European Journal of Education Studies
ISSN: 2501 - 1111
ISSN-L: 2501 - 1111
Available on-line at: www.oapub.org/edu

DOI: 10.46827/ejes.v9i6.4324 Volume 9 | Issue 6 | 2022

THE EFFECT OF CONTENT MASTERY SERVICES IN OVERCOMING STUDENTS' LEARNING DIFFICULTIES IN MATHEMATICS SUBJECTS AT SMP NEGERI 254 JAKARTA, INDONESIA

Tri Sari Rejeki[i],
Muhammad Nur Wangid
Master of Education in Counseling Program,
Faculty of Education,
Yogyakarta State University,
Yogyakarta, Indonesia

Abstract:
This study aims to determine the effect of content mastery services in overcoming student learning difficulties in mathematics at SMP Negeri 254 Jakarta. The research method used is a quantitative method with a quasi-experimental approach and a purposive sampling technique used to determine the research sample. The instrument used in this research is a questionnaire. It can be proven by the change in class 7.3, namely the experimental class that has learning difficulties in high Mathematics subjects, after being given treatment in the form of content mastery services there is a significant change. In class 7.2, which is the control class, which also has learning difficulties in high mathematics, there was a significant change that was influenced by other factors outside the study. So that the results of the research hypothesis are "There is an influence before being given treatment with after being given treatment in the form of content mastery services. That content mastery services have an influence in overcoming students' learning difficulties in mathematics subjects at SMP Negeri 254 Jakarta."

Keywords: content mastery service, learning difficulties, math

1. Introduction

Education is a process to develop students' abilities correctly and planned to create a learning atmosphere and an active learning process in increasing the potential that exists within the students themselves. To realize this, there are several obstacles and challenges, both from within (internal) and from outside (external), so solutions or efforts are needed to find a way out. Good learning is learning that has a real impact on everyday life. That is, the learning material delivered by the teacher in the study room can be applied in real

[i] Correspondence: email trisari.2021@student.uny.ac.id, trisaripardede95@gmail.com

life. Students are not only successful theoretically, but students are expected to be able to practice it in everyday life. Therefore, the achievements obtained are not just numbers, but values that are beneficial to themselves and the community.

In the implementation of activities and counseling in schools, service is one of the activities provided through guidance and counseling to students related to their learning activities. Content mastery service (PKO) is a support service for individuals (alone or in groups) to master certain abilities or competencies through learning activities.

Content mastery service is one of the important educational programs in schools to help students overcome difficulties in carrying out their developmental tasks. In particular, in overcoming students' learning difficulties at school, increasing students' learning responsibility at school, students are aware of the importance of learning, students master certain content in an integrated manner, students master lessons that are difficult for them and students master certain ways or habits in overcoming their learning difficulties.

Content mastery services help individuals master these aspects of the content in a synergistic manner. By mastering content, individuals are expected to be able to meet their needs and overcome the problems they experience (Prayitno 2015:89).

In learning activities in schools, teachers are faced with many different and varied characteristics of students, there are those who take the learning process smoothly and successfully without experiencing difficulties, and there are also those who experience various difficulties in their learning. The difficulty is a certain condition that can be seen by the presence of obstacles in activities to achieve goals so that it requires even greater effort to be able to overcome them. While learning difficulties can mean a condition in the teaching and learning process that is known by the existence of obstacles to achieving the desired learning outcomes. These barriers can be psychological, physiological, or sociological in the overall learning process of a student. Learning difficulties are a condition of students in receiving lessons that will cause a barrier in a person's learning process. Where this obstacle can cause a person to fail or be less successful in achieving learning goals (Utami, 2019).

At SMPN 254 Jakarta, many students experience learning difficulties, especially in Mathematics. It can be seen that many students are not able to develop creativity in mathematics subjects, the lack of learning media used in the learning process in the classroom, and the inability of teachers to understand the character of students, where this makes students experience difficulties in learning, resulting in students not being able to process learning material provided by the teacher, and contains students having a sense of laziness, boredom and so on.

This section should comprise a description of the general framework, definitions and principles, primary issues and controversies, background information and contexts, etc.

2. Literature Review

M. Luddin Abu Bakar (2010:70-71) defines content mastery services as follows: Content mastery services are intended to enable students to understand and develop good study attitudes and habits, skills and learning materials that are suitable for their speed and learning difficulties as well as the demands of abilities that are useful in their life and development. Content mastery services are assistance services for individuals to master certain abilities and competencies through learning activities.

