

Literacy Development Through Independent Learning Model in the Eastern Part of Indonesia

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Abstract

This research aims to determine the effect of the independent learning model assisted by plasticine media as a way to improve students' abilities in basic reading and writing so that it has an impact on elementary school students' phonemic awareness. The method used in this research is an experimental method with a comparison design of one group at regular time intervals before and after the intervention (time series design), this method focuses on using only one group. So, we did not use a control group. The data source in this research was 98 elementary school students. Data was collected using test, observation, questionnaire, and interview techniques. Hypothesis measurement result prove that there were 0 students who experienced a decrease between the pre-test and post-test scores for alphabet knowledge, there were 59 students who experienced an increase in scores between the pre-test and post-test scores, and there were 39 students who obtained pre-test and post-test scores the same. Based on output of the Wilcoxon

test, it can be concluded that the value of Asymp. Sig. (2-tailed) is $0.000 < 0.05$, so H_0 is rejected and it can be concluded that there is a significant influence from the application of the independent learning model assisted by plasticine media on the alphabet knowledge of elementary school students in Sorong Regency.

Keywords: Independent learning; plasticine media; basic literacy; reading ability; writing ability

Introduction

Literacy development plays a very crucial role in the world of education. The importance of literacy development according to Hadiananto et al. (2022) is focused on the nature of literacy as a fundamental and strategic factor because it is related to all basic human competencies in the midst of their social life. One of the basic competencies in this case is related to reading and writing competencies as important components for humans in carrying out their activities as social creature. Several previous studies that have been carried out, such as Axelsson et al., (2020); Nation (2019); Meldawati et al., (2023); Yusniah et al., (2023) have shown that literacy development, especially reading and writing literacy, is very important to develop from an early age to increase competence both academical and non-academically, research in the field of literacy development is still very limited to language skills separately. Furthermore, there is still no comprehensive research regarding how to develop literacy through independent learning models in eastern Indonesia. This research provides a new view that the application of authentic and targeted learning models can have positive impact on the quality of student literacy in a school.

The world of education is a close relationship between a teacher and students in the process of transferring value through learning. Effective learning will not be realized without being balanced with the quality of the teacher. In line with this paradigm, of course, in order to realize the quality of learning, it must be accompanied by improving the quality of teachers. A teacher is essentially required to have personality competence, pedagogical competence, social competence, and professional competence. Through these competencies, teachers play their role in the learning process in the learning environment. Act as a facilitator and mediator in the student learning process. The Minister of Education and Culture (2017) stated that a developed nation is not built solely by relying on abundant natural wealth and a large population. A great nation is characterized by a society that is literate, has high civilization, and is active in advancing world society. The social transformation of Indonesian society as explained by the Russian social and culture scientist, Alexei N. Tarasov in Kistanto (2018) explains that “dynamics is an attribute characteristic of culture, which includes the entire set of changes that occur in it under the influence of internal and external factor; its analysis provides research fund, mechanisms and processes that describe the changes”.

Through the expert explanation above, it can be concluded that the new paradigm of Indonesian national education must lead to the creation of an education system as a solid and charismatic social institution to shape the power patterns of all citizens so that they are able and proactive in responding to the challenges of the times which are always dynamic. The true aim and process of education is for the benefit of the prosperity of society in the future. This is in line with the paradigm Sujana (2019) which explains that from various perspectives regarding the function and goals of education it is clear that education seeks to create a nation that is capable, faithful, devoted to God Almighty and has good knowledge and national insight. Referring to the above, education in Indonesia continues to improve itself and develop and promote a literacy culture within the National Literacy Movement platform. In general, the aim of National Literacy Movement stated in Kementerian pendidikan & Kebudayaan (2017) states that to develop a

culture of literacy in the educational ecosystem starting from families, schools and communities in the context of lifelong learning as an effort to improve the quality of life. As a movement, literacy should be implemented continuously and sustainably. Thus, literacy becomes a priority program that must continue to be promoted to all Indonesian people in order to welcome the dignity of higher quality education in the future with all forms of competent literacy skills. One of the most basic literacy skills is reading skills and the highest is writing skills. As a form of productive skills, reading and writing skills are one of the language skills that everyone must have. Reading and writing in the world of education cannot be separated from the concept of language learning in general.

Language is an important tool in people's lives as a means of communication, both verbally and writing. Language in general can be interpreted as a system of arbitrary sound symbols (whichever one likes) resulting from human oral process which are characterized as dynamic, conventional, and universal. This is in line with the opinion of (Putra & Sumadi, 2020), which states that language is the main tool used by its users in every activity of their lives, both as individual and social beings. The concept of language learning cannot be separated from the four basic skills. Suhardi (2017) said that there are four types of skills that students must master during the learning process. Student's language skills are theoretically divided into two parts, namely receptive skills, and productive skills. According to (Fatimah & Kartikasari, 2018), a person's language skills consist of listening, speaking, reading, and writing skills. These four skills are the basis for learning Indonesian language and literature. Students should master every basic essence of every skill. So, able to communicate well verbally and non-verbally. Two of these four skills, namely reading and writing, are two form of skills that can be implemented integrative in the learning process so that can they be form a child's verbal and nonverbal skills talent.

