

Research/Review

The Effectiveness of the Community Learning Service Model Development Through the Literacy Clinic

Ibrahim¹, Febriansa^{2*}¹ Universitas Negeri Makassar¹; email : Ibra0524@gmail.com² Universitas Negeri Makassar²; email : Febriansa@unm.ac.id*Corresponding author : Febriansa@unm.ac.id

Abstract: The government has implemented various illiteracy eradication programs at both central and local levels. However, illiteracy remains high, with South Sulawesi ranking sixth nationally. This condition is influenced by the imbalance between the number of Non-Formal Education Units and target areas, limited human resources, as well as learner-related factors such as motivation, age, occupation, distance to learning sites, and monotonous teaching methods. Community learning services through literacy clinics using collaborative methods Reading, Writing Beginning, Structure, Analysis, and Synthesis, combined with project-based learning serve as alternative models to increase community participation and improve learning outcomes. The problem of this research is how the description of the implementation of basic literacy programs through the model "Community Learning Services Through Literacy Clinics"?; and how effective the model "Community Learning Services Through Literacy Clinics with the collaborative method approach?". The purpose of this study was to determine the description of the implementation model of basic literacy education programs and determine the effectiveness of learning outcomes. The results of the study illustrated that the basic literacy program was carried out in collaboration between the resources of the Non-formal Education Unit and the resources in the village/kelurahan government as the organizer and tutor Learning outcomes show that the Community Learning Service Model through the Literacy Clinic with a collaborative method approach was declared effective in improving student learning outcomes.

Keywords: Effectiveness; Educational Impact; Literacy Clinic; Literacy Learning; Reading Skills

1. Introduction

Illiteracy remains a major challenge in Indonesia. Research conducted by John Miller, Chancellor of Central Connecticut State University in New Britain (2016), found that Indonesia ranked 60th out of 61 countries in the global literacy index. This research assessed literacy skills and the characteristics of an educated population (Antaranews, September 11, 2017). Data from the Ministry of Education and Culture (2019) shows that 2.07%, or approximately 3.4 million Indonesians, are still illiterate and unable to read. This figure is spread across all provinces, with South Sulawesi ranking sixth nationally with 252,768 people. This situation indicates that literacy eradication programs remain a crucial focus in non-formal education.

Since independence, the government has implemented various literacy eradication strategies, including prioritizing high-risk areas, implementing a block system, a vertical approach through government structures, and a horizontal approach through collaboration with community organizations, non-governmental organizations, and universities. Furthermore, these programs are integrated with poverty alleviation and community empowerment programs.

Although various approaches have been implemented, the results have not been optimal. The distribution of program implementing institutions is not balanced with the target areas. In South Sulawesi, there are 3,047 villages and sub-districts, while there are only 455 implementing institutions (consisting of 375 PKBM, 23 SKB, and 57 Islamic boarding schools). This means that one institution must serve approximately six villages. Quraisy and Babo (2017) identified the main obstacles as low community motivation, limited funding, lack of outreach, and suboptimal tutor performance. As a result, many students are unable to maintain their reading and writing skills.

Received: September 17, 2025

Revised: October 15, 2025

Accepted: November 24, 2025

Online Available: November 28, 2025

Curr. Ver.: November 28, 2025



Copyright: © 2025 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY SA) license (<https://creativecommons.org/licenses/by-sa/4.0/>)

The imbalance between the number of institutions and the target areas, as well as the low effectiveness of the learning methods used, are major challenges in eradicating illiteracy. This situation creates gaps in non-formal education services, particularly in rural areas such as Wajo and Soppeng Regencies, South Sulawesi Province.

As a solution to these problems, this study developed the "Community Learning Services through Literacy Clinics" Model, a community-based learning approach that partially adopts the working system of health clinics. This model emphasizes the active involvement of learners, collaboration between Non-Formal Education Units and village resources, and the application of the Beginning Reading and Writing (MMP) method, the Analysis and Synthesis Structure (SAS), and the Collaborative Project Method. This approach is believed to be able to increase student participation and the effectiveness of student learning outcomes.

