



Peer-Mediated Initial Reading Intervention Strategies for Students with Initial Reading Difficulties

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ABSTRAK

Kesulitan membaca permulaan merupakan fenomena yang terjadi hampir setiap tahun ajaran di sekolah dasar. Dalam merespon fenomena ini, layanan yang dikembangkan adalah layanan pembelajaran remedial. Dalam pelaksanaannya, layanan pembelajaran remedial masih menjadi perdebatan. Pada satu sisi, layanan remedial lebih melihat dari sisi efektivitas pelaksanaan kegiatan, namun pada sisi lain masih belum menjawab kebutuhan holistic siswa. Penelitian ini dikembangkan dengan tujuan mengembangkan strategi intervensi dalam melayani kebutuhan belajar membaca siswa dengan kesulitan membaca tanpa harus melayani mereka di kelas khusus. Subjek dalam penelitian ini adalah dua orang siswa dengan kesulitan membaca permulaan yang terdapat di kelas tiga pada salah satu sekolah negeri di wilayah Jakarta Timur. Metode penelitian ini adalah metode penelitian pengembangan. Pada tahap pertama dilakukan assesmen kesulitan membaca pada siswa. Selanjutnya dikembangkan strategi yang dibutuhkan dan terakhir menganalisis efektivitas strategi yang digunakan melalui grafik visual capaian hasil intervensi. Hasil penelitian ini menunjukkan bahwa melalui strategi intervensi yang dikembangkan dapat memberikan kesempatan untuk meningkatkan keterampilan membaca awal siswa. Hasil ini berimplikasi pada model layanan pendidikan bagi siswa dengan kesulitan membaca permulaan dalam meningkatkan keterampilan membaca permulaan.

ABSTRACT

Initial reading difficulties are a phenomenon that occurs almost every school year in elementary school. In response to this phenomenon, the services developed are remedial learning services. In its implementation, remedial learning services are still a debate. On the one hand, remedial services look more at the effectiveness of activity implementation, but on the other hand still do not answer the holistic needs of students. This research was developed with the aim of developing intervention strategies in serving the reading learning needs of students with reading difficulties without having to serve them in specialized classes. The subjects in this study were two students with initial reading difficulties in the third grade of one of the public schools in East Jakarta. This research method is a mixed method. In the first stage, an assessment of reading difficulties was carried out on students. Furthermore, the required strategy is developed and finally analyzes the effectiveness of the strategy used through visual graphs of the achievement of intervention results. The results of this study suggest that through the intervention strategies developed can provide opportunities to improve students' early reading skills. These results have an implication on the development of educational service models for students with beginning reading difficulties in improving beginning reading skills.

1. INTRODUCTION

Early reading difficulties are characterized by students' difficulty in reading a series of letters in a word. It is further explained in several findings that The form of reading difficulty shown is Difficulty in spelling, deletion of letters, insertion of letters, reversal of letters and incorrect pronunciation of letters (Nurani et al., 2021; Sulaiman, 2017), recognizing letters and arranging letters into syllables and syllables into words (Istiqoma et al., 2023; Septiana Soleha et al., 2021), Difficulty identifying letters and putting letters together, reversing letters, changing words, omitting letters in word order, halting spelling, pronouncing words incorrectly (Meo et al., 2021; Pridasari & Anafiah, 2020). When described, initial

reading problems start from students' difficulties in carrying out the decoding process or breaking graphonic codes into speech codes (Bar-Kochva et al., 2021; Broce et al., 2019). This problem can be motivated by obstacles to the development of phonological awareness (Adhani et al., 2016; Suardi et al., 2019). However, other predictors were found that caused problems that did not involve phonological awareness problems. Previous research found that initial reading difficulties can occur due to the learning process and/or factors contained in the curriculum (Rohman et al., 2022). Thus, it is possible that the initial reading difficulties that occur in students are not only due to internal factors but also due to external factors.

