Assistance in the process of grouping students based on basic literacy and numeracy skills in Karang Sidemen Village

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ABSTRACT

This community service aims to provide assistance to the process of grouping students based on basic literacy and numeracy skills for teachers in accordance with "Semua Anak Cerdas" approach in Karang Sidemen Village, North Batukliang District, Central Lombok Regency. Mentoring activities were carried out 1 to 2 times with the target schools for mentoring, among others, SDN Karang Sidemen, SDN Persil, SDN Rangkep, SDN Repuk Sintung Barat, SDN Senurus, and MI NW Nurul Hidayah. Mentoring activities are centered on two focus activities, namely: (1) Grouping students based on basic literacy and numeracy skills; (2) Identify the number of students who have learning difficulties. Each school is assisted by their respective regional facilitators (FASDA). From this community service, we obtained that students who have good literacy skills are more than those who have numeracy skills, the number of students who experience functional learning difficulties is relatively not different, mentoring activities are running well and in accordance with the expectations of the implementing team, the obstacles encountered are related to mastery of literacy and numeracy concepts, facilities and infrastructure and conditions of students at the time of grouping. After the results of the mentoring activity showed that the students' ability in literacy and numeracy was increasing. In addition, because they are in groups with students who have the same ability, students become more confident in class.
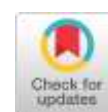
KEYWORDS
Literacy
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Elementary School

1. Introduction

Karang Sidemen Village is one of the pilot areas of the "All Children SMART (SAC)" Program. This program is the result of a collaboration between FKIP Mataram University and INOVASI NTB. The focus of this program is on inclusive basic literacy and numeracy skills for children at the elementary school level, especially in the Central Lombok region of NTB. Previously, elementary school teachers in 6 pilot schools namely SDN Karang Sidemen, SDN Persil, SDN Rangkep, SDN Repuk Sintung, SDN Senurus and MI Nurul Hidayah had been given training by the SAC Program implementation team. This training is related to literacy and numeracy materials, including grouping students based on literacy and numeracy abilities, which is one of the unique features of the SAC approach. The SAC approach is adapted from the Teaching at the Right Level (TaRL) learning model originating from India. As the name implies, this TaRL learning model is a learning system whose process is carried out based on students' abilities (Chakrabarti et al., 2018). This is different from the usual learning system where the learning process is usually carried out based on the age of the students [1], [2]. According to Sumardi the division of students based on the level of this ability can help teachers in the process of transferring knowledge to students [3].

Furthermore, according to Tariq students who study according to their abilities can receive information more easily [4]. In this regard, according to Banerji & Chavan (2016) one of the difficulties of teachers in the learning process is the diversity of students' abilities in the classroom [5]. This diversity of students will make it difficult for teachers to choose the materials to be given in class. Because the ability of students to one another is not balanced, the teacher must make adjustments that will ultimately disrupt the learning process in the classroom [6]. In this mentoring activity, the grouping process is carried out based on the basic literacy and numeracy abilities of students. Literacy and numeracy skills are very important for one's life [7], [8]. Literacy and numeracy skills can be interpreted as literacy and numeracy skills [9]. In addition, this basic ability is also a door for other sciences and knowledge in the future. Thus literacy and numeracy skills are very important for someone.

2. Method

Mentoring activities were carried out 1 to 2 times for each pilot school. The pilot schools targeted for assistance included SDN Karang Sidemen, SDN Persil, SDN Rangkep, SDN Repuk Sintung Barat, SDN Senurus, and MI Nurul Hidayah. Mentoring activities will be centered on two focus activities, including: (1) Grouping students based on basic literacy and numeracy abilities; (2) Identify the number of students who have learning difficulties. The activity of grouping students according to their abilities and identification of student learning difficulties will be carried out in grades I-V. Each school will be accompanied by 1 Regional Facilitator (Fasda) and 2 Field Assistants (FA). The activity flow will depict in Figure 1.
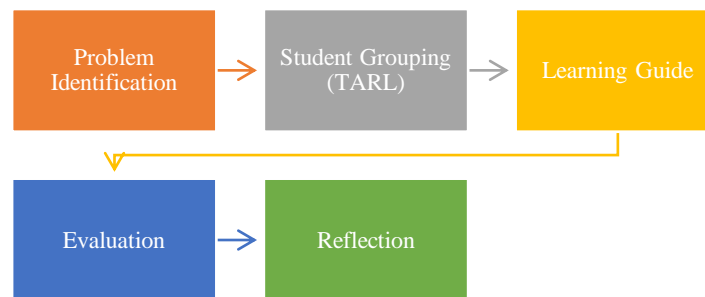

