

Influence of Focus Sky Application-Based Information Service to Improve Problem Solving

Mega Larasukma Sulistiaty^{*)1}, Rasimin², Affan yusra³

^{1,2,3} Guidance and Counseling, Teacher Training and Education, Jambi University, Indonesia.

^{*)} Corresponding author, ✉e-mail: megalarasukma1327@gmail.com

Received:
01 June 2022

Accepted:
15 June 2022

Published:
25 June 2022

Abstract

In the learning process, students acquire the ability to solve problems or what is called problem solving skills, so that students can manage and overcome problems in learning. At SMP N 17 Jambi City, problem solving skills need to be improved because the first school period is a good time to develop problem solving skills both in learning and in everyday life. Students' problem-solving skills can be improved by using information services. There are several methods that can be used and applied in the implementation of services, one of which is using electronic media, one of which is focus sky. In the form of an online-based slide show that presents the appearance of information services to be more attractive. The research carried out is a quantitative research with the type of experimental research in the form of Pre-Experimental in the Intecg-group comparison design. Intecg group comparison. The problem in this study is about improving students' problem solving skills, the researchers took 2 classes or groups as samples. Based on the sampling using purposive sampling technique in accordance with the criteria of the problem and obtained class VIII D as the experimental class and VIII C as the control class. Judging from the results of the post-test in the experimental group using the blended learning method, the average score was 83.00 and the post-test results for the group were at a value of 78.03 so that there was an increase of 3.97% in the experimental group. Then the sig. (2-tailed) i.e. $0.00 < 0.05$, where $T_{count} 3.965 > 2.006$ T table at degrees of freedom $64(66-2)$ at a confidence level of 0.05, it can be found that the average difference between problem solving abilities in student learning experimental group and control group. So that the hypothesis in this study is accepted. H_0 is rejected and H_a is accepted which means that there is an influence of the blended learning method.

Keywords: Problem Solving, Focus Sky, Information Services

Abstrak

Dalam proses pembelajaran, siswa memperoleh kemampuan memecahkan masalah atau yang disebut Problem solving skill, agar siswa dapat mengatur dan mengatasi permasalahan dalam belajar. Pada siswa SMP N 17 Kota Jambi perlu di tingkatkan lagi kemampuan pemecahan masalah karena ada masa sekolah pertama adalah saat yang baik dalam mengembangkan kemampuan dalam memecahkan masalah baik dalam belajar maupun kehidupan sehari-hari. Kemampuan memecahkan masalah siswa dapat ditingkatkan dengan layanan informasi terdapat beberapa metode yang bias digunakan dan diterapkan dalam pelaksanaan layanan salahsatunya yaitu menggunakan media elektronik salahsatunya adalah focus sky. Berupa tampilan slide show berbasis online yang menyajikan tampilan layanan informasi menjadi lebih menarik. Penelitian yang dilaksanakan adalah penelitian kuantitatif dengan jenis penelitian eksperimen dengan bentuk Pre-Eksperimental dalam rancangan Intecg-group comparison. Perbandingan grup intecg. Masalah dalam penelitian ini adalah tentang meningkatkan kemampuan pemecahan masalah siswa maka peneliti mengambil 2 kelas atau kelompok sebagai sampel. Berdasarkan penarikan sampel menggunakan teknik purposive sampling sesuai dengan kriteria permasalahan dan didapatkan kelas VIII D sebagai kelas eksperimen dan VIII C

sebagai kelas control. Dilihat dari hasil post-test pada kelompok eksperimen menggunakan metode blended learning berada pada rata-rata nilai 83,00 dan hasil post-test kelompok pada nilai 78,03 sehingga mengalami peningkatan sebesar 3,97% pada kelompok eksperimen .kemudian pada nilai sig . (2-tailed) yakni $0,00 < 0,05$, dimana $T_{hitung} 3.965 > 2.006 T_{tabel}$ pada derajat kebebasan 64(66-2) pada tingkat kepercayaan 0,05 maka dapat ditemukan bahwa perbedaan rata-rata antara kemampuan pemecahan masalah dalam belajar siswa kelompok eksperimen dan kelompok kontrol. Sehingga hipotesis dalam penelitian ini diterima. H_0 ditolak dan H_a diterima yang memiliki arti adanya pengaruh metode blended learning.

Kata Kunci: Pemecahan Masalah, Focus Sky, Layanan Informasi



This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. ©2022 by author.

INTRODUCTION

Learning goals that concern responsibility include how to deal with and deal with a problem (*problem solving skill*). As in 2013 curricular, for example, it always states the importance of developing problem-solving skills as part of *life-skills* that should be developed through the implementation of the 2013 curriculum. *Problem-based learning* is even recommended as one of the main learning approaches in the implementation of the curriculum.