Early reading difficulties have a direct impact on students' academic achievement. Previous research found that of 220 respondents, 85% of respondents had excellent academic achievements (Leahy & Fitzpatrick, 2017). This is due to his excellent reading ability. The higher the class a student occupies, the greater the need for reading that influences academic performance. Other research suggests that students who have good reading skills will also have good results (Halawa et al., 2020). Meanwhile, on the other hand, when a student's reading ability is in the low category, it will also have an impact on low academic achievement. This low academic ability then has an impact on living conditions.

In response to this phenomenon, interventions have long been developed that aim to help students with reading difficulties get out of their difficulties. Special guidance will be very helpful in resolving students' learning problems caused by psychological factors (Setyawan et al., 2020; Wijayanti et al., 2020). Meanwhile, children with specific learning difficulties need special programs in the form of remedial and individual learning programs. Previous research found that remedial services are services that can be developed to overcome students' difficulties in reading (Suprihatin, 2015). Other researchers suggest that remediation is an effort to help students with reading difficulties develop their abilities (Putra et al., 2016). From these three findings, reading difficulties can be treated through a remedial approach.

The remedial learning approach is the setting most preferred by teachers in overcoming the initial reading difficulties faced by students. This is done by teachers so that they can focus more on providing the services needed (Krismanto et al., 2015; Wahiddah et al., 2022). Basically, remedial learning requires an observation process regarding improving student abilities carried out by the teacher in a natural setting, namely classroom activities. Thus it can be seen that the application of a remedial learning approach is essentially not just about attracting students with reading difficulties into special classes but also requires a separate process in generalizing students' abilities that develop in their natural class (Kurniawan et al., 2018; Nurcholis & Istiningsih, 2021).

In terms of students' psychological development, students essentially want to always be in their group. This developmental task led to the emergence of another phenomenon in the implementation of remedial learning services which was subsequently discovered, namely class remedial gives students the opportunity to lose their friends (Anshori, 2014; Kamaluddin, 2017). This fact illustrates that remedial classes have an unfavorable social impact on students. Apart from students feeling like they have lost their friends in the remedial process, on the self-esteem side it was found that there is not a direct correlation between the increase in students' reading skills as an effect of remedial learning services and the psychological problems faced by students, namely students' self-esteem (Bashori, 2017; Septikasari & Frasandy, 2018). Previous research adds to its findings regarding the opinions of students who take remedial classes, namely the tendency for repetition, pretense, and boredom (Wijaya et al., 2019).

Reading is part of the language development process that occurs in individuals. Reading is a process of receptive language through visual symbols. The activity of solving graphonic symbols occurs in the reading process (Istiqoma et al., 2023; Pratama et al., 2022). In this way, there will be a relationship between letters as graphonic symbols and spoken language. Words in Indonesian are formed in syllables or in other words, the elements that form words in Indonesian are syllables (Maruti, 2022; Fitriyah Nur Rohmah & Bukhori, 2020). This is also related to the script developed in Indonesian culture. The traditional characters that developed in Indonesian literacy are not romance letters. In its development, Indonesian was strongly influenced by Malay. The traditional Malay script is the Arabic-Malay script (Febriani, 2021; Mohamad Johan, 2018). The Arabic script, like the scripts of other Asian nations, is rich in variations of symbols (Abudayeh & Dubbati, 2020; Bradley et al., 2020). These findings then provide guidance that in essence the scripts that developed in the Asian region are syllabic, including those that developed in Indonesia, such as the Sanskrit script. In Sanskrit, all vowels are phonemic and all consonants are syllabic. It is clear that in essence the original script of the Indonesian nation is a script that represents syllables.