Content mastery services are generally provided in person (directive) and face-to-face, with classic, group or individual formats. Counselor service providers actively present materials, provide examples, stimulate, encourage, and move participants to actively participate in following and undergoing service materials and activities. In this case, the counselor upholds two values of the learning process, namely: *High-touch*, namely high-level touches concerning aspects of the personality and humanity of service participants (especially affective aspects, enthusiasm, attitudes, values and morals) through implementation by counselors: authority, compassion and tenderness, exemplary, giving reinforcement, decisive action that educates. *High-tech*, namely high-level technology to ensure the quality of content mastery, through implementation by counselors: learning materials (in this case content), learning methods, learning aids, learning environments, and assessment of learning outcomes.

Various techniques can be used, namely:

1) Presentation; the counselor presents the main content of the content after the participants are properly prepared.
2) Questions and answers and discussions; counselors encourage active and direct participation of participants, to strengthen participants' insight and understanding, as well as various links in all aspects of content.
3) Follow-up activities; according to the emphasis on certain aspects of the content carried out the sharing of continued activities. These activities can take the form of group: discussion limited assignments and training, field surveys; literature study, experiments (including laboratory, workshop, and studio activities), and action training (in order to change behavior).

Individuals who have learning difficulties mean that they have deficiencies or disorders in intellectual or intelligence, but it is also caused by the design results of learning that are less effective than the teaching process (Arifin, 2020). Learning is a condition of students in receiving lessons that will cause a barrier in a person's learning process. Where this obstacle can cause a person to fail or be less successful in achieving learning goals (Utami, 2019).

Learning difficulties exist if a student has high abilities but is unable to achieve learning outcomes in accordance with their abilities (Asmidir Ilyas, et al., 2017:43). One of the students' abilities in mathematics that is still felt to be low is the ability to connect mathematically. This is in accordance with the results of Ruspiani's study

(Sulistyaningsih, 2012:122) which revealed that in general, the ability of students in mathematical connections is still low.

The low ability of students' mathematical connections will affect the quality of student learning which has an impact on the low participation of students in school (Siagian, 2016).

3. Material and Methods

The method used in this research is experimental research by providing content mastery services to the experimental group. The research process carried out in this study was a pre-experimental design with the type of design one group pre-test and post-test design because there was no comparison with the control group, so one test group was given the same treatment before and after receiving certain treatments (Safutra et al., 2018).

Then, the post-test results are compared or tested for differences. The subjects of this study were students of SMP 254 Jakarta. Data was collected using a questionnaire with reference to the Likert scale. The data analysis technique uses descriptive analysis to test the validity using product-moment correlation and to test the hypothesis using Paired-Samples T-test. All analyzes were calculated using SPSS software (Statistical Product and Service Solutions) 25.0 for Windows.

Table 1: Research design nonequivalent control group design

O_1	X	O_2
O_3	-	O_4

Description:
O_1 : Pretest experimental class,
O_2 : Posttest experimental class,
O_3 : Pretest control class,
O_4 : Posttest control class,
X : The treatment in the experimental class is in the form of content mastery services.

4. Results and Discussion

Based on the results of the descriptive analysis of the pre-test and post-test between the experimental group and the control group as well as the results of hypothesis analysis using SPSS 25.0 with learning difficulties in Mathematics can be seen through the following table:

Table 2: Percentage of Classification of Mathematics Learning Difficulties of Students in the Pre-test Experiment Group

Interval	**Category**	**Frequency**	**Percentage (%)**
>104	Very High	0	0
89-104	High	9	26
73-88	Currently	19	54
57-72	Low	7	20
<56	Very low	0	0
Total		35	100

Based on the table above, it can be seen that the students' learning difficulties in Mathematics before being given treatment in the pre-test experimental group. The results of the pre-test experimental group showed that students who had difficulty learning Mathematics in the very high and very low score categories were 0 students and had a percentage of (0%), the high score category was 9 students and had a percentage of (26%), the category 19 students have medium grades and have a percentage (54%), low-grade category as many as 7 students and have a percentage (20%).

Table 3: Percentage of Classification Difficulty in Learning Mathematics of Students in Control Group Pre-test

Interval	Category	Frequency	Percentage (%)
>104	Very high	0	0
89-104	High	16	44
73-88	Currently	18	50
57-72	Low	2	6
<56	Very low	0	0
Total		36	100

Based on the table above, it can be seen that students with learning difficulties in Mathematics were not given treatment in the pre-test control group. The results of the pre-test control group showed that students who had difficulty learning Mathematics in the very high and very low score categories were 0 students and had a percentage of (0%), the high score category was 16 students and had a percentage of (44%), the category 18 students have a medium score and have a percentage (50%), a low score category is 2 students and has a percentage (6%).

