

THE USE OF SIM TO IMPROVE STUDENTS' MOTIVATION OF MATHEMATICS LEARNING SIM (STUDY INSTAGRAM MATHEMATICS)

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Abstract

The development of technology is increasing rapidly. In this case, the development of technology has its own pros and cons for the people, especially in education. Therefore, the purpose of this paper are firstly to prove that social media, which one of them is Instagram, can be an alternative for the enhancement of student motivation especially in mathematics lesson and secondly to know other functions of social media nowadays. With the development of the current era, SIM (Study Instagram Mathematics) is one of the social-media-based learning, especially Instagram, by utilizing various existing features to support the means of media for interactive learning media. During this time most people know that social media can cause negative impact as it decline learning motivation. But actually, otherwise, social media have benefits for life, especially in the implementation of education. In this case, one of the social media, Instagram, can be used as one of the learning media that can increase student motivation. One way to improve students' motivation in learning mathematics, for now, is through the existence of an account of interesting and useful social media in the dissemination of positive information about learning, one of which mathematics learning through SIM (Study Instagram Mathematics).

Keywords: Learning Motivation, Instagram, Learning Media

PRELIMINARY

Today, learning today is a basic that need for everyone to should have. Learning is also one of the most important keys in any educational endeavor today, so without learning there will never be education. As the era progresses, the education system will undergo continuous renewal in accordance with the developments taking place both locally, nationally and internationally. Based on the objective of NKRI (Negara Kesatuan Republik Indonesia Indonesia) in the Preamble of the 1945 Constitution (UUD'45), one of the education's goal is in order to educate the nation.

Indonesia establishes a 6-year education system at elementary level, 3 years at junior high school level and 3 years at senior high school level . Which, every Indonesian citizen is obliged to school for 9 years, that is to sit in elementary and junior high school. In their education, every citizen is allowed formal education (obtained from school and teacher) or nonformal (obtained from outside school). In non-formal education, many kinds of types that start from learning privat tutoring, environment and internet.

In today's internet world, there are various uses. Starting from as a means of communication, entertainment and others. In this case, most of the internet usage is the audience of social media as a means of communication is a juvenile that has an occupation of junior high and high school. The statement is also supported by the results

of research that states 40% (30 million) of 75 million Internet users are teenagers (Technisia 2014, February 20). With the number of social media users for teenagers, it can lead to a variety of negative things one of which is the declining interest in learning for students because lulled by the use of excessive social media. Various activities are often done by teenagers that upload selfie photos, videos, chats and various activities that do not support other learning. One type of social media that is currently much loved teenagers is Instagram, because it is one application that can be used to share photos, videos and chat to fellow users. Learning difficulties or learning disability is one of the circumstances in which a person who learns find it difficult to do learning activities effectively. There are so many negative perceptions of educators who say that if their students score under the KKM (Minimum Exhaustiveness Criteria) has a low level of intellectuality, according to Jamaris (2014: 3). The statement is not always true, this is because there are several kinds of factors that can affect student learning conditions so that student learning activities become less effective. Quoted from Brueckner and Bond, Cooney, Davis and Henderson (1975) in Widdiharto (2004) stated that students' learning difficulties can be divided into five groups, including social factors, psychological factors, intellectual factors, emotional factors and pedagogical factors. Due to learning difficulties, one of the lessons currently facing many problems on the effectiveness of its activities is mathematics. A study of 3.215 students in one school in Jakarta stated that there was 16,25% experiencing learning disability to mathematics learning stated by Abdurahman (2009: 10). From the problems above, we already know that one of the social media Instagram is an application that many loved teenagers who still occupy the junior high and high school, then if Instagram can be used as a suitable container in supporting students' learning one of the math lessons, then this can be a positive influence for students. This can be based on students' current preferences that are more intense to open social media because it is considered more contemporary, one of them Instagram. In this case also, students can share not only about activities or personal activities but can share knowledge on their friends and can communicate with each other to the quality of their friends.

RESEARCH METHODOLOGIES

The method used in this study is the quasi-experimental method. The purpose of the study using this method is to obtain information that is an estimate for researchers who can be obtained through actual experiments in circumstances that are not possible to control or manipulate all relevant variables. Its main characteristic is not doing random assignment, but using grouping of research subject based on preformed group.

Quasi experiments do not perform random assignments, but based on pre-existing groupings. The design used in this research is the design of Nonequivalent Control Group Design. The research design chart as shown in Table 1.

Table 1. Research Design

Group	Pretest	Treatment	Posttest
Eksperiment	O1	X	O2
Control	O3		O4

In this study, it was determined that the target population was the students' study group in Banyuasin Regency which currently occupied 12th grade. The research sample was determined as many as 20 people from the Natural Sciences class, of which 10 people were used as experimental groups ie groups using learning using social media as learning media and 10 other people that is the control group which does not use learning using social media as a medium of learning.