The thinking presented previously provides a basis for thinking that the method that is closest to the spoken language used by the Indonesian people is syllables. Empirical data found in Malaysia as a cognate nation that uses Malay is the result of research finding that students in Malaysia prefer to learn to

read using the syllable method (Lee & Wheldall, 2010). Based on this idea, the reading method developed is to use the syllabic method. Furthermore, other research found that teaching beginning reading using the syllable method can provide an opportunity to improve beginning reading skills (Asmaryadi, 2021). Other researchers found that through the syllable method, there was an increase in initial reading skills in grade I elementary school students (Nurani et al., 2021).

The context of peer involvement is based on the idea that essentially learning involves a process of interaction between people who have mastered an ability and people who have not yet mastered the ability being studied. (Rizkiah et al., 2020; Sriwulan, 2018). In the micro environment at school there are teachers and peers who can read fluently around students with reading difficulties. This gives an idea about whether students who are already fluent in beginning reading can be used as a learning resource for students with reading difficulties. In this way, students with reading difficulties do not lose their friends in the intervention process. This involvement of peers is in accordance with students' developmental tasks, namely living in groups (Almun & Ash-Shiddiqy, 2021; Candrakanti, 2023).

The results of the field study found that in essence peer involvement can ultimately make a positive contribution to students with learning difficulties in dealing with academic problems (de la Hera et al., 2022; Sytsma et al., 2019). These empirical findings can be a rationale for why peer involvement should be used in conducting interventions. In the phenomenon of reading difficulties, the success of peers in providing support for the development of their peers' reading abilities can also be proven (Kharizmi, 2015; Pridasari & Anafiah, 2020).

Peers are the subject of intervention which essentially needs to be directed by the teacher. This is because the learning objectives to be achieved are part of the tasks carried out by the teacher. Therefore, the interaction relationship between teachers and peers in providing opportunities to develop a person's abilities needs to be built well. Based on the problems and explanation above, this research aims to develop intervention strategies to serve the reading learning needs of students with reading difficulties without having to serve them in special classes.

2. METHOD

The aim of this study was to develop an intervention strategy. This study was conducted on two students with beginning reading difficulties in class III of a state elementary school in the East Jakarta area. The research results are not results intended for generalization purposes. This research uses development research methods. The research procedures carried out are, (1) conducting needs assessments, (2) product design in the form of intervention strategies, (3) product development, and (4) evaluation. Assessment of students' learning needs was carried out through interviews with school principals regarding the existence of students with initial reading difficulties which occurred in students starting from grade III. This is because class I and II students are still in the process of learning to read. Based on the interview with the school principal, the interview was conducted with the class teacher where the students with initial reading difficulties were located, namely class III. Based on the results of the interview, we conducted a beginning reading identification test to ensure that students had difficulty reading beginning. Identification tests are carried out to see how students' skills are in reading words, syllables and letters. Based on the test results, it was continued to determine students' phonological awareness. Through these two stages of the test, you will be able to understand whether students are experiencing problems with phonological awareness or decoding problems. Data analysis through this instrument was carried out using a descriptive analysis method, namely making a percentage of students' ability to answer in one aspect.

Strategy design development is carried out based on theoretical studies and empirical findings. Through reviewing these studies, a problem solving framework was then developed. Based on this framework, an intervention strategy design was developed. Development is carried out through validation from experts and teachers of the strategy design that has been developed at the hypothetical strategy design stage. Experts involved in validation activities are (1) Indonesian language experts from FPBS Indonesian Language study program lecturers, (2) Reading difficulties experts from Special Education study program lecturers, and (3) Special education experts from special education study programs. Validation was carried out through an FGD (discussion group forum) process with both experts and teachers via online methods. The instrument used was an interview guide.

The evaluation process is carried out through an experimental thinking framework. This framework of thinking is divided into two phases. The first phase is the phase where the initial reading skills of students with reading difficulties are measured before implementing the strategy product. The first phase is based on questions (1) how are students' decoding abilities? (2) what is the description of students' phonological awareness? The second phase is the strategy development phase which refers to

the question (1) what form of intervention strategy will be developed to overcome the problem of students' reading difficulties? How were the observations where the intervention strategy developed was implemented with reference to question (1) How did students' reading skills develop before and after being given the intervention?