This research contributes scientifically to the field of non-formal education by offering an alternative, participatory, and contextual learning model. The results are expected to serve as a reference in developing literacy education policies and for future researchers developing community-based learning models.

The structure of this paper is as follows: Section 1 explains the introduction, Section 2 describes the literature review, Section 3 discusses the research method, Section 4 presents the results and discussion, and Section 5 contains the conclusions and research recommendations.

2. Literature Review

This section discusses the theory, previous research results, and concepts underlying the development of the Community Learning Services model through Literacy Clinics as a community-based effort to eradicate illiteracy.

2.1. Community Learning Service Concept

Service is an activity or series of activities carried out through direct interaction between individuals or groups to meet specific needs. Yasira and Jamhir (2019) explain that service is an activity aimed at providing satisfaction to the recipient. Meanwhile, Kotler (2012) defines service as an action or performance that can be provided to another party.

In the context of education, service can be defined as an effort to facilitate the community in addressing the educational challenges they face. Community learning services mean providing adaptive, flexible, and tailored learning activities tailored to the needs of the learners. Therefore, the literacy clinic model was developed with active service principles, similar to the working system of a health clinic, where tutors and administrators act as "experts" who diagnose the learners' learning needs and provide appropriate learning interventions.

The "Community Learning Services through Literacy Clinics" model emphasizes collaboration between non-formal education units (such as PKBM and SKB) and human resources at the village level. Through this model, learning activities are no longer top-down, but rather based on community needs and participation. This approach is expected to strengthen student motivation and enhance the effectiveness of basic literacy learning outcomes.

2.2. Theoretical Basis and Previous Research

Human capital theory is an important foundation for the literacy clinic model. Romer (1990) emphasized that economic and social development is strongly influenced by the quality of human resources acquired through education and experience. Widjajanti (2011) added that community capacity building must be carried out in an integrated manner through strengthening educational facilities, developing human resources, and enhancing the competency of community empowerment actors. Thus, non-formal education plays a crucial role in developing productive and empowered individuals.

Research by Quraisy and Babo (2017) shows that the implementation of literacy programs is often hampered by low motivation to learn, limited funding, inadequate outreach, and inadequate tutor competency. These factors impact the sustainability of community learning outcomes. Therefore, a new, more collaborative approach is needed, centered on community needs.

In the context of basic literacy learning, effectiveness is a crucial indicator for assessing the success of a developed model. According to the Ministry of Education and Culture (2021), effectiveness is the alignment between efforts and achieved results. Kusumawati (2023) emphasized that learning effectiveness is measured by the extent to which teaching activities positively impact students. Meanwhile, Windhiarty et al. (2018) stated that effective learning is learning that facilitates students' learning and is recognized for its success by competent authorities.

Based on the theory and research results, the development of a Community Learning Service model through a Literacy Clinic is important as a non-formal education innovation that can increase the active participation of learners, strengthen social interactions, and expand access to education for communities in areas with limited basic literacy institutions.

3. Method

This research was designed with a "Research and development" approach, as per the Regulation of the Directorate General of Early Childhood Education and Community Education No. 2 of 2016, concerning the Procedures for Developing PAUD and Dikmas Models. The procedures and subjects of the research are: (1) preliminary study in Soppeng Regency and Wajo Regency, on February 27 and 28 to March 1, 2019 (2) Expert and practitioner validation at the BP-PAUD and Dikmas South Sulawesi Campus in the first week of April 2019. (3), Conceptual trial in Wajo Regency in the first week of May to the second week of July 2019. (4) operational trial in the "Aggalacenge" and "Tomodi" study groups, Pat-tirosompe Village, Tempe District, Wajo Regency. The instruments used in the preliminary research were observation guidelines and structured interview guidelines.

The model feasibility validation instrument was developed to obtain data from education experts to determine academic content feasibility and from non-formal education practitioners to determine practical feasibility. This data is needed to develop the hypothetical model into a conceptual model.

The model's feasibility validation standards are measured based on expert assessments and assessments by non-formal education practitioners who have implemented literacy programs. If the expert and practitioner assessments fall into the appropriate or very appropriate category, the model is declared valid.

