

Is It Effective or Not? Countenance Stake Evaluation of The Numeration Learning Combination Model for Students in South Papua

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ABSTRACT

This study evaluates the effectiveness of the Numeration Learning Combination Model (NLCM) for students in South Papua by employing the Countenance Stake Evaluation model. The region's educational landscape, characterized by linguistic diversity and resource constraints, necessitates innovative teaching approaches. The NLCM combines traditional pedagogical methods with modern educational technologies and culturally relevant content. This evaluation framework examines antecedents, transactions, and outcomes to provide a comprehensive assessment. Data collection by conducting pre-post tests, observations and interviews. Data analysis techniques use a quantitative and a qualitative approach. Data analysis involves quantitative measures of measure the effectiveness of the learning model using the T-test based on student performance. Initial findings reveal that the NLCM enhances numeracy skills, increases student engagement, supports a more inclusive learning environment and addressing the diverse needs of South Papua's student population. The findings suggest that the NLCM is a viable and effective approach to numeration learning in the South Papua context, with potential implications for broader educational strategies in similar regions.

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INTRODUCTION

Education development in South Papua faces unique challenges, including language diversity, limited resources, and varying levels of educator readiness (Sianturi et al., 2018). These factors contribute to significant gaps in educational outcomes, particularly in learners' numeracy skills, which are important for learners' future academic and professional success (Ben Zaied et al., 2015; C. Jain & Prasad, 2017). Numeracy is so important in learning, especially for students in South Papua because the numeracy ability of most South Papuan students is still very low. This is evident from the researcher's

empirical experience teaching students in class. Based on PISA data 2022, the mathematical ability of most Indonesian students experienced an increase of 5 points from the previous position, but the downward trend in scores also occurred, Indonesia experienced an average score decrease of 13 points from 379 to 366 points. This shows that the numeracy literacy ability of Indonesian students is still low (Rokhima & Pamungkas, 2023). In response to these challenges, innovative teaching methodologies are needed to improve learning effectiveness and ensure educational equity (Afrianto, 2018; Kalungwizi et al., 2020; Kemp et al., 2019; Nirtha et al., 2021).

Numeracy literacy is so important to be learned by all students, especially students in South Papua, apart from the fact that in general, the ability of Indonesian children, including South Papuan children, is not so high in Numeracy based on PISA data, also because empirically the Numeracy ability of South Papuan students is still very low. In fact, good numeracy skills will be very helpful for students in solving problems in daily life, including shopping, managing household budgets, calculating time, and reading maps (Hwang, 2020; Ismail et al., 2020; May, 2020; Purnomo et al., 2022). This ability makes it easier for students to make better and more efficient decisions in their daily lives (P. Jain & Rogers, 2019). The next reason why Numeracy is so difficult but so important to learn is because Numeracy is the foundation of many fields of science and technology (K. Aini et al., 2024; Kristen et al., 2021; May, 2020). This ability is especially important in subjects such as math, science, and economics, as well as in a variety of professions that require data analysis, problem-solving, and number-based decision-making. In addition, Through numeracy, a person learns how to analyze situations, understand patterns, and make precise calculations (Rokhima & Pamungkas, 2023). It develops critical thinking and problem-solving skills that are important in various aspects of life (Rokhima & Pamungkas, 2023) (Suciyati et al., 2022).

If viewed from the perspective of social life, it can be said that numerate individuals are better able to understand statistical information that is often used in the media and public policy. This allows them to participate more actively in society, make more informed decisions, and better navigate complex systems. In addition, in terms of critical thinking, through numeracy, a person learns how to analyze situations, understand patterns, and make precise calculations. It develops critical thinking and problem-solving skills that are important in various aspects of life (May, 2020).

Next in terms of finances, good numeracy skills are very important in managing personal finances. This includes managing a budget, saving, understanding credit and investment interest, and making smart financial decisions for the future, thus allowing a person to achieve financial well-being in his or her life (Ismail et al., 2020).

