

## Improving the Competence of Elementary School Teachers Through Assistance in the Preparation of Numeracy-Based Literacy Teaching Modules

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### ABSTRACT

The curriculum continues to change, and until now Indonesia has been implementing the curriculum. The teacher's ability to implement the curriculum will be a benchmark for his success in implementing the current curriculum. Literacy culture is still a hot topic to discuss. Unfortunately, in Indonesia, the culture of literacy is still low and has not yet become a social culture. To be able to keep up with the times, students must have basic abilities, namely literacy and numeracy. Literacy and numeracy learning in elementary schools must be carried out through innovative learning activities so that it can increase students' interest in learning, as well as develop elementary school students' literacy and numeracy skills. Based on the results of a preliminary study by the Community Service team in Lahat Regency through the results of initial interviews with the education office and several elementary school teachers, information was obtained that teachers were not yet skilled in developing teaching modules related to literacy and numeracy for elementary school students. In connection with this problem, it is necessary to provide an alternative solution, one of which is training related to literacy and numeracy-based module design. After participating in the training, it is hoped that elementary school teachers in Lahat Regency can easily develop literacy and numeracy-based teaching modules so that the quality of learning in the classroom becomes higher, which will have an impact on student learning outcomes. The method used in this community service is counseling and guidance, which is carried out online and offline. In the results of the pretest before being given assistance, participants got an average score of 41, and after being given assistance, the post-test score of participants got an average score of 70.7. Assistance in the development of literacy and numeracy-based teaching modules for elementary school teachers in Lahat district went smoothly, as demonstrated by the teachers' success in designing appropriate teaching modules, and there was an increase in the pretest and post-test scores that had been given.

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## INTRODUCTION

The curriculum continues to change; until now, Indonesia has been implementing an independent curriculum (Safitri et al., 2023). The teacher's ability to implement the curriculum will be a benchmark for his success in implementing the current curriculum (Anwar, 2022). Through curriculum changes, all teaching staff need to measure and introspect themselves so that learning can adapt to current developments (Arviansyah & Shagena, 2022). To be able to keep up with the times, students must have basic abilities, namely literacy and numeracy. Fitriana & Ridlwan (2021) revealed that to be able to produce graduates who meet the demands of changing times, a strong foundation in learning at school is needed in the form of literacy and numeracy.

Literacy culture is still a hot topic to discuss. Unfortunately, in Indonesia, the culture of literacy is still low and has not yet become a social culture. A survey conducted by PISA in 2009–2015 stated that the literacy skills of Indonesian students were still very low compared to other PISA participating countries (Ayuningtyas & Sukriyah, 2020). The School Literacy Movement in elementary school learning can be realized in literacy and numeracy learning. Literacy and numeracy learning in elementary schools must be carried out through innovative learning activities so that it can increase students' interest in learning as well as develop elementary school students' literacy and numeracy skills. In this regard, it is necessary to develop teaching modules that are innovative and oriented towards students' literacy and numeracy abilities.

The next problem found was that there were complaints from teachers regarding difficulties in designing and developing teaching modules that included literacy and numeracy. This obstacle arises because teachers are still less skilled in developing teaching modules, and teachers lack understanding in implementing literacy and numeracy in learning. When planning learning, teachers should be able to choose teaching materials and encourage students to read quality books because this reading activity is in line with the critical thinking process, which has an impact on the formation of students' inventiveness and creativity (Kurniawan et al., 2019). Teaching modules must be designed using innovative learning models by combining teaching materials that contain literacy and numeracy. This requires teachers to have the ability to innovate according to their understanding and creativity. Developing teachers' abilities to innovate in the learning process is very important in order to improve the quality of learning (Cahaya Nurani et al., 2023).

Based on the results of a preliminary study by the Community Service team in Lahat Regency through initial interviews with the education office and several elementary school teachers, information was obtained that teachers were not yet skilled in developing teaching modules related to literacy and numeracy for elementary school students. In connection with this problem, it is necessary to provide an alternative solution, one of which is training related to literacy and numeracy-based module design. After attending the training, it is hoped that elementary school teachers in Lahat Regency can easily develop literacy and numeracy-based teaching modules so that the quality of learning in the classroom becomes higher, which will have an impact on student learning outcomes. This training is related to several courses in the PGSD FKIP study program at Sriwijaya University, namely Development of Elementary Science Learning, Development of Elementary Social Sciences Learning, Development of Elementary Civics Learning, Development of Elementary Mathematics Learning, and Development of Indonesian Language and Literature Learning in Elementary Schools, so that students can contribute to this training activity. Based on these conditions, lecturers at the FKIP Primary School Teacher Education Study Program at Sriwijaya University felt the need to provide training and mentoring on literacy and numeracy-based teaching modules. The scope of training and mentoring provided for elementary school teachers in Lahat Regency. The aim of the training and assistance activities for the development of numeracy literacy-based teaching modules for elementary school teachers in Lahat Regency is to provide an understanding of the

development of numeracy literacy-based teaching modules for elementary school teachers in Lahat Regency and to motivate elementary school teachers to be able to design teaching modules that suit their needs. so that they can improve learning in class.