The practicality aspect can only be fulfilled if: (1) experts and practitioners state that what is developed can be implemented; and (2) reality shows that what is developed can be implemented. The practicality of the literacy education model can be measured from the steps in implementing the model.

The construction of this instrument is based on the steps of implementing the model, namely; Identification of pockets of illiteracy in rural areas, coordination with village governments, establishment of a community literacy clinic structure, orientation of clinic staff and implementation of learning.

Literacy learning using the "Community Learning Services Model Through Literacy Clinics" begins with diagnostics, delivery of competency standards, group organization, mutual learning, and learning evaluation. This instrument is designed in the form of a graduated scale based on the principle of practicality: Not practical, Less practical, Quite practical, and Very practical.

The model's practicality or implementation standards are measured based on the assessments of experts and practitioners in non-formal education. If the assessments are categorized as practical or very practical, then the "Community Learning Service Model Through Literacy Clinics" is deemed practical for implementation.

The model's effectiveness instrument was constructed based on the Student Learning Outcomes Test. Effectiveness was measured using the following quasi-experimental method:

The model uses the One-Shot Case Study experimental method. The paradigm in this experimental research model can be described as follows:



X = treatment given (dependent variable)
 O = Observation (dependent variable)
 (Justan et al., 2024)

4. Results and Discussion

This study aims to describe the implementation of a basic literacy program using the Community Learning Services model through Literacy Clinics at Non-Formal Education Units (SPNF) in Wajo Regency. The initial implementation step was to prepare a pilot document for the concept and the implementing agency at the field level.

The first stage was the development of a model book for "Community Learning Services Through Literacy Clinics," which contains guidelines for implementing basic literacy programs according to the developed model. The second stage was the development of trial instruments, including an instrument for model implementation, an instrument for learning product attractiveness, and a student learning outcome test.

Furthermore, technical orientation was carried out for SPNF managers (SKB and PKBM) as model assistants, with material covering: (a) procedures for organizing basic literacy programs, (b) procedures for implementing learning, (c) recruitment of educators and education personnel, and (d) implementation of learning evaluations.

The program began with the formation of two study groups: Tomedi (10 participants) and Aggalacengnge (17 participants) in Pattirosompe Village, Tempe District, Wajo Regency. The learning process utilizes collaborative methods including Beginning Reading and Writing (MMP), Structured Analysis and Synthesis (SAS), and Collaborative Projects (PBL).

Table 1. Collaboration of Basic Rudeness Learning Methods Using the "Literacy Clinic" Model

	Competency standards	PBM Method
2.1	Mastering reading techniques	MMP
2.2	Get to know personal texts about self-identity	MMP
2.3	Understand descriptive texts about describing an object (thing, animal, plant, or person) in at least 3 (three) sentences related to everyday life.	SAS
2.4	Get to know simple information texts in the form of posters related to everyday life.	SAS
3.10	Estimating or rounding calculation results in everyday life	PBL
3.11	Measuring and using units of length, distance, weight and time commonly used in everyday life and interpreting measurement results.	PBL

The learning process includes five main stages:

- (1) Diagnostics: the tutor assesses the initial abilities, interests and characteristics of the students;
- (2) Exploration: delivery of competencies, indicators, and learning objectives;
- (3) Instructional: application of MMP, SAS, and project methods in writing, reading, and arithmetic activities;

- (4) Group transformation: students teach each other to improve learning outcomes;
- (5) Reflection: discussion and feedback between groups and planning the next meeting.

The results of the effectiveness test describe the development of students' cognitive, affective, and psychomotor abilities.

4.1 . Figures and Tables

The percentage of learning outcomes based on the writing skills test can be seen in Figure 1 below:

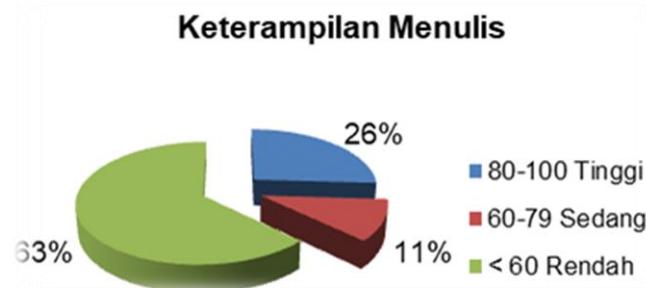


Figure 1 . This is a picture. The schematic follows the same format.

