

Community Learning Assistance Strategy to Improve Teacher Capacity in Implementing Learning in Banjarmasin City

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Abstract. Government policy promotes learning communities as a core strategy for continuous professional development, transforming isolated work cultures into collaborative ones while enabling educators to share ideas, information, and resources. This study evaluates the effectiveness of a learning community mentoring strategy in 25 elementary schools in Banjarmasin, involving 50 respondents (principals and teachers). The mentoring applied an inquiry cycle focused on strengthening learning communities and enhancing literacy and numeracy practices. A quantitative descriptive approach was used, employing the N-Gain test to measure effectiveness. Results show a significant improvement in teacher capacity, increasing from 28% to 80% (a 52% gain), with an N-Gain score of 0.72, categorized as high effectiveness. The findings indicate that the inquiry cycle is a suitable mentoring model, as it supports data-driven needs analysis and priority setting, enabling efficient use of time and resources. In addition to teacher capacity, the availability and effective use of literacy- and numeracy-rich environments play a crucial role in improving learning quality.

Keywords: Effectiveness of Activities; Learning Community; Teacher Capacity; Learning Quality; Literacy Competence; Numeracy Competence

1 Introduction

There are 3 (three) principles in the Implementation of the Independent Curriculum, namely: focusing on essential content, character development and flexible. Referring to these principles, we can understand that the purpose of implementing the Independent Curriculum is to provide more space for teachers and students to manage a flexible learning process according to their respective characteristics and needs, so that learning can be carried out effectively to support the achievement of student competencies. The implementation of flexible learning is also designed to accommodate the implementation of learning that focuses on essential content and character development with the main focus on strengthening literacy and numeracy competencies and achieving the Pancasila student profile.

Due to the dynamic and student-centered nature of learning, in the implementation of the Independent Curriculum Educational units implement inclusivity, therefore educational units should strive to provide learning facilities in the form of adaptive learning media, teaching aids, or other infrastructure and ensure that these facilities are used according to their function to facilitate the different needs of students [1]. In addition, teachers and education personnel also need to carry out collaboration and efforts to improve competence in a sustainable manner. Supporting this need, government policies as stated in the Regulation of the Director General of Teachers and Education Personnel of the Ministry of Education, Culture, Research, and Technology Number 4141/B/HK.06/2023 concerning Guidelines for Continuous Competence Development for Teachers, establish learning communities as a forum for building collaboration and improving teacher competence in a sustainable manner. Learning communities are groups of Teachers and Education Personnel (GTK) who learn together, collaborate on a scheduled and sustainable basis with clear and measurable goals to improve the quality of learning so that it has an impact on student learning outcomes [2].

One of the learning needs of students captured through national-level assessments is the need to strengthen literacy and numeracy competencies. The results of the 2022 national assessment, on the literacy and numeracy competency indicators, show that in general the literacy and numeracy competencies of students in Indonesia are in the moderate category, meaning that only 40-70% of students in Indonesia achieve the minimum literacy and numeracy competencies [3].

The low literacy and numeracy competencies of students will affect their learning abilities, critical and analytical thinking, collaboration skills and competitiveness in the era of globalization and technology, considering the importance of mastering literacy and numeracy competencies, from the national assessment data it shows that strategies to improve the quality of learning that encourages strengthening student competencies need to be carried out, one of which is by strengthening teacher capacity through learning communities [4].

In Banjarmasin City, there are 259 elementary schools and 63 junior high schools. To improve teacher capacity, the Education Office implements cluster-based programs through Teacher Working Groups (KKG) at the elementary level and Subject Teacher Deliberations (MGMP) at the junior high level. Additional support is provided by institutions such as the South Kalimantan Education Quality Assurance Center (BPMP) and the Teacher Leader Center (BGP).

However, the 2023 education report card shows that 76 schools (24%) still fall below minimum literacy and numeracy competency standards. This indicates that existing initiatives have not significantly improved overall learning quality and outcomes. Therefore, schools below the minimum standard require more targeted and effective teacher capacity development strategies [2].

So far, the cause of low literacy and numeracy competencies of students is often understood to be caused by low interest in reading among students and excessive use of gadgets. The results of the study did show that low interest in reading caused a decrease in activity and learning outcomes, but the low interest in reading of students was apparently triggered by the complexity of the text in the teaching materials presented, this complexity made them less interested in reading textbooks [5].

