

Breaking the Barriers: Flash Card Media's Role in Enhancing Literacy for Students with Special Needs

Zumrotul Mukaffa¹, Uswatun Chasanah², Majidatun Ahmala³

¹ Universitas Islam Negeri Sunan Ampel, Surabaya, Indonesia; zumrotulmukaffa@uinsby.ac.id

² Universitas Islam Negeri Sunan Ampel, Surabaya, Indonesia; uswatunchasanah@uinsby.ac.id

³ STAI Taruna, Surabaya, Indonesia; mazida23@gmail.com

ARTICLE INFO

Keywords:

Flashcard;
literacy skills;
students with special needs

Article history:

Received 2022-08-24

Revised 2022-10-27

Accepted 2023-09-05

ABSTRACT

This research is motivated by the phenomenon of the low literacy culture of the Indonesian people, which, according to UNESCO, are ranked 60th out of 61 countries. In a year, children in Europe and America can read about 25-27% of books, children in Japan are around 15-18%, while Indonesian children only reach 0.01%. The phenomenon of low interest in reading books also occurs in students with special needs at a private Elementary School. This study aims to improve the literacy skills of students with special needs at an elementary school using flash card media. This study uses an experimental approach, with a pre-experimental model carried out by (pretest-posttest design). The group observed was ten students with special needs in low grades with down syndrome, speech delay, meningitis, slow learning, and dyslexia. The results showed that the flash card media improved the literacy skills (reading at the beginning) of students with special needs with a significance value of $0.007 < 0.05$, which means that the statistical test significance of reading skills scores is smaller than the significance limit value. The improvement of literacy skills (reading the beginning) is also influenced by attractive, illustrated and colourful flash card media design. This results in students being more interested in learning to read and more accessible to understanding the studied concepts.

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Corresponding Author:

Uswatun Chasanah

Universitas Islam Negeri Sunan Ampel Surabaya, Indonesia; uswatunchasanah@uinsby.ac.id

1. INTRODUCTION

The data of Children with Special Needs reported by databoks.katadata.co.id, from elementary to middle school totaling 144.621 students ((ed), 2021). This amount does not include the students with special needs at the kindergarten which allows much more. Therefore, schools and teachers need to give greater attention to the education of children with special needs, especially their literacy skills. The ability to interpret information critically to access science and technology to improve the quality of life (Republik Indonesia, 2017) is the right of everyone. However, this literacy ability is difficult for Children with Special Needs with developmental disorders and abnormalities, such as physical, mental, and social behaviour disorders (Atmaja, 2017).

Special handling of students with special needs (ABK) who experience learning barriers requires educational services following the developments experienced (Nur'aeni, 2019). Therefore, unique media for Children with Special Needs students is needed to help their literacy skills in processing and understanding information in reading and writing (Palupi, 2020) and help them strengthen their other literacy activities such as listening, speaking, reading, writing, and their ability to think which becomes elements in language skills (Padmadewi, 2018). One of the media for learning to read, namely flashcards, is a learning medium that carries a series of messages (Susilana, 2008) and has various functions such as attentional, affective, cognitive, and compensatory functions (Arsyad, 2011), which are considered capable of solving problems in literacy. Various studies have also shown that flashcard media can improve students' reading ability with a significant increase.

The previous study in this research includes research by Yunus et al which discusses the importance of educational services for children with special needs by providing assistance for students who have limited hearing or deaf, providing front seats for deaf students so they can read the teacher's lips and giving back seats for autism and tantrums so as not to disturb their classmates (Yunus, As, Hasyim, Yahya, & Sapinah, 2021). Stefani and Syamsiyah's (2021) research discusses in more detail the ability of children with special needs in recognizing words using flashcards. In the results of their research it is said that flashcards really help students in pronouncing words even though even though the level of word choice and speaking still needs to be improved. Furthermore, Sri Hardiningsih et al. deepened the use of flashcards in learning for students who had learning difficulties (dyslexia) and the results showed that students were able to have initial skills in letter or word literacy (Hardiningsih, Komalasari, & Hakim, 2022). If the study the ability of children with special needs how flashcards were able to improve students' ability to pronounce words and letters, so in this study, literacy is given to children with special needs focused on analyzing the involvement of flashcards for students with physical, mental, and social behavior disorders. Thus, the increase in literacy given to children with special needs in this study was given according to the obstacles each student had, as in the research of Siska Angreni and Rona Taula Sari who said that improving the quality education was carried out by accommodating the educational needs of children with special needs according to the obstacles (Angreni & Sari, 2022).