In orders to support the improvement of these skills, every teacher must be able to plan appropriate learning strategies so that each skill can be taught optimally to students through education. According to Zuhairini in Sarbini & Lina (2011) explains that education is in harmony with the nature of human activities and conscious efforts to improve their personality by developing the potential of the spiritual personality (thinking, feeling, intention, creativity, and mind) with the physical personality (five senses). and skills). That is why, an appropriate language skills education system will have a positive impact on improving students' personalities both spiritually and physically.

Subandiyah (2017) in his research explains to reinforce the previous explanation, that a child's basic skills from the perspective of language skills, especially reading and writing, will be able to determine a child's success in mastering or understanding various other subjects. The concept of reading and writing in this case refers to the concept of beginning reading and writing. There has been a lot of research that has focused on learning to read and write beginnings, including one conducted by Rahmawati (2017) who put forward a concept of beginning reading and writing through the medium of colorful picture words to be able to attract children's attention to continue learning to read and write until the desired language competence emerges. Christianiti (2015) in his research emphasized that a child's ability to read and write begins at an early age by exploring the environment through the initial reading and writing stages. Meanwhile, research conducted by Rozak & Mulyati (2018) provides a solution to improve initial reading and writing skills by linking it to fairy tale literary literacy.

The concept of early reading and writing learning is generally a basic tool for guiding children to become independent readers and writers. Then, in the teaching process teachers must

be able to innovate with media that is appropriate to the development of children's character at school. Learning models are another important thing that supports a child's linguistic development. Accuracy in carrying out learning activities will have a positive impact on the process of digesting knowledge in the school environment.

Efforts that can be made to develop students' abilities in this case can be through an independent learning model. The independent learning model in the world of education is more often known as Self Directed Learning. In Sukmono (2015) it is explained that the Self-Directed Learning technique is a constructivist model that focuses on students as the center (student centered) which is based on the paradigm pioneered by John Dewey which states that every person has unlimited potential to grow and develop. The development of a person's potential in the concept of independent learning can take place well if a child as a student has full responsibility for their learning activities or the teacher can direct it towards meaningful learning.

Broadly speaking, the learning process in the concept of independent learning is divided into three interrelated stages, including; 1) planning stage; 2) monitoring stage; 3) evaluation stage. Then adapting from Song & Hill (2007) which views this model as a personal attribute in the learning process. In this research, independent learning techniques are then paired with supporting media that can improve the quality of students' abilities. According to Setiawan et al (2023), learning media will have an impact or influence on students in understanding the lesson material presented by the teacher (Barbe et al., 2023; Husnia et al., 2023; Wang, 2024).

Based on the concept explained, the concept of the independent learning model is based on the paradigm that all or almost all student will be able to learn knowledge or skills well as long as they are provided with time that suits their learning needs. Every student has the competence and effort to understand something they are learning. The mastery stage depends on the quality of the learning experienced. The independent learning model is a model that focuses on efforts to ensure that all students master the expected learning outcomes in one material before moving on to the next learning material. This model requires sufficient time and quality of the learning process. Thus, the importance of independent learning skills and literacy skills in children's reading and writing learning at the early elementary school level (phase A: Grades 1 & 2) in based on curriculum demands for the quite complex competency needs of Phase A children. Nurcholis & Istiningsih (2021) stated that elementary school level learning with reading and writing literacy development material is one of the materials and competencies that students at the elementary level must have and master.

Literature review

Independent learning

The concept of independent learning in the world of education is more often known as Independent Learning. In Sukmono (2015) it is explained that the Independent Learning method is a constructivist model that focused on students as the center (student centered) which is based on the paradigm pioneered by John Dewey which states that every person has unlimited potential to grow and develop. The development of a person's potential in the concept of independent learning can take place well if a child as a student has full responsibility for his or her learning activities. Or the teacher can direct it to meaningful learning. Broadly speaking, the learning process in the concept of independent learning is divided into three interrelated stages, including; 1) planning stage; 2) monitoring stage; 3) evaluation stage. Then adapting from Song & Hill (2007) which views this model as a personal attribute in the learning process.

Independent learning does not mean learning activities are carried out individually. Independent learning is not defined as an attempt to alienate student from their friends or study groups and separate students from their teachers. A very crucial thing in the concept of independent learning is increasing students' abilities and skills in the learning process without the help of other people. So that in the final stage, students do not experience dependence on the teacher and their study group friends.