Learning Outcomes through Effectiveness Tests are carried out by depicting or describing the level of development of cognitive, affective and psychomotor abilities of students after participating in learning; (1) Writing Ability, From the learning outcome tests that have been carried out, a picture of the writing abilities of students is obtained, as in the following table:

Table 2. Students' Writing Skills Test Scores

Indicator	Achieve-Category	Respondents
80-100	Tall	7
60-79	Currently	3
< 60	Low	17
	Total	27

As many as 63% of students still need remedial work in writing skills.

The percentage of learning outcomes based on the reading skills test can be seen in Figure 2 below:

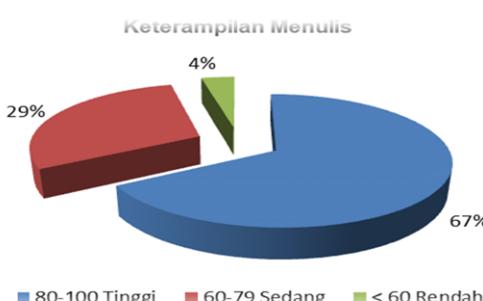


Figure 2. Percentage of Reading Skills Scores

Reading Ability, from the learning outcome tests that have been carried out, a picture of the students' reading ability is obtained, as in the following table:

Table 3. Students' Writing Skills Test Scores

Indicator Achievement	Category	Respondents
80-100	Tall	18
60-79	Currently	8
< 60	Low	1
	Total	27

As many as 67% of students are in the high and medium categories in terms of numeracy skills.

The percentage of learning outcomes based on the numeracy skills test can be seen in Figure 3 below:

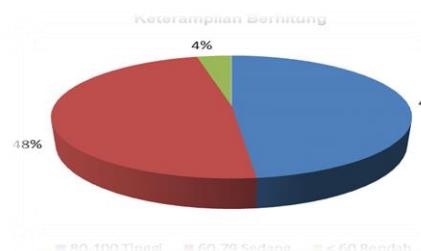


Figure 3. Percentage of Numeracy Skills Scores

Numeracy Ability, from the learning outcome tests that have been carried out, a picture of the numeracy ability of students is obtained, as in the following table:

Table 4. Results of Students' Numeracy Ability Test

Indicator Achievement	Category	Respondents
80-100	Tall	13
60-79	Currently	13
< 60	Low	1
	Total	27

As many as 48% of students obtained high and medium scores and only 4% were in the low category. Recapitulation of Learning Outcomes, from the learning outcome tests that have been carried out, a picture of the reading, writing and arithmetic abilities of students is obtained, as in the following table:

Table 5. Summary of Student Learning Outcomes

Indicator Achievement	Category	Respondents
80-100	Tall	11
60-79	Currently	11
< 60	Low	5
	Total	27

The results of the descriptive analysis using SPSS showed an average (mean) value of 74.53, with a minimum value of 45.52 and a maximum of 95.96, and a standard deviation of 13.67. This indicates a reasonable variation in learning outcomes and demonstrates the successful implementation of the model.

The implementation of the basic literacy program through the Community Learning Services model through the Literacy Clinic is part of a community empowerment effort carried out in collaboration with Non-Formal Education Units. This aligns with Ihsan's (2018) findings that non-formal education serves to meet the learning needs of the community outside the school system.

Furthermore, Dyah Lestari et al. (2013) explain that non-formal education plays a fundamental role in developing basic community skills and fostering a culture of lifelong learning. In this context, literacy programs play a strategic role in educating communities by eliminating illiteracy and increasing their knowledge.

The literacy clinic model is implemented based on the principle of collaboration between the SPNF and rural community resources to reach areas difficult for formal institutions. Mustofa (2020) emphasized that community empowerment can be achieved through five basic approaches: humanistic, participatory, collaborative, continuing, and cultural.