The research was conducted at a private elementary school in the 2021-2022 academic year on 21 students with special needs with various classifications, communication barriers, cognitive, read write count to Down syndrome, to determine the effectiveness of using flash cards for children with special needs who are in every developmental wall, so that it is revealed literacy skills possessed by each student. Therefore, the purpose of this research is to contribute to the scientific treasures in the development of learning media and the implementation of literacy for students with special needs. This research can be applied as a reference for teachers in elementary schools to teach students with special needs to master basic literacy skills.

2. METHODS

This study uses quantitative research to test theories by detailing specific hypotheses and then collecting data that supports or refutes these hypotheses. The approach or strategy used is an experiment to assess behaviors before and after the experimental process. The primary purpose of experimental design is to examine the impact of a treatment or intervention on research outcomes controlled by other factors that may influence the results.

The type of experimental research design used in the study, namely: pre-experimental, in which the researcher observes one primary group and intervenes in it during the research process. In the pre-experimental design, the pretest-posttest procedure was carried out in one group that was observed (one group pretest-posttest design). The plan included one group honored at the pretest stage, which continued with treatment and post-test –tests (Creswell, 2013).

Group A: Pre-test _____ treatment _____ post-test

The population in this study were children with special needs at YAPITA elementary school, with as many as 21 students. The sample was determined through purposive categorization, namely: children with special needs (lower elementary grades) and had reading disabilities. From this categorization, it was found that ten students were suitable to be used as research samples: 1 student with speech delay, one student with meningitis, six students with slow learning, one student with Down syndrome, and one student with dyslexia. Data collection was carried out with the help of a particular instrument designed to assess behavior. The devices used in this research are: the literacy ability scale, aspects of beginning reading ability (phonemic awareness), and word recognition aspect.

The measurement used in this study is content validity, namely the validity estimated through testing the test content with rational analysis or through professional judgment. This content validity consists of two types, namely advance reality, which is based on an assessment of the scale appearance format, and logical validity, which refers to the extent to which the test content is representative of the attribute characteristics to be measured as determined in the size area (Azwar, 2013). This validity assessment is judgmental or carried out by a panel of experts, not by the author or designer of the item itself. Based on the content validity of the literacy scale, it can be used for the tryout stage.

After being validated by provisional judgment, namely YAPITA elementary school psychologist, class teacher, and inclusive student teacher, and it was stated that they could be used, continued with the distribution of the scale to try to determine whether the items could be used to differentiate, then used the selection of power of discrimination or power of discrimination with the help of SPSS 16.00 for windows. An item's discriminatory power is accepted if it meets the price rules for the correct item-total correlation coefficient of 0.30.

In the experimental procedure, there are two kinds of validity, namely 1) validity relating to the effects caused or internal validity, and 2) validity relating to the application of experimental results or external validity. An experimental result can be said to have high internal validity if the changes in the observed dependent variable are caused only by the treatment or intervention given in the experiment, not by more minor relevant factors. Description of the process in giving flash card treatment: 1) Preparation stage: starting with looking for theories about flash cards and reading skills. After finding the idea, the researcher begins to design the treatment used in the experiment, and then the researcher determines the research subject and prepares the experimental module; 2) The implementation stage: a) The researcher says the opening greetings and prayers at the beginning of the process of using flashcards in the classroom; b) researchers open the beginning of learning by taking attendance and brain gym; c) the researcher conveys the material for giving flashcards according to the module stages; d) the researcher controls the validity of the experiment during the activity by checking the list of experimental validity; 3) the final stage: a) the researcher conveys that the activity will be completed soon; b) researchers conduct questions and answers related to the material presented; c) the researcher summarizes the results obtained during the treatment process, and d) the prayer ends the activity. To determine the effectiveness of flashcards in improving literacy skills, statistical calculation of paired sample t-test analysis is used, where the pretest data will be processed and the average value and correlation to test the research hypothesis (Muhid, 2012).