Basic reading and writing ability

The concept of beginning reading and writing is generally a strategic stage in the learning process for elementary school students at lower grade levels. In this concept, students learn to have competencies related to basic reading and writing techniques and are able to capture the content of reading well. Basic reading and writing is used as basic learning material for lower grade students so that students have phonemic awareness. In the basic reading and writing concept there are two learning phases. The first phase, namely initial reading, is oriented towards children's ability to change and pronounce written language symbols into meaningful sounds. In this phase, it is very possible for children to be able to pronounce the letter symbols they read without being accompanied by an understanding of the sound symbols. In the initial reading phase, according to Tarkensley (Damaianti, 2021) phonemic awareness plays a very important role in forming the basis of reading ability. Phonemic awareness plays a very important role in forming the basis of reading ability. Phonemic awareness is the ability to hear and manipulate phonemes, which are the smallest parts of spoken language. One of the main components that determines a reader's readiness when learning to read is the ability to combine sounds into a single unit of words and meaning. The second phase, namely initial writing skills, is oriented towards mechanical abilities. Students are trained to be able to write written symbols which, when arranged in a structure, become meaningful. Furthermore, through these basic skills, students are slowly led to the ability to write fluently.

Research method

Research design

The research design that is considered feasible and relevant in this research is the method. This research is essentially development research. Based on the explanation (Rayanto & Sugianti, 2020) that development research has a series of procedures that can not be separated from each other. In this research, referring to the concept developed by Willis & Wright (2000) explain the development research model using the R2D2 (Reflective, Recursive, Design, and Development) work pattern. The research design in this case can be understood through the following figure:

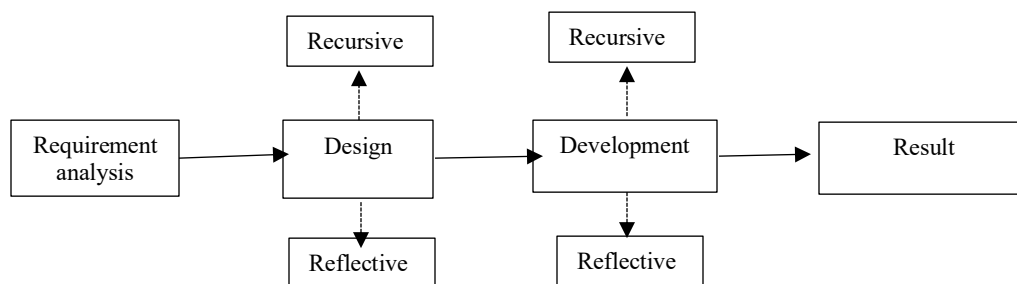


Figure 1. Research design through modeling pattern R2D2

Sampling

The sample used in this research was 98 students in Eastern Indonesia who were in the age range of 7-8 years old. The sample collection technique in this case uses the Purposive Sampling technique. According to Rinaldi et al. (2020), the purposive sampling technique (judgmental sampling) explains that samples are taken by selective subjects based on specific criteria set out in the research. The 98 samples from this research will be tasted in learning reading and writing literacy using an independent learning model assisted by plasticine media. The next sample was 119 teachers in Eastern Indonesia who were used as reinforcement for the development paradigm in this research through a questionnaire filling system distributed online.

Instruments

The instruments used in this research include 1) a reading learning evaluation instrument to measure the level of students' reading ability through the application of an independent learning model; 2) writing learning evaluation instrument to measure the level of students' writing abilities through the application of the independent learning model; 3) the TBQ (Teacher Believe Questionnaire) instrument to measure the level of confidence in the construction of students' reading abilities and the construction of writing abilities.

Data analysis

The method applied in this research is the experimental method. Research using an experimental method with a comparison design of one group at regular time intervals before and after the intervention (*time series design*). Sugiyono (2013) said that this design only uses one group. So, there is no need for a control group. Before being given treatment, the group in this study was given a pretest and continued with treatment using the application of independent learning techniques assisted by plasticine media in students' initial reading and writing learning and after that continued with giving a *posttest*. The following is the *time series design* table in this research:

Tabel 1. Analysis date table time series design

Pretest	Treatment	Posttest
X1	Y	X2

Information:

X1 : Pretest value before treatment

Y : Treatment of Plasticine-Assisted Independent Learning Techniques

X2 : Post Test value after being given treatment

The procedure in this research begins with determining the group that will be used as the experimental group. In this research design, only one group was used, so a control group was not used. The research group used was grade 1 student at elementary school. The next stage is giving an initial *pretest* to determine initial indicators of students' reading and writing skills. After the *pretest* has been carried out, the next step will be given *treatment* of independent learning techniques assisted by plasticine media to train students' understanding and awareness of phonological concepts. The treatment given to the experimental class was three treatments (making letters, reading letters and spelling letters). After giving the treatment, the experimental group was given a *posttest*, so that an overview of the gain value or the difference between the *pretest* and *posttest* scores was found and obtained.