Fig. 1. Activity Flow

Each Fasda will be equipped with Basic Literacy and Numeracy Instruments that have been prepared by the INOVASI team. In addition, Fasda will also be given a Student Learning Profile (PBS) instrument to identify the number of students who have functional learning difficulties. This instrument was also compiled and developed by the INOVASI team in collaboration with FKIP Unram. The results of the use of this instrument will then be presented by the Fasda in the form of a report on the results of the mentoring activities. To ensure that this Fasda report is valid, the implementing team also provides monitoring assistance instruments collected by the FA. The results of collecting basic literacy and numeracy grouping data at each level as well as the results of identifying the number of students who have functional learning difficulties will be collected to the implementing team to be mixed into a pilot school database.

3. Results and Discussion

Mentoring activities are carried out based on an agreement between Fasda and the target school. Based on the Fasda report and FA monitoring, all teachers in grades I to V in the target schools participated in mentoring activities. The first mentoring activity was carried out at SDN Rangkep on April 6, 2021. While the last mentoring activity was carried out at SDN Senurus on April 18, 2021. Thus the percentage of teacher attendance at the target school during mentoring activities was 100%. Even in some schools, such as SDN Karang Sidemen and SDN Persil, not only grades I to V teachers participated in mentoring activities. So that the participants of mentoring activities exceed the targets planned by the implementing team.

In practice, there are several schools that require assistance more than once. Such as SDN Rangkep, SDN Persil, and SDN Senurus where the mentoring process was carried out 2 times. This is done because of the large number of students or other constraints such as many students in certain classes who do not come on the appointed day. Figure 2 shows the mentoring process carried out by the community service team. The process of mentoring activities is not only carried out during learning, but after the learning process the team also serves learning reflection.

Fig. 2. Guidance during the mentoring process

3.1. Grouping Students Based on Literacy and Numeracy Ability Levels

In general, the grouping activities have been carried out well. The high enthusiasm of teachers and students during the literacy and numeracy tests made the mentoring activities run actively and smoothly. This was found at SDN Rangkep, where the acceptance of Fasda by teachers at this school was very good. The same thing was also found at SDN Karang Sidemen and SDN Persil, where the teachers were very enthusiastic in implementing the results of the previous training. For SDN Repuk Sintung, the students themselves are very active and enthusiastic in undergoing basic literacy and numeracy tests, Figure 3. Constraints related to teacher motivation in this mentoring activity were found at SDN Senurus and MI Nurul Hidayah. For these two schools, Fasda and FA found difficulties in assisting teachers in classifying students by level. This is allegedly due to the lack of enthusiasm of the teacher in this grouping activity.

Fig. 3. Assistance in grouping students based on basic literacy and numeracy skills

The grouping process is carried out by the interview method (one by one) between teachers and students. In general, Fasda will go around from class I to class V because grouping activities are carried

out simultaneously. As for SDN Rangkep, SDN Persil and SDN Senurus, the grouping activities were divided into 2 sessions, namely Low-class sessions (Class I, II, and III) and High-class sessions (Class IV and V). In the process of grouping teachers are also supervised by FA to ensure the results of grouping can be maximized. At the end of each grouping activity, Fasda will invite teachers to reflect on the activities. In this session, it was seen that the communication pattern between Fasda and teachers was quite good and interactive. The teacher actively conveys the obstacles faced when giving basic literacy and numeracy test questions. During this reflection activity, Fasda also provided the Student Learning Profile (PBS) instrument. This instrument is given to the teacher to identify how many children have functional difficulties experienced by students. In addition to information from teachers in each class, Fasda also provides school operators with instruments to fill in information related to the profiles of parents of students who have learning difficulties.