3. FINDINGS AND DISCUSSION

The distribution of research measuring instruments was carried out on July 17, 2021, for ten children with special needs students. Statistical tests were carried out to determine the results of the validity and reliability of the literacy scale. To find out which items can be used to distinguish, then use the selection of power discrimination or power discrimination by using SPSS 16.00 for Windows. The results of item discrimination power or validity, from 35 assessment items, 33 items were accepted with a total item correlation coefficient of 0.30 or had high discriminatory power, which means that these items can be used to assess students' literacy abilities. Thus, the blueprint for the literacy ability scale is as follows:

Table 1. Literacy Skills Assessment Scale Blueprint

No	Aspect	Item Number	Total
1	Early reading skills (phonemic awareness)	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20	20
2	Word recognition	21,22,23,24,25,26,27,28,29,30	10
3	Deep reading	31,32,33	3

Reliability refers to the consistency or confidence of the measurement results, which implies the accuracy of the reliability measurement, which is expressed by the reliability coefficient ($r_{xx'}$), whose numbers are in the range of 0 to 1. If the reliability coefficient is closer to 1, the higher the reliability (Azwar, 2013).

In this study, the estimation of the reliability of the results of the scale measurement was carried out by the tryout method. Researchers used the SPSS program, Cronbach's Alpha, to measure reliability and its relationship with other reliability measurements. The results of this literacy scale show that the reliability coefficient value of the literacy skills research scale is 0.964. Hence, the valuable scale items are also very reliable, which means that all items are reliable as data collection instruments. The process of action or experimentation to improve literacy skills (reading the beginning) using flashcard media for students with special needs at YAPITA Elementary School was carried out 15 times with details of 1 pretest activity, 13 action activities, and one post-test activity. Pretest and post-test score data, are as follows:

Table2. Score Measurement Results Pretest and Post-Test

Subject	Barrier	Pre-tets	Pos-test	Description
Am	Down syndrome	35	36	Low
Fa	Slow learner	56	76	High
Da	Slow learner	75	79	High
Em	Meningitis	63	71	High
Ch	Speech delay	47	49	Low
Az	Slow learner	65	76	High
Nv	Slow learner	97	97	High
At	Slow learner	74	74	High
Zd	Dyslexia	64	86	High
Au	Slow learner	65	72	High

Based on the literacy skill measurement scale, a maximum score of 99 is obtained, where the total number of items is 33, with a full score of 3. Based on this score, the assessments are grouped into three groups, namely: low, medium, and high groups, with details: 1) low category from a score of 0 up to 33; 2) moderate category with a score of 33 to 66; 3) high category with a score of 66 to 99.

After being categorized, there are two students in the low category and eight in the high. The results of the examination scores obtained by each student show that there was an increase during the pretest and posttest in each child.

To find out the results of the effectiveness of the research, it is necessary to carry out statistical tests using paired samples tests on the scores of the pre-test and post-test results. The following is a statistical table of the paired or paired sample test.

Table 3. Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre Test	63.30	10	16.351	5.171
	Post Test	71.6000	10	17.41774	5.50797

Table 4. Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 Pre Test & Post Test	10	.902	.000

Table 5. Paired Sample Test

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	Pre Test- Post Test	-8.30000	7.55792	2.39003	-13.70661	-2.89339	-3.473	9	.007