The pretest scores and *posttest* scores describe the scores of Students reading and writing skills before and after being given treatment. Overall, the stages in experimental research are

detailed as follows. 1) Carry out initial observations and carry out licensing administration procedures; 2) Preparation and validation of instruments used in research activities; 3) sending the TBQ (*Teacher Believe Questionnaire*); 4) Carry out a pretest (initial test) before providing independent learning technique treatment; 5) Carrying out research activities (giving treatment using independent learning techniques assisted by plasticine media) in 3 meetings; 6) Carry out a *posttest* (final test) for students in the experimental group at the end of the meeting; 7) Analyzing research data.

Results and discussion

The independent learning model for developing literacy skills in this research is used to measure the impact or influence on the level of students' reading and writing abilities. These conditions include the existence of 1) interaction between students and teachers; and 2) the influence of learning media on students' skills. The development of reading and writing is applied to students through the design of an independent learning model through three core stages, including the following. Stage I: (Preparation) In the preparation stage, the important things that are directly related are preparing all the media needed to support the implementation of the model. What is prepared is plasticine media. Plasticine media in the process of learning to read and write for students at the basic level is able to improve their thinking power which is integrated with their sensory and motor skills in an integrative manner. Stage II: (Incubation) In the incubation or mechanism stage, there is a combination or pairing of literacy stages with learning themes. Stage III: (Illumination) In this illumination stage, a concept or method for pairing at the incubation stage is born. The concept that is born is a literacy concept or model.

This research uses instruments in the form of initial reading and writing test instruments, plasticine media, and independent learning media. Before conducting research, instruments and media first go through a validation process and it is declared that all instruments that have been determined are suitable for application. To analyze research data using statistical tests, a data normality test is first carried out, then a statistical test is carried out.

The results of this research begin with the outcome of a questionnaire on the level of teacher confidence in how to construct students' reading and writing abilities. In this case, a questionnaire was distributed to 119 teachers in Eastern Indonesia. Following are the percentage levels.

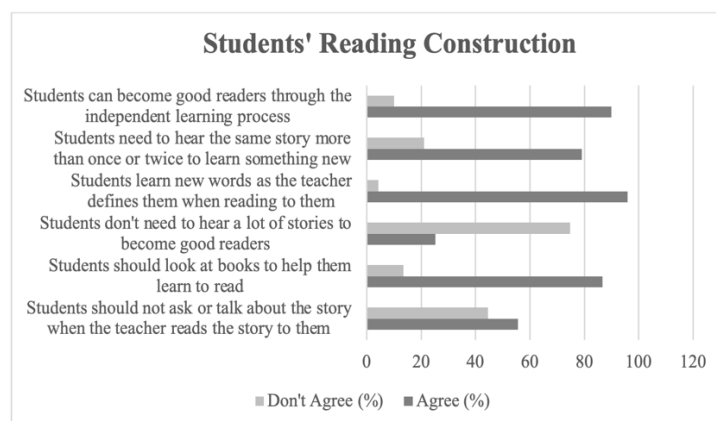


Figure 2. Teacher's statement regarding students' reading construction

Figure 2 shows that the highest level of teacher confidence regarding students' reading construction is found in aspect three, namely students learning new words as the teacher defines

them during learning, at 95.8%, while teachers who disagree are only 4.2%. It can be understood that basically, teachers still adhere to the principles of TCL (Teacher Centered Learning) and are in control of the learning process. Meanwhile, the level of teacher confidence regarding students' writing skills can be understood through the results of the following questionnaire data collection.

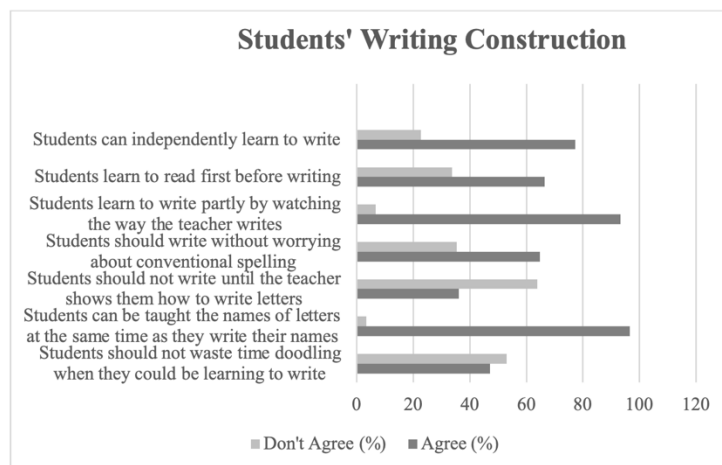


Figure 3. Teacher's statement regarding students' writing construction

Figure 3 shows that the highest level of teacher confidence regarding students' writing construction is found in the aspect that students can be taught the names of letters at the same time when they write their names with the highest percentage result being 96.6% and the lowest being 3.4%. This shows that the view of teachers in Eastern Indonesia regarding writing is that it is assumed that learning to read and write can be applied simultaneously or integrated. So, what is found in this development process is that literacy skills can be developed through an independent learning model scheme.