The instruments used are:

Test Results Learning in the experimental class, the test is given after the experimental class has been taught using Instagram as a medium of learning. While the control class is given as usual learning that is in the form of conventional media.

Make an observation format as a recorder of student activity in following the learning using Instagram.

Questionnaires for students and teachers to find out their responses to learning using Instagram social media.

This data analysis technique using validity test, reliability test, normality test and statistical hypothesis test and its requirements for the purposes of generalization of research results.

The research procedure adopted is as follows :

Preparing,

Conduct documentation studies through preliminary observation,

Setting subjects to be taught in the classroom,

Develop research instruments,

Conducting trials of research instruments,

Implementation of the experiment,

Data processing research results,

Making interpretations and conclusions from the results of research hypotheses, and

Reporting of research results.

RESULTS AND DISCUSSION

Data on student learning outcomes between learning using Instagram and conventional are as follows:

Learning using social media Instagram as a medium of learning.

Implementation of learning using social media Instagram as a medium of learning is done on study groups that exist in Banyuasin Regency consisting of 20 students in grade 12 and divided into two groups namely the experimental group and the control group.

The implementation of this learning is done on the subject matter of the matrix. Implementation of the learner begins with a brief explanation of the matrix to be explained using the features in Instagram. Discussed material through video, use of live features on instagram and use of ask feature. Before entering the learning using Instagram, students do the pretest and fill the questionnaire to know the initial ability and how the students interest in mathematics learning so far. After completion, new students do learning using Instagram.

Implementation of learning using sosmed in Instagram has two things to note, such as how much enthusiasm students when learning to use social media Instagram and see student activity in social media when teachers participate monitor student activity in social media. At the end of the lesson, a posttest is conducted to determine its influence and to fill in the questionnaire again to find out how enthusiastic the students and their interest in the learning of mathematics. The results of the questionnaire about the implementation of the learning are contained in Table 2 as follows.

Table 2. Interest of Students Using Social Media Instagram Learning

Student Opinions	Learning Using Instagram	
	Eksperiment Group	
	Amount	Percentage
Very Good	6	60 %
Good	1	10%
Less Good	3	30%
Not Good	0	0%

2. Learning Conventional Model conducted by the teacher.

Implementation of learning conducted in the control class as well as done in the experimental class. In the classroom, the learning control is different from the experimental class and conventional, just like the usual workmanship by lecturing method and collects the usual paper or book assignments. In the end learning held back in the form of posttest and filling questionnaire. The results of the conventional learning questionnaire are listed in Table 3 below.

Student Opinions	Conventional Learning	
	Control Group	
	Amount	Percentage
Verry Good	4	40 %
Good	2	20%
Less Good	3	30%
Not Good	1	10%

Based on the assessment of student learning outcomes statistical calculations, obtained t count value of 3.429. Price t table as a critical limit on the t distribution table at the 95% confidence level ($\alpha = 5\%$) and degrees of freedom (df) 18 equal to 2.100922. This statement is also reinforced by a probability value of $0.001495 < 0.005$. Because the price t arithmetic of $3.429 >$ from t table of 2.100922, so H_0 rejected. This means that the average posttest result in the experimental class is higher than the average posttest result of the control class.

Based on the above analysis, we can know that learning using social media Instagram can give a considerable contribution in improving motivation and student learning outcomes in mathematics subjects.

CONCLUSION

Based on the results of the study gives an illustration of the tendency to increase the score of evaluation of student learning outcomes in posttest. The experimental class evaluation score is much higher and significantly different when compared to the evaluation scores obtained in the control class. On that basis, it can be concluded that learning using social media instagram as an alternative in learning mathematics can improve student motivation in terms of learning.

BIBLIOGRAPHY

Abidin, Zainal. 2016. Pemanfaatan Media Sosial sebagai Ruang Belajar Siber Pada Pendidikan di Era Digital. Diakses pada tanggal 18 Maret 2018 dari <http://simposium.gk.kemdikbud.go.id>

Ahmadi, Abu. 2002. Psikologi Sosial. Jakarta : Rineka Cipta.

Nasrullah, Rulli. 2015. Media Sosial: Prosedur, Tren, dan Etika. Simbiosis Rekatama Media : Bandung.

Nursih, Isti. 2014. Komunikasi Massa. Yogyakarta : Graha Ilmu.

Suharyat, Yayat. 2009. Hubungan antara sikap, minat, dan perilaku manusia. Jurnal REGION Volume I. No. 3 September 2009.

Syamsudin, Abin. 2012. Psikologi Pendidikan : Perangkat Sistem Pengajaran Modul. Remaja Rosdakarya: Bandung. <https://id.wikipedia.org/wiki/Instagram> diakses pada 10/7/2018 pukul 19.40 WIB