Based on the Paired Sample Statistical analysis table, it is known that the average pretest value is 63.30 with a Standard Deviation of 16.35, and the post-test scale has an average value of 71.60 with a Standard Deviation of 17.41. This indicates an increase in literacy skills scores after learning using media flashcards. Through statistical analysis, paired sample test (paired sample statistical test) obtained a significant result of 0.007. To find out the results of hypothesis testing, it is necessary to compare it with 0.05, and the hypothesis is accepted if the significance value is <0.05. Based on the analysis results, a significance value of $0.007 < 0.05$ was obtained. This means that the statistical significance of the reading skill score is smaller than the value of the significance limit. Thus, there is an influence between flashcard learning media on improving literacy reading skills (reading the beginning) of students with special needs with positive scores. The positive value of significance indicates that there is a positive or directly proportional influence and is related to the use of flash card media and students' literacy skills. Where the use of flashcard media in reading learning activities is good and following the stages, the better and more effective it is in improving literacy skills.

Based on the results of statistical tests of data scores on the effect of flashcard media to improve the literacy skills of students with special needs at YAPITA Elementary School. So, the research hypothesis is accepted. This means that flashcards effectively improve literacy skills for students with special needs at YAPITA Elementary School. Children's level of knowledge and literacy skills must be a particular concern in literacy activities at school, especially in reading and writing. The following are seven levels of reading ability which are equivalent to the level of education:

Table 6. Reading Level Equality

Equality of education levels	Reading ability
Early Childhood Education/Kindergarten	Pre-reading
Elementary School Student Grade 1	Early reader
Early School Students Grade 2 and 3	Early reader
Junior High School	Advanced reader
Senior High School	Proficient reader
College	Critical reader

Overall, it went smoothly while delivering experimental material, namely learning to read with flashcard media to improve initial reading. However, some students experienced problems due to the

diversity of abilities, needs and characteristics of the student's circumstances. Early reading aims to recognize language symbols or symbols, recognize words and sentences, find main ideas and keywords, and retell the contents of short lessons (Iskandarwassid, 2008). The initial reading process includes introducing letters as symbols of language sounds and reading content and is given to low-grade elementary school students (Sri Wulan Anggraeni, 2020). The use of flashcards in early reading learning in this study was carried out according to the needs of students with special needs and abilities.

The accompanying teacher for SD Capita, Mrs FAM, said that SD Yapita carried out various kinds of learning innovations according to the characteristics of elementary school students, namely: likes to play, likes to move, likes tangible things, has difficulty understanding abstract things, and pleasant to watch. Therefore, SD Yapita continues to innovate in providing literacy learning to students with special needs, using individual and classical methods, tiered books, false cards, and others.

This investigation examines the proficiency of students at YAPITA Elementary School in utilising flash card media as a kind of literacy media, with a focus on identifying the difficulties encountered during the learning process. Students with special needs face barriers related to slow learning abilities. Students who encounter obstacles related to sluggish learning, namely children who possess intellectual conditions that deviate somewhat from the norm or fall below the average range for their age group. Students who engage in slow learning exhibit a reduced capacity to acquire knowledge at a rapid pace compared to their typically developing peers and may experience difficulties in effectively solving issues within the designated time constraints.

Children with slow learning have cognitive abilities that are less good than normal children, have weaknesses or delays in processing information, have weak memory compared to normal children, and have impaired learning concentration and short attention spans. Learners with slow learning disorders also experience difficulties and obstacles to abstract thinking, causing slow learners' inability to express ideas and ideas more precisely and having poor abilities to maintain their attention or lack of concentration (Hassan & Mahmud, 2018). With slow learner conditions as described in theory above, in the process of action, students with slow learner barriers need media that shows a concrete picture of the initial reading material, such as if a slow learner learns the word "shoes" then it will be easier for him to understand the word "shoes". " with flash card media equipped with pictures of shoes and so on.