Reading ability test through the application of the independent learning model assisted by plasticine media

The results of developing a student reading literacy model were then tested in learning for 98 students using plasticine media. In a previous study conducted by Oktaviani et al. (2021), it was stated that the benefits of plasticine on children's fine motor skills are very influential. In practice, this research in learning to read provides opportunities for students to explore understanding of pronouncing letters one by one through assistance. The next stage is that students are independently given learning media in the form of plasticine media to measure the level of awareness of reading letters from the form of letters formed using plasticine. At this stage, students' abilities are measured in the learning process. Thus, producing ability value data as follows.

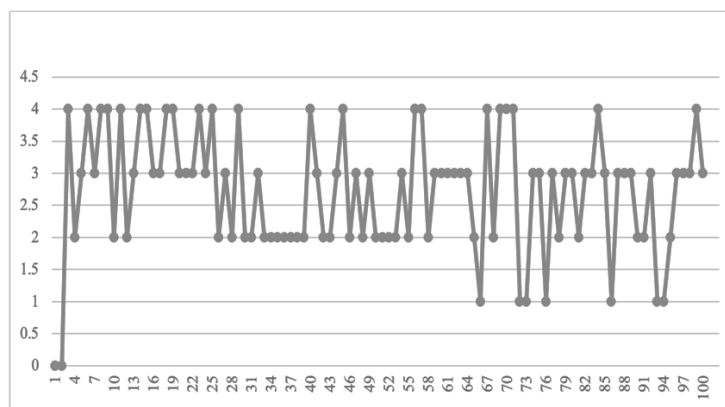


Figure 4. Results of students' reading abilities

The most striking result from this data is the average score obtained as depicted in the diagram above, it can be identified that the highest level of score obtained is 3 (39 students). These results show that there is a significant increase between before implementing the independent learning model assisted by plasticine media and after implementing the independent learning model. Students' letter reading skills increase.

Writing ability test through the application of the independent learning model assisted by plasticine media

Students' writing skills in their learning cannot be separated from reading skills. These two skills are a unit that supports each other. In relation to writing skills, several relevant previous studies were conducted by González-López (2021) which focused on the management of reading and writing learning at the elementary school level which provides an illustration that literacy learning (reading or writing) should be supported by adequate space management. Substantial differences with the results of this research focus on the research object. This research is more focused on the application of the model through the help of media to have an impact or influence on a student's skills. The following is the score of students' learning outcomes on writing ability through the application of the independent learning model assisted by plasticine media.

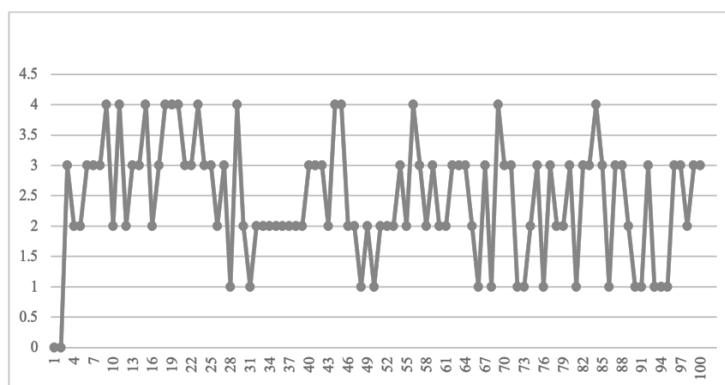


Figure 5. Results of students' writing abilities

The result that seems most dominant is score 3 (36 students). These results show that there is a significant increase between before implementing the independent learning model

assisted by plasticine media and after implementing the independent learning model. Students' letter reading skills increase. When paired with reading skills, the results of the writing ability test have quite strong relevance. It can be interpreted that the reading ability of students aged 7-8 years is in line with their writing ability.

Test of normality

Normality test hypothesis (Rinaldi et al., 2020):

H_0 : data is normally distributed

H_1 : data is not normally distributed

The following are the results of the normality test using statistical software.

Table 2. Tests of normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pre-Test	.239	98	.000	.822	98	.000
Alphabet Knowledge	.217	98	.000	.869	98	.000

a. Lilliefors Significance Correction

The normality test results shown in the table show that the p-value of the pre-test and post-test alphabet knowledge data is Sig. of 0.000. Because the p-value < 0.05, H_0 is rejected, so the two data are not normally distributed.