Meanwhile, regarding the use of gadgets, because currently it is almost impossible to prevent students from using gadgets, what can be done is to increase parental supervision and involvement to make children wise in using gadgets, research results show that the direction of the relationship between gadget use and maternal involvement is positive. Some maternal involvement includes explaining websites that children can access to communicate politely on social media,

accompanying and guiding children to use gadgets to carry out various learning activities such as recognizing letters and numbers, reading, learning to count, coloring, drawing, and playing educational games. To be able to do this, it is important for parents to have a good level of understanding of the applications or technologies that students use [4].

In implementing learning to encourage strengthening the achievement of literacy and numeracy competencies of students. Based on the explanation above, this study was conducted to identify the effectiveness of the learning community assistance strategy through a teacher literacy and numeracy strengthening program in learning at the elementary school level in Banjarmasin City [6].

2 Methodology

Quantitative-descriptive research methods and approaches are used in this study to see the effectiveness test of literacy and numeracy reinforcement which will later produce a description of the actual data on the effectiveness of the elementary school learning community assistance strategy in the Banjarmasin City area. The research data collection technique and instrument used a questionnaire distributed to the parameters of the elementary school population subjects in the city of Banjarmasin as many as 25 schools and the research sample that became the object of discussion of statistical descriptions was the effectiveness between literacy and numeracy practices in learning [7]. The data analysis technique used a statistical data processing program to find the N-Gain effectiveness test between activities in the learning community on strengthening literacy and numeracy which would ultimately have an impact on improving the quality of learning. The focus of strengthening literacy and numeracy on mentoring learning communities, and a portrait of good literacy and numeracy practices in learning [8].

Data analysis techniques to test effectiveness using the N-Gain score test obtained from the average value before (pretest) and after (posttest) given literacy and numeracy reinforcement. The N-Gain Score formula is as follows:

$$N\ Gain = \frac{Score\ Posttest - Score\ Pretest}{Score\ Ideal - Score\ Pretest}$$

The effectiveness test can be seen in the following table:

Table 1. Interpretation Categories of N-Gain Effectiveness

n-Gain	Interpretation
$0.70 \leq g \leq 1.00$	Tall
$0.30 \leq g < 0.70$	Currently
$g < 0.30$	Low

3 Results and Discussion

3.1 Mentoring Strategy

Community Learning Mentoring is carried out using an inquiry cycle, which consists of 4 stages, namely: reflection, planning, implementation and evaluation. The topic of reinforcement refers to 3 main variables, namely: Understanding and practice of learning communities, understanding and practice of literacy reinforcement and understanding and practice of numeracy reinforcement [9].

The mentoring strategy is designed referring to the results of data analysis at the reflection stage which shows the competency needs of principals and teachers in the target educational units, but the strategy will be continuously evaluated at each stage to ensure the achievement of the mentoring objectives, namely increasing the effectiveness of the implementation of strengthening literacy and numeracy competencies. The results of the analysis at the reflection stage are generally described as follows:

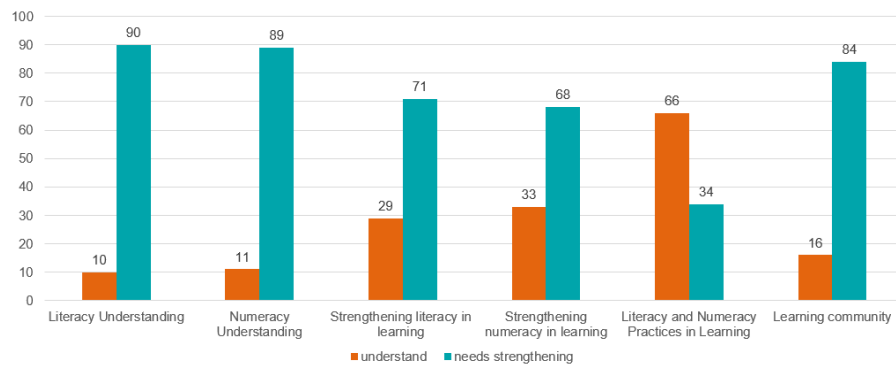


Fig. 2. Results of Data Analysis Reflection Stage

The results of data analysis at the reflection stage identified the need to strengthen the understanding of the principals and teachers of the target educational units related to the concepts of literacy, numeracy and learning communities, the percentage of understanding before participating in mentoring on these 3 variables was below 20%, while for the variables of strengthening and learning practices that strengthen literacy and numeracy were identified as higher above 20% but still did not exceed 50%. From these data, several conclusions can be drawn, including:

- Educational units can still implement government policies and/or programs even without adequate understanding.
- Insufficient understanding is one of the causal factors misconception in implementing government policies and programs.
- Considering the fact that the target educational units are educational units with literacy and numeracy competency achievements below average or experiencing a decline from the previous year, it can be estimated that the needs of educational units include strengthening

understanding of the 3 variables in this study to straighten out literacy and numeracy strengthening and learning practices [10].