The inclusion of visual elements in text is a beneficial feature of flash card media. According to Susana and Riyana, it has been asserted that the act of moving or transporting objects is a straightforward task. Flashcards provide the advantage of being compact in size, rendering them convenient to store within limited spaces, such as pockets. Furthermore, their portability allows for its utilisation in various settings, including both classroom and lecture hall environments. Consequently, flashcards are deemed more pragmatic in nature. When utilising this media, the teacher is not required to possess specialised skills or knowledge, nor is it necessary for them to engage in prior practise. The specific sort of flash card in question does not necessitate the use of electrical power. The utilisation of flashcards involves the organisation of visual content in a desired sequence, hence facilitating ease of memorization. Flashcard media possesses many distinguishing features. Firstly, it comprises individual cards, each bearing concise textual content or brief messages. This attribute facilitates enhanced retention of the conveyed information or text by students. Additionally, the utilisation of flashcard media is accompanied by engaging and enjoyable experiences, since it often incorporates vibrant colours and is employed within the context of interactive games. As an illustration, pupils engage in a competitive activity wherein they are tasked with locating letters or syllables in accordance with the directives provided by the teacher. Furthermore, flash card media possesses the advantage of enhancing the cognitive ability of the right hemisphere by facilitating the retention of visual stimuli and promoting the association of relevant words with corresponding visuals (Kumullah, Yulianto, & Ida, 2019).

Students with slow learner barriers tend to feel less confident (Wanabuliandari, Ardianti, Gunarhadi, & Rejekiningsih, 2021). Therefore, teachers must concretize learning materials, and teachers

cannot force students with slow learner barriers to improve their reading literacy skills independently, but a learning process that is trained repeatedly and requires a process of listening and imitating with more concentration compared to typical students. Fauziah Zulva that learning for slow learner students must be carried out intensely and requires repetition of material in the learning process. Besides that, according to him, one of the learning media that can be used for students who have slow learner type of learning barriers is multisensory media. Multisensory media, namely learning media, utilizes the various senses of students, such as the senses of sight, pronunciation, hearing, touch and motion, in one learning activity. With the use of multisensory media in Indonesian subjects in the aspect of early reading, students with slow learning barriers at the elementary school level can read by imitating the teacher's speech, the ability of slow learners in terms of reading is very lacking, and the oral reading process only limited to imitating the teacher's words (Zulva, 2020). NurulHidayatiRofiah and Ina Rofiana, in their research, also said that although standard students and students with special needs with slow learner barriers were in one class, the teacher gave more straightforward questions during the question and answer process compared to other friends to adjust to their abilities (Rofiah & Rofiana, 2017).

The process of actions or experiments carried out on Da, Az, At, and Au students, namely first-grade students with slow learner-learning barriers, delivers learning materials according to the research module. For these four students, the learning process requires exact repetition of material, and the delivery of material must be designed attractively during the learning process so that students are more focused and interested in learning. According to Rofiah and Rofiana (2017), the learning method applied to slow and regular learners does not have different types. However, slow learners need to be modified by adding study time for intense repetition of material and additional modifications of particular tasks for students. Slow learners as a follow-up to learning (Jannah, Suryanto, & Pratitis, 2021; Rofiah & Rofiana, 2017). Students with slow learner barriers have good abilities in receiving and understanding learning material with good long-term memory; they are also easier to memorize and repeat reading material such as the alphabet, syllables and the relationship of images to writing. However, in the aspect of reading sentences and paragraph texts, an intense learning process is needed because at the beginning of the action, students in the reading stage only learn syllables, assemble syllables, and continue into sentences and paragraphs that require more concentration and understanding.

Based on the findings in the field, when taking action on students with slow learner barriers to improving initial reading fluency, it is carried out through the process of listening to the readings read by the teacher. Students are easier to understand the subject matter, such as material about the alphabet, vocabulary. They can practice how to read with the correct rhythm and intonation so that when students independently repeat the learning material or recall what is written on the flash card, it will be smoother. Students will remember what they have learned longer.

This has become one of the findings that teaching reading to students with slow learner barriers in low grades requires careful listening and imitating process. Overall, on the results of the literacy skills examination (reading the beginning), the four students had a relatively high score and experienced increased learning outcomes after reading material using flash card media. While the results shown by students Nv and Fn students with slow learner barriers are children who are slow in learning and have the characteristics of lack of concentration and low abstract thinking, this makes it challenging to achieve learning outcomes following the achievements of the peer age group. However, even so, the results of the experimental test showed that there was a significant increase in their reading ability. This is evidenced by the rise in the mean at the time of pretest and posttest. The mean on the pretest with a value of 56, while the compromise on the posttest with a value of 76.