Furthermore, many jobs today require good numeracy skills. In an increasingly digital and data-driven world of work, the ability to understand and process numerical data is becoming increasingly crucial. In addition, numeracy is also important in understanding economic trends and making business decisions. Lastly in the field of health, numeracy helps in understanding health information, such as drug dosages, nutrition, and medical statistics. This contributes to better decision-making regarding personal health and well-being (Suciyati et al., 2022) (K. N. Aini et al., 2024).

Thus, based on these benefits, mastering numeracy is very essential and is very needed, especially by students in South Papua (Rokhima & Pamungkas, 2023).

However, it is not easy to teach Numeracy, apart from academic ability that is quite low input is also influenced by other factors, including student awareness is also low and monotonous and boring learning models can make students lazier to learn (Rasmuin et al., 2020). So that the creativity of teachers is needed to make numeracy learning interesting, fun and make students aware of the importance of numeracy learning for especially students in South Papua. The numeracy learning model needs to accommodate all student needs (K. Aini et al., 2024) (Septianti et al., 2020).

LITERATURE REVIEW

Previous research that discusses combination learning is a study by Bohon et al. (2018), which provides training to United Kingdom teachers based on experiential learning. He stated that combination learning can be done indoors or outdoors, artistic or natural, online or offline. The difference between Bohon et al. (2018) research and combined learning in this Numeracy course is that the research of Bohon et al. (2018) is applied to professional United Kingdom teachers, while in this study, the combined learning model is carried out on prospective students of basic education teachers in South Papua.

Furthermore, research by Köpeczi-Bócz, T (2024) states that the combined learning model between PBL and Flip Class Room is effective and has a significant influence in improving performance, motivation and learning outcomes in undergraduate education (BSc) students and vocational education and training (HVET) students. The research by Köpeczi-Bócz, T (2024), has similarities and differences with this study, namely if the research by Köpeczi-Bócz, T (2024) examines the influence of the learning model on, performance, motivation and learning outcomes of undergraduate and vocational students, then this study examines the effectiveness of the combined learning model in the Numeracy course in prospective teacher students (Marcellis et al., 2024).

Next, research by Jarvis, D.H., et al. (2021) researched a combination of On-line, Self-directed and Prerequisite Model learning models to improve Mathematics competence and confidence of nursing students. The result is that there is indeed an increase in competence in nursing students based on the DCCT test (Jarvis et al., 2021).

Thus, based on the three studies by Bohon et al. (2018), Köpeczi-Bócz, T (2024), Jarvis, D.H., et al. (2021), learning using a combination learning model has indeed proven to be effective in improving student competence (Bohon et al., 2017; Waruwu, 2023).

In this study, a combination of numeracy learning models is used, including contextual learning models, experiential learning, and cooperative learning. In addition, learning is equipped with contextual media, including using leaves, twigs and fruits. As a teaching media material in South Papua. In addition, based on experience, students with different backgrounds also have different learning experiences about Numeracy, but experience relatively the same obstacles, including when students are learners at the elementary school level, they often do not meet the teacher at school or vice versa when the teacher is at school, they go hunting in the forest to find food.

As a result, they lose most of the learning momentum, especially in learning Numeracy. So that when they are at a higher level of education, namely at the university level, their thirst for Numeracy learning is answered in Numeracy learning with a combination of various models. With cooperative learning, it is possible for them to cooperate with other students who have better knowledge of Numeracy so that cooperative learning allows them to acquire knowledge from peers, for example in the Jigsaw-type cooperative

learning model. Thus, the combined learning model in the Numeracy course is very important to be implemented and even developed, especially for South Papuan students.