Statistic test

Because the pre-test and post-test data are not normally distributed, the statistical test used is the Wilcoxon test. The Wilcoxon test is a non-parametric test to test the hypothesis of two correlated samples Rinaldi et al. (2020), which in this research is the effect of applying plasticine media to alphabet knowledge in pre-test and post-test data. The following are the results of the Wilcoxon test with the t test hypothesis, namely:

H_0 : $\mu_1 = \mu_2$ (there is no significant difference between the pre-test and post-test averages)

H_1 : $\mu_1 \neq \mu_2$ (there is a significant difference between the pre-test and post-test averages)

Table 3. Ranks				
		N	Mean Rank	Sum of Ranks
Alphabet Knowledge - Pre-Test	Negative Ranks	0 ^a	.00	.00
	Positive Ranks	59 ^b	30.00	1770.00
	Ties	39 ^c		
	Total	98		

a. Alphabet Knowledge < Pre-Test

b. Alphabet Knowledge > Pre-Test

c. Alphabet Knowledge = Pre-Test

The Ranks table above shows that out of a total of 98 students, there were 0 students who experienced a decline between the pre-test and post-test scores on alphabet knowledge, which is shown in the *Negative Ranks* between the pre-test and post-test on alphabet knowledge with the value N, mean rank and Sum of Ranks is 0. Apart from that, there were 59 students who experienced an increase in their scores as shown in *Positive Ranks* with an N value of 59, a mean

rank of 30 and a sum of ranks of 1770. Meanwhile, students who obtained pre-test and post-test scores the same is 39 children, which is shown in *Ties* with an N value of 39.

Table 4. Test statistics^a

	Alphabet Knowledge – Pre-Test
Z	-7.320 ^b
Asymp. Sig. (2-tailed)	.000

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

Based on the output of the Wilcoxon test shown in the Test statistics table, it is shown that the Asymp. Sig. (2-tailed) of 0.000. This value shows that Asymp. Sig. (2-tailed) is $0.000 < 0.05$, so H_0 is rejected, with the conclusion that there is a significant influence from the application of plasticine media on elementary school students' alphabet knowledge.

Based on researchers' observations of 98 students who were given an independent learning model assisted by plasticine media in reading and writing the beginning of the alphabet, they seemed very enthusiastic about learning to understand letters independently. Students were given the same opportunity to increase phonetic and phonemic awareness independently through playing with plasticine. This then provides an equal opportunity to analyse one's own learning needs, overcome difficulties in understanding the shape and form of letters which then optimally leads to maximum basic reading and writing abilities. Patimah & Sumartini (2022) said that increasing learning independence can be done through appropriate learning models and media, this aims to familiarize students with independent learning. In this case, the model applied to elementary school students in Sorong Regency tends to be new to them because they are used to the TCL (Teacher Centered Learning) learning system where the learning center focuses on the teacher as a source of information. So, by using an independent learning model combined with plasticine as an interactive medium, students can more quickly understand the material independently through direct experience.

The plasticine media in this research automatically stimulates students' interest in learning in elementary schools because the colours and textures are very suitable and liked by children. Plasticine media is used for the learning process of forming letters that are arranged on paper to form syllables and words. In line with research Faizah & Fitriah (2021), plasticine media has the benefit of training sensory abilities which is one way for students to recognize things through touching textures, developing thinking abilities, increasing imagination and creativity, honing language skills, increasing social interaction abilities. Regarding the benefits of plasticine media in learning, it was also emphasized by Fitriani et al. (2022) and Oktaviani et al. (2021) who both emphasized that the benefits of plasticine media can improve children's fine motor skills which ultimately has an impact on the quality of their learning.

The final result of this research is that learning carried out through the application of an independent learning model assisted by plasticine media is able to increase students learning motivation and curiosity. This is in line with research result Bastari (2021) which say that learning is said to be successful when students' motivation and curiosity increase. In this case, students are no longer asked to study, resented with materials and question. However, students will construct their learning understanding from their own learning experiences.

Conclusion

Based on the results of data analysis on the influence of the independent learning model assisted by plasticine media on the basic reading and writing abilities of elementary school students in Sorong Regency from the results of the normality test, it can be seen that the p-value of the pre-test and post-test data on alphabet knowledge is Sig. of 0.000. Because the p-value < 0.05 , H_0 is rejected, so the two data are not normally distributed. Furthermore, out of a total of 98 students, there were 0 students who experienced a decrease between the pre-test score and the post-test score for alphabet knowledge, which is shown in the Negative Ranks between the pre-test and post-test alphabet knowledge with the N value, the mean rank and Sum of Ranks are 0. Apart from that, there were 59 students who experienced an increase in their scores as shown in Positive Ranks with an N value of 59, a mean rank of 30 and a sum of ranks of 1770. Meanwhile, students who obtained the same pre-test and post-test scores were 39 children, which is shown in Ties with an N value of 39. So, based on the output of the Wilcoxon test shown in the Test statistics table, it is shown that the Asymp. Sig. (2-tailed) of 0.000. This value shows that Asymp. Sig. (2-tailed) is $0.000 < 0.05$, so H_0 is rejected, with the conclusion that there is a significant influence from the application of plasticine media on elementary school students' alphabet knowledge.