3.1 Students with Special Needs with Speech Delay Barriers

In contrast to students who experience speech delay barriers in learning literacy skills (reading the beginning), Ch gets a relatively low score. This is due to the obstacles they encounter. They do not get more serious treatment and have not made a complex and sustainable diagnosis. Theoretically, children

with a speech delay can also be classified as a symptom of psychiatric, neurological and behavioural disorders. Apart from that, speech delay can also be classified as a symptom of various diseases, such as selective mutism, mental retardation, expressive language disorders, psychosocial deficiencies, hearing problems, autism, cerebral palsy and receptive aphasia.

Impaired speech barriers can be caused by secondary factors, namely developmental delays or bilingualism. As a result of various diagnoses of speech and language disorders, a doctor's examination is needed to determine the right and fast diagnosis. Children who experience speech and language disorders or speech delays can usually recover and can even cause prolonged communication disorders in the future. As a result, speech impediments and disorders can severely impact other aspects of development, such as social and intellectual development. Therefore, a diagnosis and intervention are needed to determine the cause of speech delays and language disorders so that appropriate therapy can be given and obtain good results. Perfect (Dewanti, Widjaja, Tjandrajani, & Burhany, 2012).

In addition to the factors causing speech delay above, it can also be caused by internal factors, namely perception, a person's ability to distinguish incoming information, which is perception. Perception of development consists of 4 aspects: growth, including the development of nerve cells and the whole system; stimulation, namely in the form of input from the environment, including habits and all sensory aspects. Traditions and habituations in children's childhood will give babies new stimulation, which is then stored in memory at the next stage and used in the child's communication and language learning process. Through the senses of touching, feeling, smelling, seeing and hearing, children will gradually learn new stimuli experienced and obtained at the age of toddlers. The ability of auditory perception begins in their daily lives. The ear is an auditory sensory organ that channels information and messages into memory, which plays an essential role in children's language development. In several studies, children with language development disorders also experience hearing problems (L Kurnia, 2020).

External factors also can potentially influence children to have speech delay disorders. These external factors are Family history. If close family members experience speech or language delays, the child may also be at risk of experiencing speech and language delay disorders. Parenting and wrong parenting patterns in providing lessons related to children's language and speech development can also cause children to experience speech delay barriers. Verbal environment, children's language learning process is strongly influenced by the number of languages children hear daily. Children who live in a professional family environment will listen to more speech than children who live in a family environment in which the use of language is low. Education a study explained that mothers with low education would influence children's language development. Finally, the factor of the number of children or the number of families, some researchers explain that the number of children or the number of families influences the language development of a child (Lita Kurnia, 2020). In addition, the role of siblings, the habit of watching television and the awareness of those around them about the barriers to children's speech delay are also factors for delays in speaking (Aris& Ismail, 2021). So increasing parents' knowledge about the concept of good speaking and signs of speech delay will overcome this problem (Purwandari, 2022).

So complex and so many factors causing speech delay, Ch is not known as the cause of speech delay barriers, so during early reading learning, Ch lacks concentration, moves a lot, ignores teacher instructions and has more difficulty following instructions in learning compared to other students. Students who experience slow learning barriers and meningitis. What happened to Ch was caused by the speech delay barrier, which had not been handled with the right therapy. Therefore, the accompanying teacher during learning is more intense, paying particular attention and various actions are given to arouse interest in education and the concentration of Ch. According to Mayawati, as quoted by Nella Rahim et al., to deal with children with speech delay barriers in learning, several actions can be taken, namely: 1) encouraging children to speak; 2) communicating with a smile and attention to speech delay; 3) treat with affection through language and always make eye contact when speaking; 4) respond to the child's sign language; 5) train the muscles or speech apparatus; 6) sing; 7) be a good

language model for children; 8) praise when the child pronounces the word correctly; 9) Introduce children to various sounds and tones; and 10) increasing interest in reading by frequently reading interesting story books (Nella Rahim, Yuhariati, 2021).