The Combination Learning Model in Numeracy course (NLCM)

The combination of learning models in teaching Numeracy is a learning model that integrates various learning methods and strategies as well as all educational resources with the aim of achieving learning targets (Musdi et al., 2024). When viewed from the learning syntax, this model uses several learning models including contextual learning, experiential learning, and cooperative learning (Nirtha et al., 2021; Paliling et al., 2024; Wilson & Beard, 2003; Winangun & Fauziah, 2019). This model is so important to be applied for various reasons, including the following; 1) Able to overcome various learning styles, in this case we believe that each student has different learning references, different ability to receive different materials, some learn better visually, some through auditory or kinesthetic means, so that combination learning answers these various needs by combining various learning strategies. This learning is also personalized, meaning that it allows for a more personalized learning experience, ensuring that each student can engage with the material in a way that suits their individual learning style. 2) Increase engagement and motivation, interactive and dynamic, by combining traditional methods with modern technology (such as interactive simulations, multimedia resources, and gamification) to make learning more engaging and enjoyable. 3) Have real-world relevance: by integrating the application of theoretical concepts in the real and practical world, it can motivate students by demonstrating the relevance of their learning. 4) Making critical thinking and problem-solving, because by using various perspectives, exposure to different methods and viewpoints encourages students to think critically and approach problems from various angles. 5) Collaborative learning, which combines group activities and discussions, fosters collaborative skills, and helps students learn from each other.

In addition, using a combination of learning methods can help reinforce concepts. For example, a concept that is taught through lectures, then explored through hands-on activities, and finally reviewed through interactive quizzes, is likely to be retained. Next, the scope taught is more comprehensive and this ensures that complex subjects are covered thoroughly, addressing potential gaps left by any method.

Next, with combination method learning, it is possible to form a high degree of adaptability and flexibility, because responsive teaching allows educators to adjust their methods based on student feedback and performance, making the learning process more adaptive and responsive. Furthermore, resource utilization allows the use of a variety of resources, including digital tools, physical materials, and human expertise, to create a richer and more contextual learning environment.

Numeracy learning, which with a combination of learning models, also has great potential to support inclusive education, because there is easy accessibility, namely combination learning can include accommodation for students with special needs, making education more inclusive and equitable (Insari et al., 2022; Kang & Martin, 2018). In addition to supporting inclusive education, there is also cultural relevance, in this case it can integrate culturally relevant materials and approaches, which is especially important in diverse classrooms (May, 2020).

An effective combination of learning models can also encourage lifelong learning, as skill development is possible when different learning methods are used. Students develop a variety of skills, such as digital literacy, research ability, and adaptability, which are essential for lifelong learning. Next is the occurrence of self-directed learning, namely teachers encourage students' independent learning habits when learning using different resources and methods independently (Palupi et al., 2023).

Thus, the numeracy learning model combined with various learning models is a learning model that is in line with the needs of students in South Papua, apart from the fact that this model aims to provide new skills and knowledge to students about numeracy proficiency, but also the purpose of this learning model can be an example for prospective students of PGSD teachers, especially when they become teachers in the future, they already have an idea of how to teach Numeracy to their students. At least through this combination numeracy learning model, they can equip themselves in teaching numeracy. Thus, in addition to gaining knowledge and numeracy skills, they are also indirectly trained in their skills as a prospective educator or prospective teacher in the future.

Countenance Stake Evaluation

Countenance Stake Evaluation is an educational program evaluation model developed by Robert Stake, which has a number of important reasons why the Countenance Stake model evaluation is used, including the advantages of the Countenance Stake evaluation mode, including having simple, very comprehensive and systematic steps to be used to evaluate educational programs. It makes it possible to capture a rhyme and balanced understanding of educational initiatives by examining their predecessors, transactions and outcomes. So, this study uses the Countenance Stake model evaluation research to evaluate NLCM. There are at least three main research questions that guide this evaluation: (1) How effective is NLCM in improving Students' Numeracy in South Papua? (2) What are the factors that affect the success or limitations of NLCM? (3) How do students and educators view NLCM in terms of engagement and inclusivity in learning?