In language *problem solving* comes from two words, *namely problem* and *solves*. The meaning of *a problem* is something that is difficult to do or understand, while *solve* is to find the answer to a problem. *Terminology problem solving* according to (Djamarah & Zain, 2010) is a scientific way of thinking to find a solution to the problem.

To cultivate the ability to solve problems or *problem solving* students are strengthened by special methods or learning given to grow students' *problem solving* skills, one of which is through Guidance and Counseling. The ability to think in solving student problems can be improved through one of the services contained in guidance and counseling, namely in information services..

Based on the results of the survey and response from students of SMPN 17 Jambi City ' on March 20, 2021 with Teacher BK Mrs. Susiyani S.Pd regarding their ability to solve problems. There are still some students who do not understand learning materials and are able to solve problems independently so often ignore the problem or find a way out of the problem with origin.

The role of BK Teachers in helping students' problems is very important. However, by providing services using lecture techniques will make students become saturated and less enthusiastic about the material provided, so that students do not get what is given during the teaching and learning process.

The learning process that utilizes technological advances and the use of appropriate learning media, innovative, and supports the development of student creativity, making students more active and able to understand the learning conveyed. So that in this research, the author will provide information services based on *the focus sky application*.

For this reason, researchers conduct research on the above. With the research title "The influence of *focus sky* application-based information services to improve *Problem Solving* in students of SMP Negeri 17 Jambi City". The intended hypothesis in

this study is whether there is an influence between *focus sky* application-based information services in *improving students' Problem Solving* skills. This research can be an inspiration and source for anyone who will conduct similar research or do the continuation of this research, so it becomes a benchmark for the next researcher.

METHOD

Methods used

The research carried out is a quantitative research method because it is to find comparisons between *problem solving* skills that students have before the research is carried out and after *being given treatment* or the implementation of research so that it is obtained in the form of quantitative data.

The method used in research is an experimental research method with a *Pre-Experimental* form in the *Design Of Intecg-group comparision*. *Intecg-group comparision* (one experimental group with one comparison group) is a study conducted by dividing the subject into two groups (can use matching or random), then in the experimental group given stimulation or *treatments* while the comparison group is not given stimulation or *treatments* (Prasetyoningrum et al., 2014) . After the implementation of research, it can be known the influence of the provision of these services.

Research subject

The subject in this study was a student of class VIII of State Junior High School 17 Jambi City. The total population is 264. Samples are presentative representatives selected from the population to be used as data sources or respondents using purposive sampling.

The blame in this study is about *improving the problem solving* ability of students so researchers take 2 classes or groups as samples. Based on the withdrawal of samples using *purposive sampling* techniques in accordance with the criteria of the problem. So the research subjects used in this study are class VIII C and VIII D because of the results of data processing anget Pre-test between classes, class VIII C and class VIII D which occupy the lowest position in solving schoolwork problems. Therefore, researchers designate class VIII C as a control class and class VIII D as an experimental class.

Data collection procedures

Data collection in this study was carried out by questionnaire, interview and obesrvasi methods. Pre-test and post-test data collection using a statement questionnaire of 25 statements that have been selected in accordance with the instrument test criteria, including analysis of the validity, reliability, and strength of different T-tests.

Pre-test is done before learning activities to find out the ability of *Problrm Solving* students in learning. Therefore, on the data of pre-test results conducted hompogeneity test. Meanwhile, post-test is intended to find out the results of the implementation of research activities in the experimental and control groups.

Data analysis

The analysis of post-test results data includes tests of normality, homogeneity, hypothesis. The normality test is used to determine the normality of the data to determine the statistical test in the hypothesis. Homogeneity tests for advanced parametic statistical tests are used if there is normal contributed data. Hypothesis tests are conducted to

determine the influence of *Focus sky* application-based information services in *improving students' problem solving skills*.

FINDINGS

The pre-test results of the experimental group were in the low category at the <72 score of 11 people and the pre-test results of the control group at a score of 73-77 which amounted to 13 people before being given *treatment* or treatment. In accordance

with the initial survey that has been conducted in the field, where class VIII students urgently need to be improved problem solving skills or problem-solving skills in learning or doing homework. This proves that problem solving skills must be owned by students. The impact of the ability to solve problems is that it can help students in doing tasks both at home and at school.