This initial conclusion serves as a reference for designing the following mentoring topic structure:

Table 2. Topic Structure of Community Learning Assistance Strategy for Elementary School Level to Strengthen Literacy and Numeracy Competencies

Stages	Topics	Objective	Indicator	Information
Reflection	Socialization and reflection	Disseminating information about the learning community mentoring program Identifying the conditions of educational units and the competency needs of target participants for mentoring	commitment to participation Participants complete the reflection instrument with real information.	Reflection instrument in G form
Planning 1	Learning Community	Improving the effectiveness of learning communities within and between educational units	understand the concept of learning communities within and between educational units designing a learning community implementation plan carry out learning community activities according to plan Impactful learning communities to support strengthening literacy and numeracy	RTLstudy groups in G Form Field observations and implementation reports
Implementation 1	Community Learning Assistance in educational units	Educational units implement Learning Communities	Implementing learning communities according to the design at the planning stage Conduct reflection and determine follow-up actions based on reflection results	
Planning 2	Strengthening literacy	Increasing the understanding and abilities of mentoring participants regarding	Understanding the concept of literacy Doing book grading	RTL in g form Simulation and live exposure

		literacy strengthening strategies in educational units.	Creating a literacy-rich environment Designing learning that strengthens literacy	Observation and simulation Practice and simulation
Implementation 2	Literacy strengthening practices in educational units	Educational units implement effective literacy strengthening	Adapting good practices resulting from the planning stage Conduct reflection and determine follow-up actions based on reflection results	School and class observations
Planning 3	Numeracy Reinforcement	Increasing the understanding and abilities of mentoring participants regarding numeracy strengthening strategies in educational units.	Understanding the concept of numeracy Practice numeracy growth mindset ability stimulation strategy Practice Numeracy talk strategy Designing learning that strengthens numeracy	RTL in g form Simulation and live exposure Practice and simulation
Implementation 3	Numeracy strengthening practices in educational units	Educational units implement effective numeracy reinforcement strategies	Adapting good practices resulting from the planning stage Conduct reflection and determine follow-up actions based on reflection results	School and class observations
Evaluation	Evaluation and follow-up	Conduct evaluation and planning follow-up	Identifying challenges and designing strategies for the next learning community cycle	Educational unit reports in various formats and reflection instruments in G form

3.2 Statistical Data Processing Indicators

Statistical data were collected through questionnaires distributed to 25 elementary schools in Banjarmasin, involving 50 respondents (25 principals and 25 teachers). Additional data were obtained from interviews and classroom and environmental observations to strengthen the analysis.

The study focuses on the effectiveness of learning community activities in improving literacy and numeracy practices. Literacy is defined as the ability to understand, use, evaluate, and reflect

on various texts to solve problems and develop individual capacity as productive citizens. Numeracy refers to the ability to apply mathematical knowledge to explain events, solve problems, and make decisions in daily life. These findings are based on the research summary of Fitriana, E., & Ridlwan, M. K[11].

literacy and numeracy skills are a strong foundation and are very important for every student at school basic to support their ability to engage in education, achieve their potential, and participate fully in society [12]. Numeracy skills are needed in all aspects of life. While literacy is a primary need for every human being to be able to fulfill their life needs (9). Numeracy literacy is the knowledge and skills to use various numbers and symbols related to basic mathematics to solve practical problems in various contexts of everyday life and analyze information displayed in various forms (graphs, tables, charts, and so on) then use the interpretation of the results of the analysis to predict and make decisions [13].

The results of statistical data processing in this study can be described as follows: in table 3 as follows:

Table 3. Statistical Data Processing Research Results

No	Variables	Indicator	Percentage of Understanding		
			Before	After	Progress
1	Understanding and practice of strengthening literacy in learning	Understanding the concept of Literacy	10%	57%	47%
		Strengthening Literacy in Learning	29%	92%	63%
2	Understanding and practice of strengthening numeracy in learning	Understanding Numeracy	11%	77%	66%
		Strengthening Numeracy in Learning	33%	79%	46%
		Literacy and Numeracy Practices in Learning	66%	84%	18%
3	Learning Community	Learning Community	16%	89%	73%
Total Average			28%	80%	52%

$$Test\ N\ Gain = \frac{Score\ Posttest - Score\ Pretest}{Score\ Ideal - Score\ Pretest}$$

$$Test\ N\ Gain = \frac{80 - 28}{100 - 28}$$

$$Test\ N\ Gain = \frac{42}{72}$$

$$Test\ N\ Gain = 0,72$$

3.3 Data Description

The mentoring strategy involved three variables: learning community, literacy strengthening, and numeracy strengthening. The learning community variable covered respondents' understanding, as well as its use to improve teaching quality and teacher competence. Literacy and numeracy variables each included three aspects: conceptual understanding, application, and classroom practice.