RESEARCH METHODS

This research is an evaluation research, namely using the evaluation of the Countenance Stake model which consists of three steps, namely antecedents, transactions, and outcomes (Permana et al., 2023; Tompong & Jailani, 2019). The purpose of the evaluation of the Countenance Stake model is to provide a detailed understanding of how NLCM functions in practice and its overall effectiveness in improving numeracy skills among students in South Papua. Data collection was carried out pre-post tests, observations and interviews. Data analysis techniques use a quantitative and a qualitative approach. Data analysis involves quantitative measures of measure the effectiveness of the learning model using the T test based on pre-post test and qualitative insights from educators and students (Ikhlas, 2021).

In the antecedents or Pre-implementation stage, the researcher carries out two stages of activities, namely identifying the context, conditions and situations, then the next activity is to determine the goals and objectives. At the stage of identifying the context, conditions and situations, the researcher examines the background of the conditions and contexts as well as the situation in which the NLCM learning program will be implemented. This includes an understanding of socio-economic, cultural, and institutional factors that may

affect the learning program. Furthermore, documentation of the initial conditions, resources, and inputs available before the learning program begins. In addition, the researcher conducted a pre-test to measure the initial ability of the students (Harjanti et al., 2019; Tompong & Jailani, 2019).

At the transaction stage, the researcher conducts activities to record the actual implementation process. In this case, the activities in question are the teaching methods applied, the teaching materials used, and how the interaction between instructors or teachers and students. Then, in real-time, the researcher observes and documents the process and progress that occurs from the implementation of the learning model, by collecting ongoing data, and the impact of the implementation of the learning model directly on students. By using the reflection sheet to gather feedback and make necessary adjustments to improve the delivery and effectiveness of the program.

In the outcomes stage, at this stage the researcher measures the results achieved from the implementation of the learning model that has been carried out in the classroom. This activity involves evaluating whether the goals and objectives that have been set during the antecedent phase have been achieved. To measure the results quantitatively, a post test instrument is used to determine the results of the T-test, while qualitatively the measurement is carried out by observation techniques, documentation and filling in reflection sheets. Then the researcher compares the actual results of the study with the predetermined success criteria. Then the researcher determines the extent to which the program meets its objectives and identifies the difference between the desired and actual outcomes, and analyzes the reasons behind these differences.

Before the T-test was carried out, the researcher first conducted several statistical tests, including the normality and homogeneity tests first. Then conduct a hypothesis test. The normality test was carried out with the aim of finding out whether the pretest and posttest score data obtained were normally distributed or not. The normality test was carried out through the *Shapiro-Wilk* test with a significance level of 0.05 (Nirtha et al., 2021). Then the homogeneity test used a homogeneity test of two variances between the pretest and posttest data using the *Levene* test at a significance level of 0.05. After conducting a normality and homogeneity test, the researcher formulated a statistical hypothesis test. The statistical hypothesis of the Independent T-Test Sample or two-party test is as follows:

$$H_0 : \mu_1 = \mu_2$$

$$H_a : \mu_1 \neq \mu_2$$

Remarks:

H_0 = Student learning outcomes in pretest and posttest are the same or not significantly different.

H_a = Student learning outcomes in pretest and posttest differ significantly

The decision-making criteria are as follows if the significant value (Sig. 2-tailed) is less than 0.05 means H_a accepted and vice versa if the value is significant (Sig. 2-tailed) greater than 0,05 means H_0 accepted.