## METHODS

This community service is carried out in the form of scientific training, which provides added value for elementary school teachers in Lahat Regency. The methods and forms of community service activities are training and mentoring, with techniques such as lectures, discussions, questions and answers, simulations, and assignments. The activity model for implementing community service activities is in the form of counseling and guidance, which will be carried out offline and online. This counseling is provided in order to increase or deepen the knowledge and understanding of teachers regarding literacy and numeracy-based teaching modules. The teachers who are the focus of this activity are 30 elementary school teachers in Lahat Regency. This training and mentoring activity continues, meaning that participants can consult with the PPM PGSD FKIP Sriwijaya University team until they are able to carry out their professional duties as teachers, in this case being able to develop literacy and numeracy-based teaching modules.

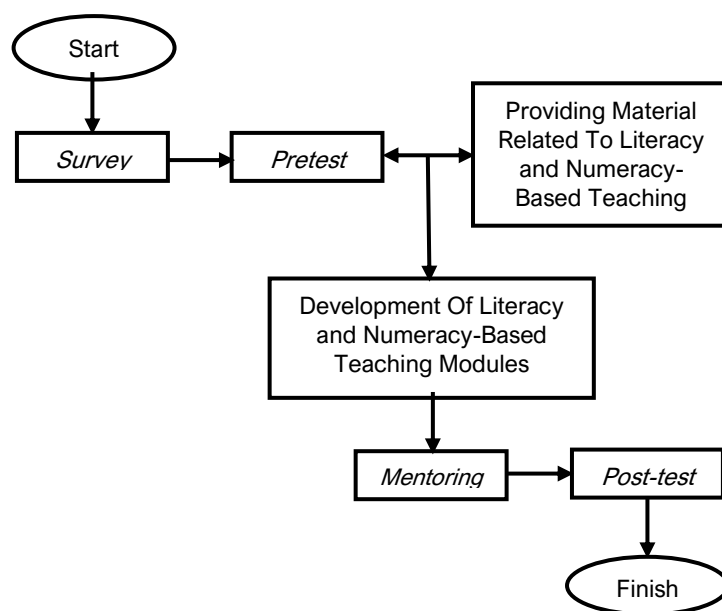


FIGURE 1. Flowchart Assistance in the Development of Literacy and Numeracy-Based Teaching Modules

## RESULT AND DISCUSSION

The implementation of this guidance and training takes six (six) months, starting from the preparation of the proposal for community service activities to the preparation of the report. In 2023, the focus of the study will be on the development of literacy and numeracy-based teaching modules, which will be implemented through coaching and training. This service activity was carried out in Lahat district, South Sumatra. This service activity was carried out from August 12 to September 26, 2023, offline at SDN 29 Lahat and online via Zoom meeting, which was attended by 30 elementary school teacher participants in Lahat.



**FIGURE 2.** Welcoming Remarks and Opening of the Event

The activity, which was carried out offline, began with a welcoming speech by the Head of the Elementary School Division in Lahat Regency, Mr. Jasjuli, S.Pd., M.M., and continued with remarks by the Dean of FKIP Unsri, represented by the PGSD Study Program Coordination by Mrs. Dr. Siti Dewi Maharani, M.Pd., as well as officially opening the activity in Figure 2. After the activity was opened, participants were given initial information related to the implementation of numeracy literacy in elementary schools, which was delivered by Dr. Suratmi, M.P.D. This material is introductory material as a basis for developing literacy and numeracy-based learning, as shown in Figure 3.



**FIGURE 3.** Delivery of Material for the Application of Numeracy Literacy in Elementary Schools

The next material was given by Dwi Cahaya Nurani, S.P.D., M.P.D., as a lecturer at PGSD FKIP Sriwijaya University related to the preparation of numeracy literacy-based teaching modules. Teachers are given insight into the minimum components of a teaching module, namely learning objectives, learning steps or activities, assessment plans for the beginning, assessment plans for the end, and learning media shown in Figure 4.



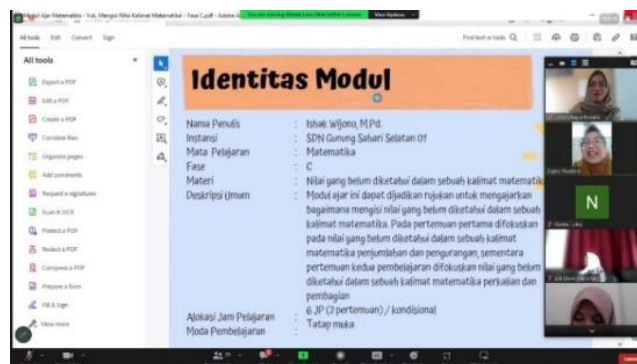
**FIGURE 4.** Delivery of Material for Preparing Teaching Modules Based on Numeracy Literacy

The mentoring continued with group discussions and the presentation of the results of the participants' discussions in the form of a design for a numeracy literacy-based learning framework for elementary school students. This activity is documented in Figure 5.