This collaborative learning process has been proven to improve learning outcomes. The average student score of 74.53 indicates a significant improvement compared to conventional learning. This finding is consistent with Astim Riyanto's (2003) view that learning effectiveness is the extent to which learning objectives are achieved through appropriate procedures. Yusufhadi Miarso (2004) also emphasized that effective learning focuses on achieving learning objectives and student success in the learning process.

Thus, the Community Learning Services model through the Literacy Clinic is declared effective in improving the reading, writing, and arithmetic skills of learners through participatory, collaborative, and contextual learning strategies.

5. Comparison

This research contributes to the development of state-of-the-art non-formal education, particularly in community-based basic literacy learning. The Community Learning Service Model through the Literacy Clinic developed demonstrates significant differences from conventional approaches to illiteracy eradication, which have been implemented in a top-down and instructional manner.

Previous approaches tended to position learners as objects of learning, using lectures and repetitive exercises. In contrast, the Literacy Clinic model positions learners as active subjects who participate in the process of identifying learning needs, planning, and implementing learning activities. This approach reflects the principles of participatory learning and community empowerment, which Mustofa (2020) and Widjajanti (2011) identify as key characteristics of empowerment-based non-formal education.

Compared to research by Quraisy and Babo (2017), which highlighted barriers such as low learning motivation, limited funding, and weak tutor capacity, the Literacy Clinic model provides an update on cross-resource collaboration between SPNF, village government, and the community. This synergy strengthens the social role of non-formal education institutions as catalysts for learning at the local level.

Furthermore, from a methodological perspective, this model introduces a multi-strategy collaborative approach—a combination of Beginning Reading and Writing (MPW), Structured Analysis and Synthesis (SAS), and the Collaborative Project Method (PBL). This combination has not been widely used in basic literacy, but has proven effective in improving students' reading, writing, and arithmetic (calistung) skills, with an average learning outcome of 74.53.

Compared to experiential learning models commonly used in adult education, the Literacy Clinic model offers a unique approach to diagnosing learning needs (diagnostic stages), which resembles clinical practice in the healthcare sector. This approach allows tutors to tailor instruction based on individual student needs, making the learning process more personalized, relevant, and contextual.

Overall, comparison with the state-of-the-art shows that the Literacy Clinic model: 1) Shifting the learning paradigm from instructive to participatory; 2) Integrating clinical and collaborative approaches in the context of literacy education; 3) Strengthening the role of

SPNF as a facilitator of community empowerment; and 4) Provide empirical evidence of the model's effectiveness through measurable learning outcomes.

Thus, this research not only enriches non-formal education practices, but also offers a new conceptual basis for the development of community-based literacy models that are adaptive to the needs of rural communities in Indonesia.

6. Conclusion

This research aims to develop a Community Learning Service model through a Literacy Clinic as an innovation in providing basic literacy education in rural areas. This model has proven effective in improving the reading, writing, and arithmetic skills of students in Wajo Regency, South Sulawesi. The Literacy Clinic model was implemented through collaboration between Non-Formal Education Units (SKB and PKBM) and village or sub-district governments. The learning process was conducted in five stages: diagnostic, exploration, instruction, group transformation, and reflection. The results of the trial on 27 students showed improvements in reading ability (67% in the high category), numeracy ability (96% in the high and moderate categories), and an average learning outcome score of 74.53, which is above the minimum completion standard. These findings demonstrate the achievement of the research objective, which was to demonstrate the effectiveness of the Community Learning Services model through Literacy Clinics as a collaborative approach to basic literacy learning. The integration of the MMP, SAS, and Project methods has been shown to significantly improve learning outcomes while fostering active community participation in the non-formal education process. The Literacy Clinic model makes a significant contribution to the development of non-formal education in Indonesia, particularly in efforts to eradicate illiteracy. This model can serve as an alternative strategy for institutions and local governments to expand access to basic education in areas with limited resources. Furthermore, this collaborative and participatory approach can strengthen the relationship between educational institutions, village governments, and learners as partners in community empowerment. This research is limited to Wajo Regency and has a limited sample size, so generalizing the results to other regions requires caution. Further research is recommended to test the effectiveness of this model in different social contexts and expand its application using digital technology in basic literacy learning, making it more adaptable to developments in the digital era.