RESULTS AND DISCUSSION

Result

The result of this study is that qualitatively NLCM learning can improve students' numeracy skills, increase students' interest in learning, and of course support a more

inclusive learning environment and addressing the diverse needs of South Papua's students. This can be proven by the results that occur at each stage of the evaluation using a quantitative and qualitative approach, including the following: In the antecedents stage or the pre-implementation stage of learning activities using the NLCM model, the results of the identification of context, conditions and situations were found that in the context category, the habits of children who are close to nature or are used to activities with life in the wild and wild are found, including hunting activities in the forest, looking for fish in the ocean and even rivers. So, the researcher took the initiative to use learning media on numeracy literacy materials from nature such as leaves, tree branches, fruits and also other surrounding natural materials that can be used as numeracy learning media. Furthermore, in terms of conditions, Papuan children have a fairly high enthusiasm for learning, but the carrying capacity of their parents is not optimal, including they walk to school so that when they arrive at the class room they are tired and hungry, in other words, the absence of a vehicle that takes them to school makes it difficult for them to reach the school. Then in the situation aspect, there are PGSD students who do not understand the operations of integers, be it the operations of addition, subtraction, and even multiplication and division in a simple way. However, there are teachers or lecturers who have qualifications and have received special Numeracy training for the Papua region. For on-campus learning facilities, it is very adequate, including learning spaces that meet national standards for higher education and other necessary learning media. After the researcher finds the results of identification on aspects of context, conditions and situations, the next activity is to determine the goals and objectives. At this stage, the results of determining the goals and objectives are the targets of this research activity are students majoring in elementary school teacher education in the fourth semester, and the purpose of this research activity is to help prospective PGSD teacher students to improve their numeracy literacy skills and develop numeracy teaching skills and skills. So it is hoped that after graduating from college, prospective teacher students will not only have numeracy teaching skills but also be proficient in numeracy literacy. At this stage, the researcher conducts a pre-test and interview. The results of the pre-test show that students who are prospective PGSD teachers still score below the minimum average graduation determined by the teacher. In addition, based on the results of interviews with YST students, it was said that *"I don't really understand about mother's integer operations. I don't understand how to operate integers especially on multiplication and addition"*. Furthermore, an interview with RG students, he also stated that *"For integers, I understand a little, but if I am asked to teach it, I also don't understand it. Because the material is a bit difficult, especially since I have to teach"*. Then the results of the interview with AG students stated that *"I don't understand integer operations, but I can calculate numbers. If I teach, I don't dare to be a mother"*. Thus, based on the results of the test and interview, it is true that the student prospective teacher does not understand the integer material which is one of the materials in Numeracy learning.

Next, the researcher conducts transactions. At this transaction stage, the researcher conducts activities to record the actual implementation process. The result of this transaction stage is that the researcher records and documents the implementation of the numeracy learning model used. The results of recording the learning model used are a combination of several learning models, including contextual learning models, experiential learning and cooperative learning models. The contextual learning model includes taking prospective PGSD teacher students around campus to pick leaves, twigs, stones and fruits that can be used as numeracy learning media. When learning the

operational material of integers, namely addition, the teacher uses an old brown leaf that symbolizes a negative integer and a light green leaf to symbolize a positive integer. These two leaves are used to operate addition and subtraction operations on positive and negative integers. Students understand the addition operation with the help of leaf media, even when doing re-simulation, students are able to do what the teacher has given. Furthermore, in fractional materials, teachers use experiential learning and cooperative learning models. At the beginning of the lesson, the teacher invited the prospective teacher students to think about whether their mother at home had ever distributed a piece of cake to the two of them. Then the students answered yes and told a little about their experience. And the teacher said that one piece of bread divided into two is part of the numeracy material, namely fractions. Then the teachers distributed the bread that had been brought from home evenly to 24 prospective PGSD teacher students. And the teacher explained that the bread eaten was a fraction. Then the teacher writes the fractional number symbol. And prospective teacher students understand that fractional material is not a scary thing. Then the teacher asked the prospective teacher students to write down their learning reflections. The media used in this fractional material is bread brought by teachers and distributed to prospective PGSD teacher students. Then the next learning model is the cooperative learning Jigsaw model. Student teacher candidates are divided into 4 groups and given material that will be discussed, including operational materials on addition, subtraction, multiplication and division on integers, lecturers share tools and media materials that will be used and the tasks of each child in the original group. After all the media has been completed, students are asked to go to other destination groups within a predetermined period of time. And back to the original group. It was recorded that prospective teacher students were enthusiastic and very happy to do this learning. Furthermore, the interaction that occurs between instructors or teachers and students is relatively good and even very familiar but still maintains objectivity in performance. Then, after the Numeracy learning is completed, the teacher gives a reflection sheet to the prospective teacher students. The following is evidence of student reflection sheets.