Table 1. *Pre-test results of experimental classes and control classes*

number	Pre-test results		
	component	Experimental class	Control class
1	Number of students	33	33
2	Highest score	88	57
3	Lowest value	55	78
4	Average	68,72	61,65
5	Homogeneous results	Homogeneous	

Based on table 1. It was seen that the average score of the experimental class (68.72) was higher than the control class (61.65). It has the same homogeneity at the beginning. The results of the post-test

experimental and control classes can be seen in table 2.

Table 2. *Results post-test experimental classes and control classes*

number	pre-test results		
	component	Experimental class	Control class
1	Number of students	33	33
2	Highest score	96	90
3	Lowest value	71	70
4	Average	83,00	78,03
5	Homogeneous results	Homogeneous	
6	T-Test	$T_{hitung} > T_{tabel}$ Ho count rejected Dan Ha Accepted	

Based on the group statistic table above, it is known that the number of post-test results of student problem solving

ability in studying experimental groups averaged 83.00 and post-test control groups averaged 78.03 so that there was an

average increase of 4.97 in the experimental group. So deskriptal statistics can be observed to have a difference in the

average results of problem solving ability in learning experimental group students with control groups.

Table 3. Independent test results of t-test samples

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference
									Lower Upper
troubleshooting ability	Equal variances assumed	.872	.354	3.965	64	.000	4.96970	1.25339	2.46576 7.47364
	Equal variances not assumed			3.965	61.960	.000	4.96970	1.25339	2.46417 7.47523

It is known that the value of Numeracy is greater than that of T_{tabel} . Where T_{ghi} calculated $3,965 > 2,006$ T_{tabel} at freedom degrees 64(66-2) at a confidence level of 0.05, it can be concluded that there is an average difference between problem solving ability in the learning of experimental group students and control groups. So that the hypothesis in this study is accepted. H_0 was rejected and H_a was accepted which means that there is an influence of blended learning methods in improving students' problem solving skills in experimental groups and control groups. So it can be concluded that there is an influence of *focus sky* learning application-based information services in improving students' problem solving capabilities.

DISCUSSION

The pre-test results of the experimental group were in the low category on the <72 score of 11 students and the pre-test results of the control group at the <65 score of 9

students before being given *treatment* or treatment. In accordance with the initial survey that has been conducted in the field, where class VIII students need to be improved again *problem solving* skills or problem-solving skills in learning and doing homework. This proves that students' *problem solving* ability is one of the things that students must have. The impact of the ability to solve student problems can help students in doing tasks both at school and at home.

This study is a follow-up study conducted by previous researchers, namely Drs.Rasimin, M.Pd and Affan Yusra, S.Pd, M.Pd in 2019 which has been outlined in chapter 2 that the reading interest of Jambi University BK students can be improved by using *focus sky* application-based media, so it is possible for researchers to also apply *focus sky* application media in *improving problem solving* capabilities. or students' problem-solving abilities in learning.

Judging from the *results of post-tests* in the experimental group using *focus sky* application media was at an average score of 83.00 and post-test control groups averaged 78.03 so that there was an average increase of 4.97 in the *experimental* group. (2-tailed) which is $0.00 < 0.05$, where $T_{hitung} 3,965 > 2,006 T_{tabel}$ at the degree of freedom 64 (66-2) at a confidence level of 0.05 then it can be concluded that there is an average difference between problem solving ability in the learning of experimental group students and control groups. So that the hypothesis in this study is accepted. H_0 was rejected and H_a accepted which means there is an influence of blended learning methods.

During the implementation of the service delivery using *focus sky-based* media with the material raised to improve students' problem-solving skills. Researchers carry out in accordance with the RPL that has been compiled before. the application of blended learning methods using focus sky media in experimental and classical classes in control classes directly observed by Susiyani's mother, S.Pd as a teacher of Class VIII Counseling Guidance.

The results of observations on the implementation of *focus sky* application-based information services that have been implemented for the treatment (1) of the first layana with a result of 78% and group members 70% are in the Right category, (2) the provision of services carried out 84% in the category is very appropriate and group members 75% are in the right category, (3) the provision of services carried out 95% and the members of the group 75% in the right category.

From the results of observations obtained on the assessment of students are always in the right category. This can indicate that there are slight shortcomings

that have been done by researchers even though the implementation has followed in accordance with RPL guidelines. A possible factor is the delivery of the material displayed on focus-sky too quickly so that students are less responsive to the material delivered. So that students' response to the implementation of services is less focused.