Table 4: Percentage of Classification of Mathematics Learning Difficulties of Students in Post-test Experiment Group

Interval	Category	Frequency	Percentage (%)
>104	Very high	0	0
89-104	High	25	71
73-88	Currently	10	29
57-72	Low	0	0
<56	Very low	0	0
Total		35	100

Based on the table above, it can be seen that the student' learning difficulties in Mathematics after being given treatment in the post-test experimental group. The results of the post-test experimental group showed that students who had difficulty learning Mathematics in the category of very high, low and very low scores were 0 students and had a percentage of (0%), the high score category was 25 students and had a percentage of (71%) , category of moderate value as many as 10 students and has a percentage (29%).

Table 5: Percentage of Classification Difficulty in Learning Mathematics of Students in Post-test Control Group

Interval	Category	Frequency	Percentage (%)
>104	Very high	0	0
89-104	High	22	61
73-88	Currently	13	36
57-72	Low	1	3
<56	Very low	0	0
Total		36	100

Based on the table above, it can be seen that students' learning difficulties in Mathematics were not given treatment in the post-test control group. The results of the post-test control group showed that students who had difficulty learning Mathematics in the very high and very low score categories were 0 students and had a percentage of (0%), the high score category was 22 students and had a percentage of (61%), the category medium grades as many as 13 students and has a percentage (36%), low-grade category as many as 1 student and has a percentage (3%).

Next, the data normality test was carried out to find out whether the data collected and studied included data that were normally distributed or not, therefore the normality test of this data was carried out using the Kolmogorov Smirnov test assisted by SPSS version 25.0 software.

Table 6: Normality Test Results of the Experimental Group Pre-test and Post-test One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		35
Normal Parameters[a,b]	**Mean**	.0000000
	Std. Deviation	2.74345483
Most Extreme Differences	**Absolute**	.078
	Positive	.059
	Negative	-.078
Test Statistic		.078
Asymp. Sig. (2-tailed)		.200[c,d]
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

Table 7: Normality Test Results of the Control Group Pre-test and Post-test One-Sample Kolmogorov Smirnov Test

		Unstandardized Residual
N		36
Normal Parameters[a,b]	**Mean**	.0000000
	Std. Deviation	4.66987898
Most Extreme Differences	**Absolute**	.100
	Positive	.100

	Negative	-.078
Test Statistic		.100
Asymp. Sig. (2-tailed)		.200[c,d]
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

The table above shows the significant value of each variable, namely the variable difficulty learning Mathematics of experimental group students at the pre-test and post-test by determining the residual value of 0.20 > 0.05. While the variable of learning difficulties in Mathematics of control group students at the time of pre-test and post-test by determining the residual value of 0.20 > 0.05. So it can be explained that each variable has a significance value greater than 0.05 so it can be said that the data is normally distributed.

The homogeneity test of the data for the mathematics learning difficulties variable of the experimental group students after being given treatment and the control group without being given any treatment at the post-test can be seen in the following table:

Table 8: Homogeneity Test Results

		Levene Statistic	**df1**	**df2**	**Sig.**
Difficulty Learning Math	**Based on Mean**	.489	1	69	.487
	Based on Median	.526	1	69	.471
	Based on Median and with adjusted df	.526	1	62.657	.471
	Based on trimmed mean	.502	1	69	.481

The provisions of the homogeneity test are as follows:

- If the value of sig> 0.05 then homogeneous,
- If the value of sig < 0.05 then it is not homogeneous.

Based on the results of the calculation table above, the sig value is 0.481 > 0.05, which means the value is greater than 0.05. This means that the variance of the population group is homogeneous. Thus the homogeneity requirement for parametric statistical analysis is fulfilled.

Table 9: Hypothesis Test Results of the Experimental Group Paired Sample Test

		Paired Differences					**t**	**Df**	**Sig. (2-tailed)**
		Mean	**Std. Deviation**	**Std. Error Mean**	**95% Confidence Interval of the Difference**				
					Lower	**Upper**			
Pair 1	Pre-test – Post-test	-9.45714	3.90582	.66020	-10.79884	-8.11545	-14.325	34	.000

Based on the table above, the coefficient Sig. (2-tailed) of 0.00 < 0.05, it is decided that H0 is rejected and H1 is accepted. Thus the hypothesis reads "there is an influence before being given treatment with after being given treatment in the form of content mastery services. Therefore, content mastery services have an influence in overcoming students' learning difficulties in mathematics subjects at SMP Negeri 254 Jakarta.

Table 10: Hypothesis Test Results of the Control Group Paired Sample Test

		Paired Differences					t	Df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre-test - Post-test	-3.11111	4.70731	.78455	-4.70383	-1.51839	-3.965	35	.000

Based on the table above, the coefficient of Sig. (2-tailed) of 0.00 < 0.05, it is decided that H0 is rejected and H1 is accepted. Thus the hypothesis that reads "there is an influence before being given treatment with after being given treatment that is influenced by other factors outside the study" is declared accepted.