Author Contributions: Conceptualization: Ibrahim and Febriansa; Methodology: Febriansa; Software: Febriansa; Validation: Ibrahim and Febriansa; Formal analysis: Febriansa; Investigation: Febriansa; Resources: Ibrahim; Data curation: Febriansa; Writing, original draft preparation: Febriansa; Writing, review and editing: Ibrahim and Febriansa; Visualization: Febriansa; Supervision: Ibrahim; Project administration: Ibrahim; Funding acquisition: Ibrahim. Both authors contributed substantially to this research and approved the final version of the manuscript for publication.

Funding: This research did not receive any external funding. All research activities were conducted independently with the support of academic facilities from the Community Education Study Program, Faculty of Education, Makassar State University.

Data Availability Statement: The data supporting the results of this study are available upon request from the corresponding author. The data cannot be shared publicly due to the personal information of respondents and due to research ethics considerations.

Acknowledgements: The authors would like to express their gratitude to the Community Education Study Program, Faculty of Education, Makassar State University, for the academic,

administrative, and research facility support provided. They also express their gratitude to the management of the Non-Formal Education Units (SKB and PKBM) and the sub-district and village governments in Wajo Regency for providing permission and support during the research. Part of the writing and preparation of this manuscript utilized AI-assisted writing support for language editing and formatting adjustments, without affecting the content and scientific results of the research.

Conflict of Interest: The authors declare that they have no conflicts of interest that could have influenced the results, interpretation, or writing of this manuscript. The funders had no role in the study design; in the collection, analysis, or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

Reference

Antaranews. (2017, September 11). Indonesia ranks 60th in the world in literacy rates. Retrieved January 27, 2019, from <https://www.antaranews.com>.

Dyah Lestari, D., & et al. (2013). The role of non-formal education in community empowerment. *Journal of Non-Formal Education*, 5(2), 112-124.

Ihsan. (2018). Non-formal education as an effort to empower society. *Scientific Journal of Education and Community Service*, 7(1), 44-52.

Justan, R., Margiono, M., Aziz, A., & Sumiati, S. (2024). Mixed methods research. *ULIL ALBAB: Multidisciplinary Scientific Journal*, 3(2). <https://doi.org/10.56799/jim.v3i2.2772>

Ministry of Education and Culture. (2021). *Big Indonesian Dictionary*, in *Big Indonesian Dictionary*.

Kotler, P. (2012). *Marketing management* (Philip Kotler, Kevin Lane Keller). Pearson Education International.

Kusumawati, E. (2023). Teacher work effectiveness. *JIIP - Scientific Journal of Educational Sciences*, 6(3). <https://doi.org/10.54371/jiip.v6i3.1578>

Mustofa, I. (2020). Developing students' soft skills through service learning (Evaluation of the community service lecture program at Darussalam Islamic Boarding School, Nganjuk). *Jurnal Pikir: Journal of Islamic Education and Law Studies*, 6(2).

Miarso, Y. (2004). *Sowing the seeds of educational technology*. Kencana Prenada Media Group.

Quraisy, H., & Babo, R. (2017). Empowering illiterate village communities. *Equilibrium: Journal of Education*, 3(2). <https://doi.org/10.26618/equilibrium.v3i2.446>

Romer, P. M. (1990). Endogenous technological change. *Journal of Political Economy*, 98(5). <https://doi.org/10.3386/w3210>

Widjajanti, K. (2011). Community empowerment model. *Journal of Development Economics: Study of Economic and Development Issues*, 12(1). <https://doi.org/10.23917/jep.v12i1.202>

Windhiarty, W., Jafar, H., & Sulistyowati, E. D. (2018). Effectiveness of learning to write explanatory texts with Adobe Flash-based media for grade XI high school students. *Journal of Cultural Sciences*, 1(4).

Yasira, R., & Jamhir, J. (2019). Social security administrator services. *Justisia Journal: Journal of Law, Legislation, and Social Institutions*, 3(2). <https://doi.org/10.22373/justisia.v3i2.5933>

Yusufhadi Miarso. (2004). *Sowing the seeds of educational technology*. Kencana Prenada Media Group.