At the outcomes stage or expected results in the use of NLCM, the researcher measures the effectiveness of the results of the implementation of the learning model that has been carried out in the classroom. The results can be seen quantitatively and qualitatively. In the quantitative approach, from the results of the test, namely the Post-Test with the quantitative analysis test of the T test as follows:

This activity involves evaluating whether the goals and objectives that have been set during the antecedent phase have been achieved. To quantitatively measure the results, a post test instrument is used to determine the results of the T-test.

Descriptive Statistic

The purpose of descriptive statistical analysis is to find out the mean value, standard deviation, lowest value, highest value, and variance. The results of the analysis are as shown in the following table 1.

Table 1. Statistical Data on Learning Outcomes

| | N | Min | Max | Mean | Std. Deviation | Variance |
|--------------------|----|-------|-------|-------|----------------|----------|
| Pre | 24 | 30.00 | 67.00 | 46.91 | 10.525 | 110.775 |
| Post | 24 | 67.00 | 89.00 | 80.29 | 5.9817 | 35.781 |
| Valid N (listwise) | 24 | | | | | |

Based on the results of the calculation in table 1 above, it can be seen that the value of *pretest* with a total of 24 students obtaining an average score (*mean*) 46.91, Standard Deviation (*std. deviation*) 10.52, the lowest score (*minimum*) by 30, the highest value (*maximum*) by 67, and *variance* by 110.77. Meanwhile, on the value of *posttest* with a total of 24 students obtaining an average score (*mean*) 80.29, standard deviation is 5.98, the lowest score is 67, the maximum is 89, and the variance is 35.78.

Normality Test

The normality test was carried out with the aim of finding out whether the pretest and posttest score data obtained were normally distributed or not. The normality test was carried out through the Shapiro-Wilk test with a significance level of 0.05. The results of processing the normality test data obtained are as shown in table 2 below.

Table 2. Results of the Normality Test

| | Shapiro-Wilk | | |
|-----------|--------------|----|------|
| | Statistic | Df | Sig. |
| Pre Test | .953 | 24 | .316 |
| Post Test | .944 | 24 | .195 |

Based on the output results in the *Shapiro-Wilk* column from the normality test in table 2 above, it can be seen that the significant value (Sig.) obtained in the pretest was 0.316 and in the post-test was 0.195. The decision taken is that if the significant value obtained is greater than the significance level of 0.05, the data from the pretest and post-test obtained are normally distributed and vice versa, if the significant value obtained is less than the significance level of 0.05, the data from the pretest and post-test obtained are abnormally distributed. Because the significant scores in both classes were greater than 0.05 ($0.316 > 0.05$ and $0.195 > 0.05$), it can be said that the data obtained in the *pretest* and *post-test* were normally distributed.

Homogeneity Test

The results of the normality test in both classes showed that the data were normally distributed, so it was continued to analyze the homogeneity test of two variances between the pretest and post-test data using the Levene test at a significance level of 0.05. The results of processing homogeneity test data obtained through the Levene test can be seen in the following table 3.

Table 3. The Result of the Homogeneity Test

| Levene Statistic | df1 | df2 | Sig. |
|------------------|-----|-----|------|
| .041 | 1 | 46 | .003 |

Based on the results of the homogeneity test using the Levene test in table 3 above, it is known that the significant value (Sig.) obtained is 0.003. The decision taken is that if the significant value obtained is greater than the significance level of 0.05, the data is homogeneous and vice versa, if the significant value is less than the significance level of

0.05, then it is not homogeneous. From the results of the calculation above, it is known that the significant value obtained of 0.003 is smaller than 0.05 ($0.003 \leq 0.05$) so that it can be said that the data obtained in the pretest and posttest do not have the same variance or the data is not homogeneous.