Based on the results of the discussion in this research, it shows that the application of the independent learning model with the help of plasticine media can increase elementary school students' enthusiasm for learning in understanding basic alphabetical reading and writing material so that students experience more significant phonetic and phonemic awareness compared to the application of learning with traditional models in general. The plasticine media used also has very good benefits in stimulating students' fine motor skills which leads to the quality of the learning experience obtained by students.

Practically, this research provides suggestions to future researchers that are in line with this research in terms of the need to study in more depth the influence of independent learning models through integration with innovative learning media in a wider student learning environment. Because basically, this research has limitations in the research area which focuses on a small area which basically has natural student characteristics because it has not been seriously affected by the development of communication technology.

The scope of this research is limited in terms of the media used. This research only focuses on 1 main medium, namely plasticine, to improve students' reading and writing skills. As a suggestion, further research can dig deeper into innovative media that can support the use of this independent learning model in developing the literacy skills of children or students.

Declaration of conflicting interest

The researcher of this research state truthfully that the publication of this research has nothing to do with commercial or even financial relevance which could potentially trigger a conflict of interest.

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References

- Axelsson, A., Lundqvist, J., & Sandberg, G. (2020). Influential factors on children's reading and writing development: The perspective of parents in a Swedish context. *Early Child Development and Care*, 190(16), 2520–2532. <https://doi.org/10.1080/03004430.2019.1590348>
- Bastari, K. (2021). Belajar mandiri dan merdeka belajar bagi peserta didik, antara tuntutan dan tantangan. *Academia: Jurnal Inovasi Riset Akademik*, 1(1). <https://doi.org/10.51878/academia.v1i1.430>
- Barbe, K. ., Sakkir, G. ., Syafitri, E. ., & Dollah, S. (2023). using illustration images to enhance junior high school students' writing skills. *Journal of Language Learning and Assessment*, 1(1), 1–8. Retrieved from <https://e-journal.naifaderu.org/index.php/jlla/article/view/74>
- Christianti, M. (2015). Membaca dan menulis permulaan untuk anak usia dini. *Jurnal Pendidikan Anak*, 2(2). <https://doi.org/10.21831/jpa.v2i2.3042>
- Faizah, & Fitriah, S. N. (2021). Upaya meningkatkan hasil belajar siswa materi huruf hijaiyah dan harakat menggunakan media plastisin. *IQ (Ilmu Al-Qur'an): Jurnal Pendidikan Islam*, 4(01). <https://doi.org/10.37542/iq.v4i01.143>
- Fatimah, F., & Kartikasari, R. D. (2018). Strategi belajar dan pembelajaran dalam meningkatkan keterampilan bahasa. *Pena Literasi*, 1(2). <https://doi.org/10.24853/pl.1.2.108-113>
- Fitriani, A., Hasanah, U., & Nopiana. (2022). Meningkatkan perkembangan motorik halus anak melalui media plastisin. *El-Athfal: Jurnal Kajian Ilmu Pendidikan Anak*, 2(02). <https://doi.org/10.56872/elathfal.v2i02.833>
- González-López, M. (2021). Teaching management to reading and writing in children of elementary school. *International Journal of Educational Administration, Management, and Leadership*. <https://doi.org/10.51629/ijeamal.v2i1.17>
- Hadianto, D., S. Damaianti, V., Mulyati, Y., & Sastromiharjo, A. (2022). Effectiveness of literacy teaching design integrating local culture discourse and activities to enhance reading skills. *Cogent Education*, 9(1). <https://doi.org/10.1080/2331186X.2021.2016040>
- Husnia, Nur, S., & Abduh, A. (2023). Students' learning styles in blended English learning in an Indonesian private school. *Journal of Language Learning and Assessment*, 1(1), 26–43. Retrieved from <https://e-journal.naifaderu.org/index.php/jlla/article/view/68>
- Kementerian pendidikan, & Kebudayaan. (2017). Panduan gerakan literasi nasional. *Panduan Gerakan Literasi Nasional*, 50.
- Kistanto, N. H. (2018). Transformasi sosial-budaya masyarakat Indonesia. *Sabda : Jurnal Kajian Kebudayaan*, 13(2). <https://doi.org/10.14710/sabda.13.2.169-178>
- Meldawati, S. F. ., & Hamid, A. H. A. . (2023). Students' strategies and self-efficacy in reading comprehension. *Journal of Language Learning and Assessment*, 1(1), 9–18. Retrieved from <https://e-journal.naifaderu.org/index.php/jlla/article/view/75>
- Nation, K. (2019). Children's reading difficulties, language, and reflections on the simple view of reading. *Australian Journal of Learning Difficulties*, 24(1), 47–73. <https://doi.org/10.1080/19404158.2019.1609272>
- Nurcholis, R. A., & Istiningsih, G. (2021). Problematika dan solusi program literasi baca-tulis siswa kelas rendah di SD Negeri Butuh. *Jurnal Ilmiah Profesi Pendidikan*, 6(2). <https://doi.org/10.29303/jipp.v6i2.206>