3. RESULT AND DISCUSSION

Result

Based on the results of interviews with class III teachers at the direction of the principal, it was found that two students were suspected of having difficulty reading at the beginning of all classes above class III. Based on the results of the interview, an identification process was carried out. This process is carried out to determine whether students have difficulty reading at the beginning. The results of the identification of students' initial reading skills are shown in [Table 1](#).

Table 1. Description of Students' Reading Skills at the Beginning of Words and Sentences

No	Aspect	Name			
		Rs		Al	
		Qty	Score	Qty	Score
1	Reading basic words (independently)	1	20	2	40
2	Reading basic words (help)	2	40	1	20
3	Read affixes (independently)	2	40	2	40
4	Reading affixes (help)	2	40	1	20
5	Read sentences (independently)	2	40	1	20
6	Reading Sentences (help)	2	40	0	0

[Table 1](#) shows that the students' reading scores, both reading words and sentences, show results below the benchmark standard, namely 90. Even though students' reading, both words and sentences, have been given the help of syllable markers in the form of a different color for each syllable in a word or an underline for each syllable (example: bolaor ball) but the reading score results still show a value below the benchmark reference. Description of reading skills is shown in [Table 2](#).

Table 2. Description of Students' Syllable and Letter Reading Skills

No	Aspect	Name			
		Rs		Al	
		Qty	Score	Qty	Score
1	Identify vowels	5	100	5	100
2	Identify consonant letters	18	94.7	17	89.4
3	Identify diphthongs and duplicate consonants	2	33.3	0	0
4	Identify syllables with CV patterns	4	40	5	50
5	Identify syllables with VK patterns	1	20	1	20
6	Identify syllables with KVK patterns	2	20	1	10
7	K+diphthong	1	20	2	40
8	Digraph+V	0	0	1	20
9	CV+digraph	1	20	1	20

[Table 2](#) shows that both students were found to have the ability to read letters. All scores indicating reading letters have scores above or close to the benchmark reference. However, on the contrary, both students had difficulty reading a series of letters with both KV and KV patterns and other variations. Thus it can be concluded that students are not yet able to read a series of letters in syllables, words and sentences. What was conveyed by the class III teacher finally proved that students Rs and Al had difficulty reading. In order to find out more about the reading problems experienced by students, a search was carried out by identifying students' phonological awareness. Based on the results of the phonological awareness test, the results were found as shown in [Table 3](#).

Based on [Table 3](#), it can be seen that there were no problems found in students' phonological awareness. The average score obtained in answering questions raised in the phonological awareness test is above the reference standard, namely 90. The score for identifying the initial syllable is an ability that is below the reference standard. However, it is still in the threshold area. Thus, it can be concluded that the initial reading difficulties faced by students are not due to phonological awareness factors.

Table 3.Description of Phonological Awareness in Students

No	Aspect	Name			
		Rs		Al	
		Qty	Score	Qty	Score
1	Counting syllables	5	100	5	100
2	Compare the number of syllables between two words	5	100	5	100
3	Identify the final syllable	5	100	5	100
4	Identify the initial syllable	4	80	3	60
5	Identify the phoneme at the beginning	5	100	5	100
6	Identify the phoneme at the end	5	100	5	100
7	Mixing syllables to make words	5	100	5	100
8	Manipulation	10	100	9	90

Based on the results of the assessment that has been carried out, it was found that students' reading problems do not lie in students' internal problems. Therefore, the focus of problem solving lies in developing reading learning strategies. Intervention strategies were developed based on the studies presented in the initial section. If described, the basic rationale for the strategy developed is as stated in Figure 1.