3.2. Results of Grouping Students and Identifying the Number of Students with Functional Learning Difficulties

The results of grouping activities based on the level of basic literacy skills can be seen in Table 1. Based on Table 1, it can be seen that the data on the number of students who are at the story level in each school is quite a lot. The percentage of students who enter the story level is mostly more than 50% except for MI Nurul Hidayah and SDN Rangkep. The data at SDN Rangkep shows that the number of students who are at the story level is 47.8% and the paragraph level is 32.6%. This data shows that there are still quite a number of students at SDN Rangkep who have not yet entered the story level. Apart from this fact, several other facts were also found, such as the finding of 7 3rd grade students who were still at the beginner level at SDN Karang Sidemen.

Table 1. The results of grouping students based on the level of basic literacy skills in the target school

School	Literacy					Total
	Beginner Level	Letter Level	Word Level	Paragraph Level	Story Level	
SDN Karang Sidemen	20	13	22	28	113	196
SDN Persil	6	8	20	22	83	139
MI Nurul Hidayah NW Tanak Beak	7	5	15	45	66	138
SDN Rangkep	14	8	11	12	38	83
SDN Repuk Sintung Barat	5	6	4	15	48	78
SDN Senurus	6	6	17	14	70	113

In detail the percentage of number of students at each literacy level can be see in Figure 4.
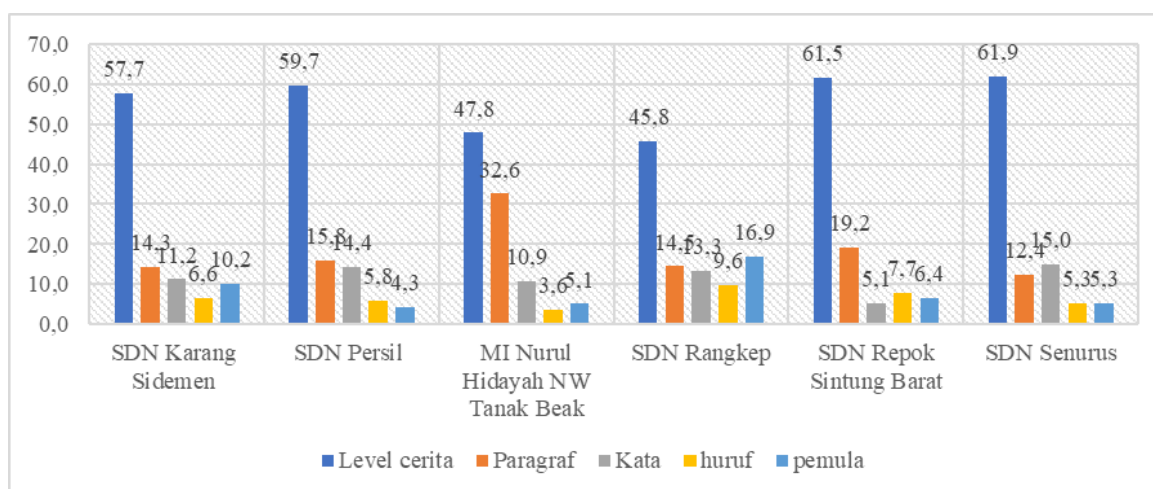

Fig. 4. Percentage of Number of Students at Each Literacy Level

Contrary to this fact, at SDN Persil found 7 grade 1 students who have entered the story-level. Based on Fasda's notes, it was also found that some students who were at the story level did not understand the contents of the reading given. This is evident from students who cannot answer the questions given by the teacher after the grouping process. While the data for grouping students based on the numeracy level can be seen in Table 2.

Table 2. The results of grouping students based on the level of basic numeracy skills in the target school

School	Numeracy					
	Beginner Level	Level 1	Level 2	Level 3	Level 4	Total
SDN Karang Sidemen	4	22	50	42	79	197
SDN Persil	1	13	15	30	80	139
MI Nurul Hidayah NW Tanak Beak	2	17	28	29	62	138
SDN Rangkep	1	13	31	22	16	83
SDN Repuk Sintung Barat	4	1	12	26	35	78
SDN Senurus	3	4	27	19	60	113