- Oktaviani, S., Priyantoro, D. E., & Hasanah, U. (2021). Penggunaan media plastisin dalam mengembangkan motorik halus di KB Nurul Arif. *Ijigaed: Indonesian Journal of Islamic Golden Age Education*, 2(1). <https://doi.org/10.32332/ijigaed.v2i1.3781>
- Patimah, E., & Sumartini, S. (2022). Kemandirian belajar peserta didik pada pembelajaran daring: Literature review. *EDUKATIF: JURNAL ILMU PENDIDIKAN*, 4(1). <https://doi.org/10.31004/edukatif.v4i1.1970>
- Putra, T., & Sumadi, S. (2020). *Bilingual dictionary development mechanism the area of the archipelago as a way of coaching and language retention in the era of globalization*. <https://doi.org/10.4108/eai.25-6-2019.2294277>
- Rahmawati, R. (2017). Strategi pembelajaran membaca dan menulis permulaan melalui media kata bergambar. *SAP (Susunan Artikel Pendidikan)*, 1(3). <https://doi.org/10.30998/sap.v1i3.1159>
- Rayanto, H. Y., & Sugianti. (2020). Penelitian pengembangan model ADDIE dan K2D2 teori dan praktek. Lembaga Academic & Research Insitute.
- Rozak, R. W. A., & Mulyati, Y. (2018). Sastra dongeng dalam pembelajaran membaca dan menulis permulaan. *Deiksis: Jurnal Pendidikan Bahasa Dan Sastra Indonesia*, 5(1). <https://doi.org/10.33603/deiksis.v5i1.860>
- Rinaldi, A., Novlia, & Syazali, M. (2020). *Statistika inferensial untuk ilmu sosial dan pendidikan*. IPB Press.
- Setiawan, H., Zulkarnain, M. R., & Afriani, D. (2023). Pengembangan media belajar mandiri matematika materi segitiga dan segiempat berbasis android. *Jurnal Pendidikan Sultan Agung*, 3(1). <https://doi.org/10.30659/jp-sa.v3i1.29258>
- Song, L., & Hill, J. R. (2007). A conceptual model for understanding self-directed learning in online environments. *Journal of Interactive Online Learning*, 6(1).
- Subandiyah, H. (2017). Pembelajaran literasi dalam mata pelajaran bahasa indonesia. *Paramasastra*, 2(1). <https://doi.org/10.26740/parama.v2i1.1502>
- Sugiyono. (2013). Metode penelitian pendidikan pendekatan kuantitatif, kualitatif, dan R&D. Bandung: Alfabeta
- Suhardi. (2017). Menguak linguistik pendidikan dalam pembelajaran bahasa. *E-Journal Undip*, November.
- Sujana, I. W. C. (2019). Fungsi dan tujuan pendidikan Indonesia. *Adi Widya: Jurnal Pendidikan Dasar*, 4(1). <https://doi.org/10.25078/aw.v4i1.927>
- Sukmono, N. D. (2015). Metode pembelajaran self directed learning berbasis ict dengan pemanfaatan game android berkarakter untuk pembelajaran bahasa Indonesia. *Seminar Nasional Pendidikan Bahasa Indonesia 2015*.
- Wang, R. (2024). Storytelling in higher education: Comparing expectancy- value in task-exposed and non-exposed English learners. *Journal of Language Learning and Assessment*, 2(2), 73–84. Retrieved from <https://e-journal.naifaderu.org/index.php/jlla/article/view/111>
- Willis, J.W., & Wright, K. (2000). A General Set of Procedures for Constructivist Instructional Design: The New R2D2 Model. *Educational Technology archive*, 40, 5-20.
- Yunisah, N., Arifin, A., & Ridwan, R. (2023). Improving reading comprehension of narrative text by using l-b-a (literature-based approach) at the ninth-grade students of SMP Negeri 1 Nunukan. *Journal of Language Learning and Assessment*, 1(2), 62–72. Retrieved from <https://e-journal.naifaderu.org/index.php/jlla/article/view/100>