Hypothesis Test

From the results of the normality test in the pretest and post-test, it is known that the data is normally distributed, but in the homogeneity test, the data does not have a homogeneous variance. However, in hypothesis testing, the *Independent Sample T-Test* test is still used because the test condition is normally distributed data. The statistical hypothesis of the Independent *T-Test* sample or two-party test is as follows:

$$H_0 : \mu_1 = \mu_2$$

$$H_a : \mu_1 \neq \mu_2$$

Remarks:

H_0 = Student learning outcomes in pretest and post-test are the same or not significantly different.

H_a = Student learning outcomes in pretest and post-test differ significantly

The decision-making criteria are as follows if the significant value (Sig. 2-tailed) is less than 0.05 means H_a is accepted and vice versa if the significant value (Sig. 2-tailed) is greater than 0.05 means H_0 is accepted. The results of the processing of two-party t-test data using the *Independent Sample T Test* test as shown in table 4 below.

Table 4. Hypothesis Test Results (Uji *t*)

| | | t-test for Equality of Means | | |
|---------------|-----------------------------|------------------------------|-----------------|-----------------------|
| | | Sig. (2-tailed) | Mean Difference | Std. Error Difference |
| Hasil Belajar | Equal variances assumed | .000 | -33.3750 | 2.4711 |
| | Equal variances not assumed | .000 | -33.3750 | 2.4711 |

From the results of the calculation in table 4, a significant value (Sig. 2-tailed) was obtained of 0.00, less than 0.05. This means that the H_a hypothesis is accepted so that it can be said that the learning outcomes of students in the pretest and post-test are significantly different. Because of the significant difference, it can also be said that there is an influence of the application of the combination learning model in numeracy courses on student numeracy learning outcomes. In addition, based on the average learning score of students after being given the implementation of the NLCM learning model, there are also significant changes which can be seen in the descriptive statistical table of minimum and maximum scores after the implementation of the learning model. At the minimum score before the implementation of learning, the lowest score of prospective teacher students is 30 while the maximum score of students obtained before the implementation of learning is 67. Meanwhile, after the combination of the numeracy learning model was applied, there was a very significant increase, namely the minimum score of prospective teacher students to 67 while the maximum score of prospective teacher students was 80.29. Thus, based on the results of the T test and the results of the comparison of the learning scores of PGSD students before and after being given a combination of

Numeracy learning models, there are indeed significant differences. This very significant difference in values also proves the effectiveness of the learning model.

Meanwhile, based on the results of qualitative measurements, with observation techniques, the results were obtained that there were 24 students who were very enthusiastic about participating in learning, 17 of whom understood learning very well, 3 of whom understood, and some of whom understood quite well. In the skill category, 20 of them are in the good category and 4 of them are quite skilled. And the activeness category in the class, 22 of them were very active, and two of them were quite active. Thus, it can be concluded that students are very enthusiastic in participating in NLCM learning, understand the Numeracy material taught, are skilled in using and making learning media, and are very active in participating in learning activities. This can be seen from the following documentary evidence.



Figure 1. Students Participate and Participate in Making NLCM Learning Media



Figure 2. Students are Enthusiastic and Actively Participate in Learning Activities

The results of filling out the student reflection sheet showed that 20 students were very happy and enthusiastic about participating in this NLCM learning, 4 of them expressed their happiness and enthusiasm. They also wrote the hope that if all courses can use a combination in the learning model, they will be very happy and welcome. Then they also claim that they gained new knowledge in the implementation of the NLCM learning model. Meanwhile, from the results of the reflection, the teacher stated that the teacher is indeed happy to find a way for students who do not like counting activities to like counting, even using a combined learning model, new learning strategies, even teachers

sometimes share food for fractional material, as an illustration of learning on fractional material.