In detail the percentage of number of students at each numeration level can be see in Figure 5.
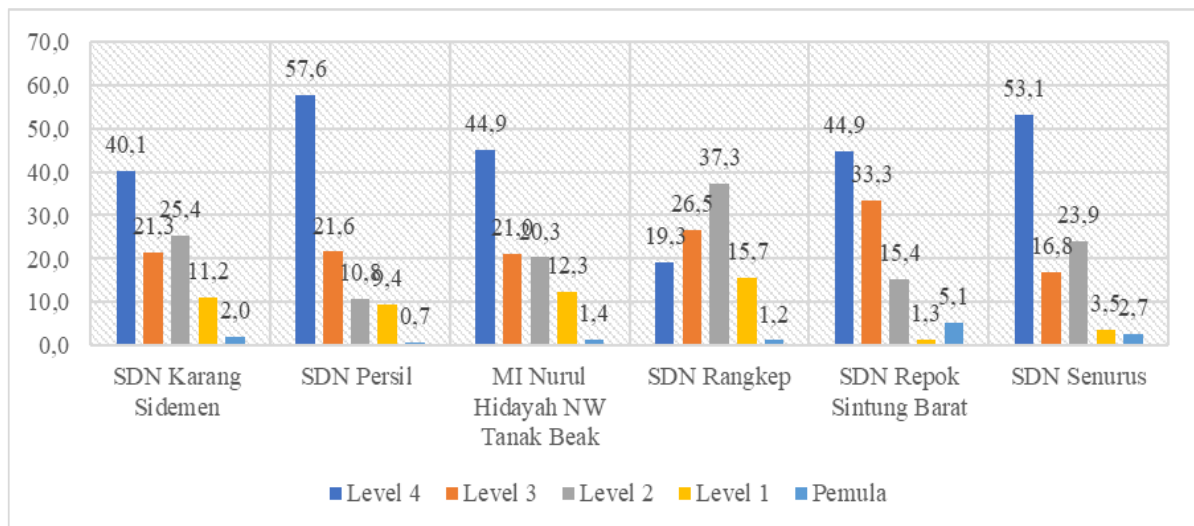

Fig. 5. Percentage of Number of Students at Each Numeration Level

Based on Table 2, the data shows that the distribution of the number of students at each level is more even. The percentage of students who are at each level is not significantly different. Even at SDN Rangkep, it can be seen that the number of students who are at level 2 has the highest percentage of 37.3%. Another interesting fact found is at SDN Persil where there are 7 grade 1 students who are at level 4. This shows that these students already know 4-digit numbers. However, when entering the arithmetic operation stage, the student had difficulty in solving the problems given. Another fact that was found was that quite a lot of students were at level 2 and level 3 in each of the target schools. This shows that the basic numeracy skills at each grade level are not significantly different. The data on the identification of the number of students who have functional learning difficulties can be seen from Table 3. Table 3 shows that each target school has students with functional learning difficulties. Even the data shows that not a few students have multiple functional learning difficulties. An interesting fact found is that so far there has been no communication between teachers and parents to deal with children who have learning difficulties.

Table 3. Results of Identification of Students' Learning Difficulties

Sekolah	Kesulitan Fungsional	Jenis Kesulitan	Keterangan
SDN Karang Sidemen	2 Student	Speech Difficulty (First student) Speech Difficulty (Second Student)	there are no students with multiple difficulties
SDN Persil	2 Student	1. Cognitive Difficulty;	one student double difficulty
		2. Specific Learning Difficulties; a) Dyslexia, b) Dysgraphia, c) Dyscalculia (First student)	Students do not have multiple difficulties
MI Nurul Hidayah NW Tanak Beak	2 Student	Controlling Emotions (First student) Difficulty Speaking (Second Student)	there are no students with multiple difficulties
SDN Rangkep	5 Student	1. Vision Difficulties; 2. Fine motor hearing 3. Cognitive, 4. Emotions 5. Concentration; (first student) Cognitive Specific, emotional (Second Student) Vision Difficulty, Hearing, fine motor, Talking, Emotions (Third Student) Cognitive Difficulties; Hearing Difficulty, cognitive, Special Learning Emotions (Fourth Student) Fine Motor Specific Cognitive (Fifth student)	Five double difficulty students
SDN Repuk Sintung Barat	4 Student	Cognitive Difficulty (First student)	No double trouble
		Specific Learning Difficulties (Second Student)	No double trouble
		Cognitive Difficulties, Specific Learning Difficulties; a) Dyslexia, b) Dysgraphia, c) Dyscalculia, Behavioral Difficulties, Difficulty Keeping Emotions (Third Student) Cognitive Difficulties, Specific Learning Difficulties; a) Dyslexia, b) Dysgraphia, c) Dyscalculia, Behavioral Difficulties, Difficulty Keeping Emotions (Fourth Student)	Two students with multiple difficulties
SDN Senurus	4 Student	Cognitive Difficulty (First student)	No double trouble
		Specific Learning Difficulties (Second Student)	No double trouble
		Cognitive Difficulty; Specific Learning Difficulties; a) Dyslexia, b) Dysgraphia, c) Dyscalculia; Behavioral Difficulties; Difficulty Keeping Emotions (Third Student) Cognitive Difficulty; Specific Learning Difficulties; a) Dyslexia, b) Dysgraphia, c) Dyscalculia; Behavioral Difficulties; Difficulty Keeping Emotions (Fourth Student)	Two students with multiple difficulties