Data analysis shows a significant increase in respondents' understanding, rising by 52% from 28% before mentoring to 80% after mentoring. The lowest initial understanding was found in literacy (10%) and numeracy (11%) concepts, making them priority areas. Additional aspects with low achievement—literacy strengthening (29%) and numeracy strengthening (33%)—were also prioritized. Although literacy and numeracy practices reached 66%, they were still included due to inconsistencies identified through triangulation and classroom observations. The N-Gain effectiveness score of 0.72 indicates a high level of effectiveness for the mentoring strategy.

Increasing teacher capacity in efforts to improve students' literacy and numeracy competencies, including the ability to utilize technology that presents multimodal texts and digital spaces in learning. The ability of students to utilize technology is influenced by hedonic motivation, performance expectations, habits, and parental assistance or support. These factors influence strong intentions to behave, but among the 4 factors, the habit factor is the most significant factor in increasing usage behavior [14]. It can be concluded from this explanation that to improve literacy and numeracy competencies, pushed by utilizing multimodal texts and digital space, one of the efforts that needs to be made is to build behavioral habits that strengthen literacy and numeracy competencies.

Some strategies that can be done to build good habits strengthen literacy and numeracy, including: utilization of multimodal texts, implementation of contextual learning and application of various learning approaches. Multimodal texts can be presented in various forms, one of which is comics. In addition to supporting learning, the use of comics is considered very appropriate for instilling exemplary character, positive values, and superior character traits in students. The selection of appropriate content, presentation in an easy-to-understand manner, user-friendly design and layout allow students to easily access and engage with the content [15].

Meanwhile, contextual learning, for example in learning Natural Sciences, the use of everyday life contexts makes it easy for students to follow the storyline. Science material is presented as an explanation of the context presented, so that competence or thinking skills are trained through questions in the narrative [5]. Implementation of various learning approaches, one of which is scientific approach in learning can also build curiosity and responsibility [13], where these abilities can support the strengthening of students' literacy competencies. From this explanation, other findings in the identified research include improved educational unit environment which includes physical, non-physical, social affective, academic, social, emotional and intellectual environments to support strengthening literacy and numeracy, these improvements include:

Table 4. Improvement of Educational Unit Environment to Strengthen Literacy and Numeracy

Variables	Environment	Information
Learning Community	Physique Non-Physical	A conducive room Schedule, Activity plan, Agreement
Literacy Strengthening	Physique	1. Even though they do not yet have quality, graded reading books, schools have begun to curate and grade the books they currently have. 2. Arrangement of Reading Corners in the Classroom 3. Library space arrangement (for schools that have a library room) 4. Some schools organize corners of the school environment
	Social Affective	The school plans and implements activities to foster interest in reading.
	Academic	Teachers plan and implement learning by utilizing quality reading books and multimodal texts.
Numeracy Reinforcement	Physique	1. Schools provide various tools to support numeracy thinking patterns. 2. Educators attach positive messages to motivate students
	Social	1. Educators implement strategies to stimulate students' numeracy development mindset
	Emotional	2. Education implements numeracy talk strategies.
	Intellectual	Carrying out lessons to strengthen numeracy in several subjects

4 Conclusion

This study aims to identify the effectiveness of the learning community mentoring strategy at the Elementary School level in the Banjarmasin City area which is implemented using an inquiry cycle. From the data collected, a significant increase of 52% was identified in teacher capacity in utilizing learning communities and implementing learning that strengthens literacy and numeracy. This capacity increase can be achieved because the learning community mentoring strategy and content are designed and implemented based on the results of the needs analysis, by identifying the percentage of understanding in 3 variables in this study, namely: learning communities, understanding and learning practices that strengthen literacy and understanding and learning practices that strengthen numeracy. In general, research respondents need reinforcement in these 3 variables, but by utilizing data, researchers can determine the priority scale of the content given so that the arrangement of mentoring strategies and times can be implemented effectively and efficiently.

Another result of this study is the identification of factors that influence teacher capacity in implementing literacy and numeracy-enhancing learning, namely the existence and utilization of

literacy and numeracy-rich environments. Although 82% of schools were identified as having facilities and infrastructure that can support literacy and numeracy strengthening, the utilization of these facilities has not been optimal. The results of this study can be a reference for activities carried out in learning communities at the elementary school level, especially in Banjarmasin City.

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