5. Recommendations

Referring to some of the data that has been collected in the study, Mastery of content in mathematics at SMP 254 Jakarta has changed for the better, but mastery of subjects needs to be improved continuously. Improvement efforts can be made by conducting training or providing sufficient modules or references and collaborating with class teachers.

6. Conclusion

Based on the results of research conducted by researchers at State Junior High School (SMP) 254 Jakarta on the Effect of Content Mastery Services in Overcoming Students' Learning Difficulties in Mathematics Subjects to determine the level of learning difficulties in Mathematics subjects experienced by students, and changes that occurred in the experimental group and the control group through the results of the questionnaire given, the researcher can put forward several conclusions that the description of learning difficulties in Mathematics subjects in the experimental class and the control class is in the high category. After being given treatment in the form of content mastery services, there was a significant change in learning difficulties in Mathematics subjects in the low category.

There is a significant effect and difference in results from the results of the questionnaire before and after being given treatment in the form of content mastery services (classical) given to the experimental group and there is a significant effect and

difference in results from the results of the pre-test and post-test questionnaires in the affected control group. by other factors outside the study.

Acknowledgements
In this short section, I would like to thank the principal, teachers, the master's degree program in guidance and counseling at Yogyakarta State University, and friends who have supported me to complete this research.

Conflict of Interest Statement
The authors declare no conflicts of interest.

About the Authors
Tri Sari Rejeki is a postgraduate student in Guidance and Counseling Program, Faculty of Education, State University of Yogyakarta, Indonesia.
Muhammad Nur Wangid is a professor working at State University of Yogyakarta, Indonesia. He conducts research on counseling, education, child development and education psychology.

References

Ahmad, & Pamujo (2020). Learning Reflection Journal. Method, 4(2). https://method.id/2020/05/15/jurnal-releksi-pembelajaran/

Amaliyah, M., Suardana, I. N., & Selamet, K. (2021). Analisis Kesulitan Belajar Dan Faktor-Faktor Penyebab Kesulitan Belajar IPA Siswa SMP Negeri 4 Singaraja. *Jurnal Pendidikan Dan Pembelajaran Sains Indonesia (JPPSI)*, *4*(1), 90–101. https://ejournal.undiksha.ac.id/index.php/JPPSI/article/view/33868

Angranti, W. (2016). *The problem of student learning difficulties*. Etam's Gate, 10(1), 31.

Arifin, M. F. (2020). Students' Learning Difficulties and Their Handling in Elementary/Mi Mathematics Learning. Journal of Research Innovation, 1(5), 989–1000. https://doi.org/10.47492/jip.v1i5.181

Emzir. (2015). *Educational Research Methodology*. Jakarta: Raja Grafindo Persada.

Djamarah, S. B. & A. Zain (2010). *Teaching and Learning Strategies*. Jakarta: Rineka Cipta.

Husein, B. (2020). Pentingnya Memahami Kesulitan Belajar Pada Siswa : Studi Kasus Di Sd Muhammadiyah Karangwaru Yogyakarta. *Jurnal Pendidikan Sekolah Dasar*, *7*(1), 54–62. http://dx.doi.org/10.26555/jpsd.v3i2.a8171

Prayitno & Amti, E. (2004). *Fundamentals of Guidance and Counseling*: Volume 1. Jakarta: Rineka Cipta.

Safutra, A., Syahriman, S., & Afriyati, V. (2018). Pengaruh Layanan Penguasaan Konten Dengan Teknik Modeling Untuk Mengurangi Kecemasan Berbicara Siswa Di Depan Kelas Di Smp N 13 Kota Bengkulu. *Consilia : Jurnal Ilmiah Bimbingan Dan Konseling*, *1*(3), 91–105. https://doi.org/10.33369/consilia.1.3.91-105

Siagian, M. D. (2016). Mathematical connection ability in learning mathematics. MES: Journal of Mathematics Education and Science2, 2(1), 58–67.

Turmudi. (2008). *Landasan Filsafat dan Teori Pembelajaran Matematika (Berparadigma Eksploratif dan Investigatif)*. Jakarta: Leuser Cipta Pustaka.

Utami, A. P. (2019). Kesulitan Belajar: Gangguan Psikologi Pada Siswa dalam Maulana, R., & Hidayati, N. W. (2017). Pemberian Layanan Penguasaan Konten Untuk Meningkatkan Kesiapan Karier Mahasiswa IKIP PGRI Pontianak. *SOSIAL HORIZON: Jurnal Pendidikan Sosial*, *4*(2), 198–205.

Menerima Pelajaran. *ScienceEdu*, *II*(2), 92–96.

Yulinda Erma Suryani. (2010). *Difficulty learning*. Magistra, XXII(73 Years).

Yusuf, S. & Nurihsan, A. J. 2010. Landasan Bimbingan dan Konseling. Bandung: Remaja Rosdakarya.