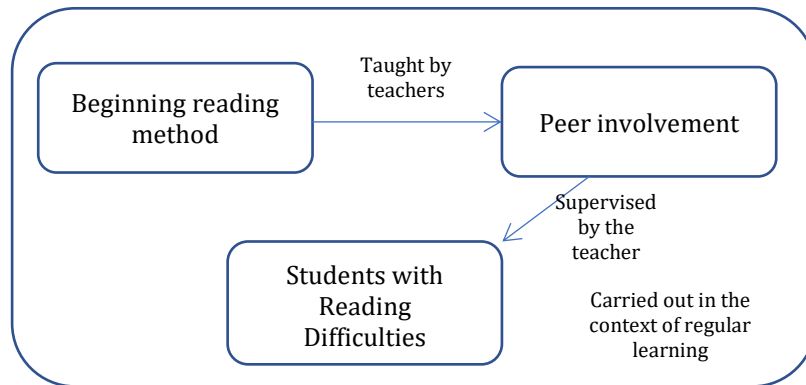


Figure 1.Theoretical Ideas Underlying the Development of Intervention Strategies

The three main elements in this strategy are the development of reading learning methods used, peer involvement and service settings carried out in the learning process in regular classes. Based on the validation results from both experts and class teachers and special guidance teachers who work in elementary schools, the strategy model developed is as described in Figure 2.

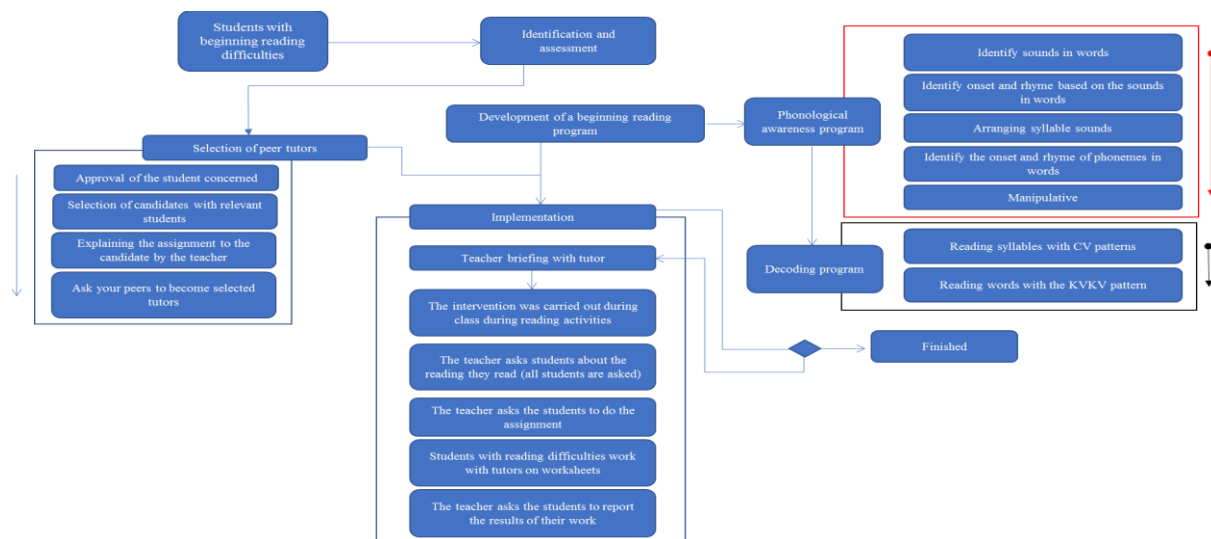


Figure 2. Beginning Reading Intervention Strategy Model for Students with Beginning Reading Difficulties based on Peers and implementation in Regular Classes

Results of Intervention Implementation

Based on the implementation of the intervention strategy on syllabic reading skills with the CV pattern, results were found as follows [Figure 3](#).