**FIGURE 5.** Group Discussion and Presentation of Participants' Discussion Results

This activity continues with online guidance so that participants can complete a product in the form of a literacy and numeracy-based teaching module, as shown in Figure 6.



**FIGURE 6.** Online Mentoring

To find out their understanding of literacy and numeracy-based teaching modules for elementary school teachers, participants were given initial questions, namely in the form of pretest questions, and after carrying out assistance, participants were given posttest questions again, which aimed to see participants' understanding after being given assistance in developing literacy and numeracy-based teaching modules for elementary school teachers. Lahat district elementary school teacher. The results of these two tests can be seen in Table 1.

**TABLE 1.** Pretest and Posttest Result

No	Name	Pretest	Posttest
1	NR	30	80
2	EA	20	70

No	Name	<i>Pretest</i>	<i>Posttest</i>
3	TE	30	50
4	DH	50	80
5	K	70	80
6	N	50	70
7	MD	60	80
8	P	70	90
9	YI	40	70
10	S	40	60
11	ES	30	70
12	H	30	90
13	D	20	60
14	SM	40	70
15	NDM	40	70
16	DS	30	60
17	LF	30	50
18	NA	30	60
19	AH	40	80
20	NH	50	60
21	M	40	70
22	D	30	60
23	BR	30	70
24	N	60	80
25	DMS	60	80
26	RO	30	70
27	NK	50	70
28	IS	70	90
29	M	20	60
30	CA	40	70
<b>Total</b>		1230	2120
<b>Average</b>		41	70,7

In the initial test or pretest before being given assistance, participants got an average score of 41. After being given assistance, participants were given questions again in the form of posttest questions, which aimed to see participants' understanding of literacy and numeracy-based teaching modules for elementary school teachers. participants got a score. The average is 70.7, so in assisting the development of literacy and numeracy-based teaching modules for elementary school teachers in Lahat district, teachers have provided an understanding of literacy and numeracy-based teaching modules. This is shown by an increase marked by the results of the pretest. and the post-test that have been given.

Based on the research results of Azzizah et al. (2023), literacy and numeracy learning modules in thematic learning can be implemented as learning activities that involve literacy and numeracy-based learning activities and have an important role as teaching materials that can improve students' literacy and numeracy skills significantly. flexible, which can be adjusted to suit class needs. and conditions. In line with this, Agusta (2022) also stated that the use of numeracy literacy-based modules is recommended as one of the learning media for improving students' ability to understand concepts. So that the literacy and numeracy-based teaching modules that have been created by teachers can be implemented in schools and in their respective classes. Other research from Alfarisi et al. (2024) revealed that student literacy is low due to a lack of development of literacy and numeracy teaching materials, so teachers are expected

to be able to develop literacy and numeracy teaching materials, namely ethnomathematics. This is also reinforced by research by Sesanti and Wahyuningtyas (2022), which states that the application and development of teaching materials need to be carried out in today's learning innovations so that teachers can create e-modules based on scientific literacy and numeracy. Research conducted by Rahmawati et al. (2023) stated that numeracy literacy is a basic ability that students must have as a skill in the RI 4.0 era, so it is necessary to carry out service activities in the form of numeracy literacy cultivation workshops. The aim of this activity is to increasing knowledge of numeracy literacy and teacher skills in compiling useful project-based learning modules optimizing numeracy literacy culture. Research by Hartinawanti and Nurddin (2023) states that one of the teachers' efforts to improve students' mathematical literacy skills is to innovate learning, namely by implementing mathematics teaching modules based on snakes and ladders media. The success of the snakes and ladders media-based mathematics teaching module in increasing the numeracy literacy of class V students at SD Negeri 2 Bone-Bone is demonstrated by the students' enthusiastic attitude in participating in the lesson. Students easily understand the meaning of the learning content and actively work on the questions instructed. Kurniasih et al. (2024) stated that the Literacy and Numeracy Guidance Activities in Biology Learning aim to improve the skills and competencies of biology teachers in senior high schools in Bogor Regency, especially in developing learning that is oriented towards increasing student literacy and numeracy. Other research from Aprilia and Wardana (2024) states that numeracy literacy-based learning modules are really needed in the Independent Curriculum because the teaching materials provided by schools cannot meet the learning needs of students in class.

## CONCLUSION

Assistance in the development of literacy and numeracy-based teaching modules for elementary school teachers in Lahat district has run smoothly; all teachers have also succeeded in designing appropriate teaching modules, and this assistance has also provided teachers with an understanding of literacy and numeracy-based teaching modules. This is demonstrated by the results of the pretest and post-test that have been given.

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