- Hamalik, O. 1994. Media Pendidikan, cetakan ke-7. Bandung: Penerbit PT. Citra Aditya Bakti.
- Hidayat Wahyu. 2010. Arti Media Pembelajaran. Jakarta: Penerbit Gunung Mulia
- Mahmun Abin Syamsudin. 1996. Hasil Belajar Siswa, Surabaya: Penerbit. Airlangga Press.
- Mulyasa E. Kurikulum Berbasis Kompetensi. Penerbit PT Remaja Rosdakarya. Bandung, 2004
- Muhammad Kholik. 2011. Metode Pembelajaran Konvensional. Online. Termuat dalam:  
<http://muhammadkholik.wordpress.com/2011/11/08/evaluasi-pembelajaran/>
- Prof. Dr. H. Wina Sanjaya, M.Pd. 2008. Perencanaan dan Desain Sistem Pengajaran. Jakarta: Penerbit Kencana Prenada Media Group
- Prof. Sukardi, Ph.D. 2003. Metodologi Penelitian Pendidikan. Yogyakarta: Penerbit Bumi Askara.
- Sarwono Jonathan. SPSS 16. Penerbit Andi Yogyakarta, Yogyakarta, 2009
- Sadiman, A.S., Rahardjo, R., Haryono, A., & Rahadjito. 1990. Media Pendidikan: pengertian, pengembangan dan pemanfaatannya, edisi 1. Jakarta: Penerbit CV. Rajawali.
- Sudjana, DR. Nana dan DRS. Ahmad Rivai.2005. Media Pengajaran. Bandung: Penerbit Sinar Baru Algensindo
- Suryana Sudrajat. 2010. Strategi Pembelajaran. Jakarta: Penerbit Prenada Media
- Sanjaya, W. 2008. Perencanaan dan Desain Pembelajaran. Bandung: Kencana.
- Tim Penyusun Kamus Pusat Bahasa. 2005. Kamus Besar Bahasa Indonesia. Jakarta Balai Pustaka
- Undang-undangrepublik Indonesia NO. 20 Tahun 2003 Tentang Sistem Pendidikan Nasional
- Zainuddin Muhammad, Metode Penelitian, Penerbit Airlangga Press, Surabaya 1997