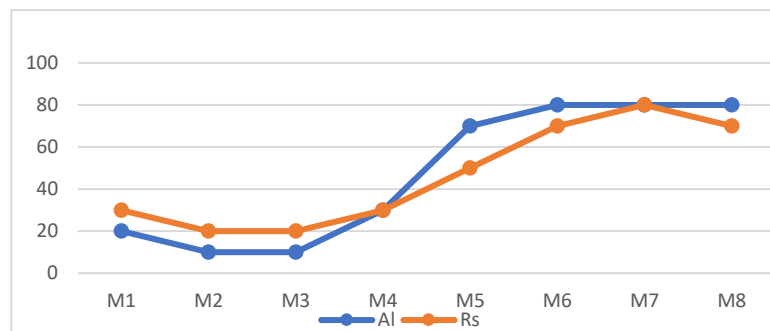


Figure 3. Syllable Reading Progression Chart

Through [Figure 3](#) Information was obtained graphically that there was a movement in students' skills in reading syllables with a directional trend towards increasing initial reading skills. Movement in a significant direction occurs between phase A (before intervention) and phase B (in intervention). In implementing the initial reading intervention strategy in the word reading category with the KVKV pattern, the data shown in [Figure 4](#).

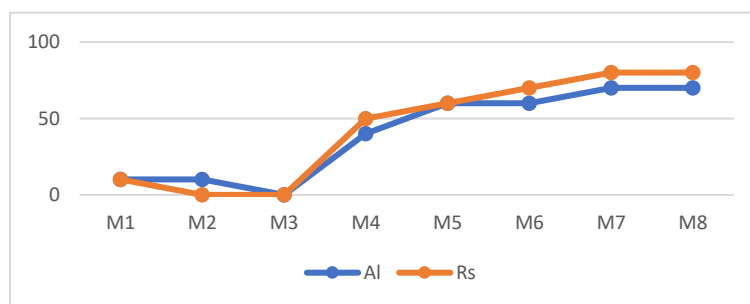


Figure 4. Word Reading Skills Development Chart

Through [Figure 4](#) graphical information was obtained that there was a movement in students' skills in reading KVKV pattern words with a directional trend towards increasing initial reading skills. Significant changes occur in phase A and phase B.

Discussion

Early reading difficulties are a phenomenon that may occur in elementary school. Even though there have been many developments regarding early reading methods, this phenomenon still occurs in schools. Previous research found that 31 grade III students at 7 elementary schools in East Jakarta had difficulty reading at the beginning ([Taboer et al., 2019](#)). Previous research found that as many as 25 people in elementary schools had difficulty reading at the beginning ([Iskandar et al., 2021](#)). These findings show that students with initial reading difficulties are still a challenge faced by teachers in elementary schools today. The initial form of reading difficulty is basically defined by a person's difficulty in translating written symbols into speech sounds until they become a sound unit that has meaning. ([Nurani et al., 2021](#); [Septiana Soleha et al., 2021](#)). The forms of difficulty that occur range from recognizing letters, reading a series of syllables and reading words. However, in this study it was found that the phenomenon of initial reading difficulties occurred only in the ability to read a series of syllables and words only ([Oktadiana, 2019](#); [Saputra & Noviyanti, 2022](#)). Thus, not all students with initial reading difficulties cannot read letters.

In the phenomenon of initial reading difficulties that are not motivated by problems with phonological awareness, it is strongly suspected that this occurs due to an inappropriate learning process. If broken down, early reading is part of the process of language development. Difficulty reading at the beginning in the Indonesian context can occur because there is a disconnect between the characteristics of word formation in Indonesian which are syllabic and the characters that represent ([Nurani et al., 2021](#);

Septiana Soleha et al., 2021). Other research suggests that a good character is when it represents one sound that is pronounced (Hadrawi & Agus, 2017). The effectiveness of learning involves various activities. Part of the involvement in various learning activities is motivated by self-confidence (Kamaluddin, 2017; Yulianingsih et al., 2020). This self-confidence is then closely correlated with self-esteem, therefore it is very reasonable to worry about the low self-esteem of students with reading difficulties regarding reading learning activities (Hidayati & Hidayah, 2020; Labudasari & Rochmah, 2019). Thus, intervention strategies must also consider the psychological side of learning, not just the development of learning methods alone.