Discussion

This research is an evaluation research, namely using the evaluation of the Countenance Stake model which consists of three steps, namely antecedents, transactions, and outcomes. In the antecedents' step, in the context aspect, it was found that there are habits of children who are close to nature or are used to activities with life in the wild and wilderness, including hunting in the forest, looking for fish in the ocean and even rivers. This is the basis for researchers to use numeracy learning media that come from the surrounding nature, such as leaves, wood branches, fruits and also other natural materials that can be used as numeracy learning media. Based on research by Williamson, Ben (2024) stated that contextual learning media has rarely been provided since digital media was introduced (Williamson et al., 2024). Even though not all digital media is in accordance with the context needed by the school. So that contextual learning media needs to be applied. And the results of the application of contextual media were welcomed with enthusiasm by every student. Thus, indeed learning media must be provided according to the learning context.

Furthermore, at the transaction stage, the researcher conducts activities to record the implementation process or the actual application of the Combined Numeracy learning model. In this case, it was found that more than one learning model was applied, including the Contextual Learning Model, Experiential Learning and Jigsaw-type Cooperative learning model, which made students very excited, enthusiastic and actively involved in learning. In line with research conducted by Tonbuloglu, Betul and Tonbuloglu, Ismail (2023) stated that combined learning has the potential to be effective because each learning model has its own advantages and disadvantages (Tonbuloglu & Tonbuloglu, 2023). During the implementation of the Jigsaw-type Cooperative learning model, students were seen to be actively involved in learning in groups. In line with Paliling's research, Jein Putri et al. (2024) stated that Jigsaw-type learning is very helpful in making children's involvement in learning easier. However, there are a number of challenges in the implementation of this type of Jigsaw learning, namely if the number of students attending is not even.

If Jigsaw learning in the previous study was applied to Mathematics subjects, in this study it was applied to the Numeracy Literacy course and combined with two other learning models, namely the contextual learning model and Experiential Learning.

Research on combined learning models has been effective and improves students' competence in learning. Whether it's online and offline learning, artificial or natural and also a combination in other learning models. Among them is research by Jarvis, D.H., et al (2021) researching about a combination of On-line, Self-directed and Prerequisite Model learning models to improve Mathematics competence and confidence of nursing students (Jarvis et al., 2021). The result is that there is indeed an increase in competence in nursing students based on the DCCT test. And two other studies, namely Bohon, et al. (2018) and Köpeczi-Bócz, T (2024), stated that combination learning is effective in improving students' competencies and learning outcomes (Köpeczi-Bócz, 2024). Thus, if it is based on data at stage one aspect of the context of the combined numeracy learning model, it is indeed effective and in the transaction step, the implementation of the NLCM learning model is also effective in improving students' ability to learn. Because judging

from several advantages it has, it can bridge various learning styles of students, make students enthusiastic about learning and improve student abilities. Based on the documentation study, it appears that students are very enthusiastic and happy in learning. Or in another words, NLCM can improve the numeracy skills, increases student engagement, supports a more inclusive learning environment and addressing the diverse needs of South Papua's student population. Based on T-test, there is significance differences between the before and after learning process that can be shown in the results of the calculation in Table 4, a significant value (Sig. 2-tailed) was obtained of 0.00, less than 0.05.

The weakness of this learning model is that there is no official guide to using the learning model in question. However, conceptually, this model can be used and combined with various other learning strategies.

CONCLUSION

From the results of the Countenance Stake evaluation, there are evaluation results of three steps, namely antecedents, transactions, and outcomes. Based on the data in the antecedents' step, it was found that the purpose of the evaluation of the Countenance Stake model was to provide a detailed understanding of how the NLCM functions in practice and its overall effectiveness in improving numeracy skills among students in South Papua.

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