CONCLUSIONS

Based on the results and discussions can be drawn some conclusions, namely the results of this study can show that *the problem solving ability* of students in class VIII junior high school N 17 Jambi City before being given services in the experimental group at a low <72 grade and a control group at a score of 73-77. The results from *the group statistics* showed that the number of post-test results of students' problem solving ability in studying experimental groups averaged 83.00 and post-test control groups averaged 78.03 so that there was an average increase of 4.97 in the experimental group. The provision of information services based on *the Focus Sky* application has an effect in *improving students' problem solving* capabilities as seen from the results of research and from the results of hypothesis tests that have been carried out. In the implementation of blended learning methods in increasing the ability of problem solving students need to be considered several things, namely: 1) The allocation of time is considered as well as possible at each stage of learning so that it can be carried out optimally, 2) Electronic media such as infocus, laptops, sound systems and the internet need to be prepared so that blended learning methods are carried out properly.

BIBLIOGRAPHY

- Achmadi, T. A. (2015). The effect of the application of blended learning on the learning achievements of students of class XI machining engineering SMK Muhammadiyah 3 Yogyakarta. *Thesis. Yogyakarta: Yogyakarta State University.*
- Al-Tabany, T. I.B. (2017). *Designing Innovative, Progressive, and Konteksual Learning Models*. Prenada Media.
- Amidi, & Zahid, M. Z. (2016). Building Mathematical Creative Thinking Skills With E-Learning Problem-Based Learning Models. *National Seminar on Mathematics X Semarang State University 2016*, 586–594.
- Arikunto, S. (2009). *Research Management: Jakarta: Rineka Cipta. Anjaryani, WD.*
- Armei, A. (2001). *Introduction to the Methodology of Islamic Education*. Jakarta: Ciputat Press.
- Bakar, A., & Luddin, M. (2010). Basics of Counseling Theory and Practice Review. *Bandung: Citapustaka Media Pioneer.*
- Djamarah, S.B., & Zain, A. (2006). Teaching and learning strategies. *Jakarta: Rineka Cipta*, 46.
- Djamarah, S.B., & Zain, A. (2010). *Teaching and Learning Strategy*, cet. 4th. *Jakarta: PT Rineka Cipta.*
- Dwiyogo, W. D. (2018). Blended learning based on learning. *Depok: RajaGrafindo Persada.*
- Firmansyah, B. H. (2015). Schoology-Based Blended Learning Development. *Proceedings of the National Seminar on Educational Technology*, 86–102.
- Fitri, E., Ifdil, I., & Neviyarni, S. (2016). The effectiveness of information services by using blended learning methods to increase learning motivation. *Journal of Educational Psychology and Counseling: Journal of Educational Psychology Studies and Counseling Guidance*, 2(2), 84–92.
- Gulo, W. (2008). *Teaching and Learning Strategies (New Cover)*. Grasindo.
- Hidayati, R. (2015). Career Information Services assist learners in improving career understanding. *GUSJIGANG Counseling Journal*, 1(1).
- Jackman, W.M. (2018). Switching from traditional to blended learning at university level: Students' and lecturers' experiences. *International Journal of Learning, Teaching and Educational Research*, 17(5), 1–14.
- Mbulu, J. (2001). Individualized teaching method approaches and media teaching guidelines for teachers and prospective teachers. *Malang: Golden Eagle Foundation.*
- Prasetyoningrum, R., Sukardjo, J. S., & Nurhayati, N. D. (2014). The application of cooperative problem solving (cps) learning to increase creativity and learning achievement in the subject matter of salt hydrolysis of students of class XI IPA 1 even semester of Sma Negeri 2 Sukoharjo in the 2013/2014 school year. *Journal of Chemical Education*, 3(3), 105–110.
- Prayitno, E. A., & Amti, E. (2004). Basics of guidance and counseling. *Jakarta: Rineka Cipta.*
- Prayitno, W. (2015). Implementation of Blended Learning in Learning in Elementary and Secondary Education. *Journal of Education*, 6(01).

- Purwoko, B. (2008). *Organization and management of counseling guidance*. Surabaya: Unesa University Press.
- Princess, A. W. (2017). *Improving The Learning Outcomes of Mathematics Students of Class VIII D Through a Think-Pair-Share Learning Model with LKS Small Steps at Raden Rahmat Balongbendo Junior High School*. University of Muhammadiyah Surabaya.
- Safitri, M. (2017). *The influence of information services to improve the motives of high school students in Hinai*. State Islamic University of North Sumatra.
- Sugiyono, D. (2013). *Educational research methods quantitative, qualitative and R&D approaches*.
- Sulasmono, B. S. (2012). Problem solving: Its significance, understanding, and variety. *Satya Widya*, 28(2), 155–166.
- Sutja, A. D. (2017). *Writing Thesis For Counseling Guidance Study Program*. Mold to.