3.3. Obstacles encountered

The description of the obstacles faced during the mentoring process in each school was different. This is because the characteristics of students, facilities, infrastructure, human resources and other factors are

different. The following are the obstacles faced by Fasda and teachers during the process of grouping students as follows:

- Rangkep Elementary School (6 April 2021); Mastery of the material is still lacking due to having to re-read the material criteria of students' ability level; infrastructure is still lacking; Grade 1 students who go a lot because they think the grouping activity is a vaccination activity (afraid of being injected)

- SDN Persil (8 April 2021); There are no significant obstacles in conducting assessments for the grouping of students in the assisted schools. Assistance can be carried out smoothly

- SDN Karang Sidemen (9 April 2021); Teachers have not been able to determine functional difficulties in learning shortage of classroom teachers so that 1 group in the assessment and grouping uses PAI teachers who have never been given training in the smart teacher program and one group. The condition of students who are still BDR, school entry information for the application of the smart child program is still lacking so that around 40 students are not included at the time of the assessment because students do not know the information so the solution is for teachers to conduct assessments and students by visiting students' homes directly

- SDN Repuk Sintung (9 April 2021); Still forget related to the form of error and ability if you have to place it at what level; Infrastructure facilities are still very lacking, there are classes that have not been drawn up; The condition of students at the time of the assessment still likes to fight.

- MI Nurul Hidayah (10 April 2021); Students who are still hard to find even though they have come to school; adequate facilities even though there are still some that are lacking; the material must be studied again

- SDN Senurus (18 April 2021); Student's condition. The condition of students is very diverse actually. The mentoring process on the first day experienced problems in several classes because half of the grade 3 and grade 1 students were not present at school; Mastery of the teacher's material is quite good but still needs a little improvement; Time. School schedules, which are still adjusting to the pandemic, make students' time at school smaller. This inevitably hampers the learning process and ultimately also has an impact on the process of assessing the students' initial literacy and numeracy abilities; There are only 5 school classrooms, while there are 6 study groups. This results in 1 class having to study outside the classroom.

4. Conclusion

Based on the data above, it can be concluded that: (a) The number of students who have good literacy skills is more than the number of students who have good numeracy skills. This can be seen from the percentage of students who are at the story level (literacy) more than the number of students who are at level 4 (Numeration); (b) The number of students who have functional learning difficulties is relatively no different. Students with functional disabilities are at most 5 students in 1 school, and at least 1 student in 1 school. Students who experience this functional difficulty mostly have multiple difficulties. This indicates 2 things, including: (1) Students who experience multiple difficulties require serious action from experts in the field of children with special needs (ABK); (2) There is a misconception in the use of the PBS instrument, both from the teacher and from the PBS instrument itself. There needs to be a more in-depth study in this regard; (c) The mentoring activity went well and was in line with the expectations of the implementing team. Fasda acceptance by the school was also good, this was shown by the high enthusiasm of teachers and students during the activity. Related to this, the communication pattern that exists between Fasda and teachers is good and interactive. The teacher does not hesitate to tell the obstacles experienced and the Fasda can accommodate and provide good feedback to the teacher; (d) The obstacles that are often encountered by teachers in mentoring are; (1) Mastery of literacy, numeracy, and inclusive education concepts owned by teachers is still low; (2) The facilities and infrastructure needed in grouping

activities are not yet complete; (3) The condition of students is not conducive and calm, many students run around and it is difficult to control during the grouping process.

Acknowledgment

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