Early reading intervention strategies that are developed based on peers and contextually are essentially developed in order to answer the learning needs of students with reading difficulties. The intervention that has developed in response to the need to develop initial reading skills for students with initial reading difficulties is through a remedial learning service approach (Aprinawati, 2018; Farah Nur Rohmah et al., 2022). One form of manifestation of remedial services is separating students with reading difficulties into special classes. This condition makes it possible that this could trigger behavioral problems in students in the future.

The effect of remedial services provided through special classes on students can ultimately be answered by inviting peers to become tutors in supporting the development of initial reading skills in students with reading difficulties. The involvement of peers as tutors in the strategy developed is essentially based on empirical findings regarding the effects of peer involvement in the intervention process on students who experience barriers to learning (Candrakanti, 2023; Yudha, R., 2020). Other research finds that students feel more comfortable when the intervention is carried out by their friends (Maheni, 2019). Comfort and progress in the learning outcomes obtained can be possible because peers and students with reading difficulties share the same culture, namely the child's culture. The success of intervention with peer support is also due to one of the cultures created by children being symbols in language (Cut Nizar, 2021; Rohmatun & Maryatun, 2022).

Neurologically, learning through contextual things is related to the brain's working capacity. The memory system will store concepts through events that connect them to the object being studied (Dewi & Retnoningtyas, 2019; Kline, 2011). In connection with the strategy developed, the syllables learned by students with reading difficulties with their tutors cannot be separated from the object of discussion in class when the learning process takes place. In this way, the syllables he reads are part of the words studied in class. Therefore, according to the findings of other researchers, it makes it easier for students to decode the syllables they read because they are stored well in students' memory (Bar-Kochva et al., 2021).

In the strategy developed, the reading method used is the syllable method. This method was developed on the basis of thinking that words in Indonesian are formed from syllabic elements (Nuraini & Abidin, 2020; Trisiantari, 2019). The fragments in word pronunciation consist of syllables. This fragmentation of syllables is then used as a symbol for scripts such as the Devanagari script in Sanskrit or the Jawi script in Malay (Alamsyah, 2016; Mohamad Johan, 2018). Thus, in essence, the script used in traditional languages in the development of script in the archipelago places more emphasis on symbols given the attributes of signs which ultimately symbolize syllables. The success of the syllable method developed in this intervention strategy lies in the connection between the student's natural condition when speaking and a series of letters that symbolize fragments of the words being spoken.

The initial reading skills intervention given to students is not given directly to students in the form of reading syllables. Students with reading difficulties are given advance skills in phonological awareness. The strongest predictor that influences an individual's ability to read is phonological awareness (Adhani et al., 2016; Farah Nur Rohmah et al., 2022). Phonological awareness is an individual's awareness of the sounds spoken. This awareness is important to connect the sounds of words with written symbols. If we review the initial reading teaching materials in elementary schools, especially in the 2013 curriculum, we do not find this activity when students start learning to read.

Furthermore, no phonological awareness activities were found when children studied in kindergarten. Thus it can be seen that initial reading is part of the language aspect. The relationship between aspects of language should not be separated. The relationship between spoken language skills must be connected in learning to read initially. In this way, the connection in learning a language cannot be separated.

4. CONCLUSION

Intervention for students with beginning reading difficulties can be done through peer support and implemented in a regular classroom setting. Intervention can no longer only be carried out in a special classroom setting and at a special time, nor can it only rely on interactions between teachers and students with initial reading difficulties alone. To be able to implement this strategy, the stages that can be

developed are; (1) assessing the initial reading abilities of students with reading difficulties, (2) selecting tutors, (3) developing intervention programs based on students' reading learning needs, and (4) implementing interventions during shared reading activities in the classroom.

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