For Ch students, the score of the examination results has increased even though, on average, the classification of score categories is at a low level. Ch learners experience speech delays. This is closely related to the process of learning to read. Because the main thing needed in reading skills, namely articulation and communication, one of which is speaking, flashcard media are less effective in helping Ch students. This is because Ch students require treatments and examinations, such as examinations at paediatricians, growth and development, and therapy. Speech before the learning process on early reading literacy. During the learning process, Ch is less concentrated, moves a lot, ignores teacher instructions and has more difficulty following instructions in learning than students who experience slow learning barriers and meningitis.

3.2. Students with Special Needs with Meningitis Barriers

Em's meningitis causes cognitive impairment, which causes learning difficulties. Despite experiencing obstacles, Em got the pretest and posttest results in the high category. In the learning process, he can learn the alphabet, words, and syllables and has difficulty reading sentences and paragraphs. The problem with reading sentences and paragraphs is due to Em's information processing ability (cognitive ability) being impaired, and he needs to be given special treatment for healing. Information processing at the beginning of the act of reading is assembling words into sentences and sentences into short paragraphs. More specifically, the process for organizing or receiving environmental stimuli, processing data, solving problems, determining concepts, and applying verbal and visual symbols in learning activities.

For Em students, namely first graders with cognitive barriers due to a troubled medical history, namely meningitis, in the process of delivering learning material smoothly because students have a cooperative nature in the learning process, such as responsiveness in the process of preparing learning equipment, able to discuss during the questioning process responsible in learning and easy to comply with learning rules.

Em students, while receiving reading material, are elementary to understand and fluent in recognizing the alphabet, reading syllables, and identifying pictures with words, although spelling letters on syllables consisting of 5 letters are more like shoes. This is due to the existence of information processing abilities (cognitive abilities) that need to be improved, namely, the process of assembling one thing with another, one of which is reading. So, for such students, apart from teaching reading through the media of letters or writing, illustrated flash cards are conducive to combining writing with pictures and colors. On the other hand, cognitive therapy activities are also needed because the obstacles experienced are due to medical history, namely meningitis.

The reading aspect that has not experienced an increase is reading sentences and paragraphs. However, the examination results have increased before and after being given reading material using flash cards.

3.3. Students with Special Needs with Down Syndrome Barriers

Down syndrome is a child who has a genetic disorder before birth. In its development, genetic disorders cause sufferers to experience retardation in physical and mental development, requiring care, guidance, and supervision throughout their lives. One of the barriers for children with Down syndrome in attending education is the delay in mental retardation; generally, they have varying degrees of mental retardation, ranging from mild mental retardation (IQ: 50-70) to moderate (IQ: 35-49) and sometimes (rarely) retardation is found. Mentally severe (IQ: 20-34). The degree of mental retardation in children with Down syndrome is mild or severe. Children with Down syndrome will be slower to learn compared to others. Children with Down syndrome have difficulty learning to speak and pick up

contact signals. Children with Down syndrome find it difficult to focus, one of which is translating symbols such as reading activities.

Students with speech delay and Down syndrome also obtained low pretest and post-test scores. This is because students with Down syndrome have difficulty learning to speak and capture contact signals. Down syndrome is difficult to focus on, one of which is translating symbols such as reading activities. It is difficult for him to sort the A-Z alphabet, let alone memorize the signs of the A-Z alphabet. He has not been able to do it, and even the ability to recognize the A-Z Am alphabet correctly has not been able to say the A-Z alphabet independently. Fauziah et al. (2018) in their research, have found that students with Down syndrome have low initial reading skills. Students cannot read at the age of grade IV, read by spelling and stutter when saying words, and often experience errors in a comment when spelling so that the words read have different meanings.

One student with dyslexia barriers obtained a relatively high score, Zd was able to read, but some letters had pronunciation errors or were reversed like d was read d. The accompanying teacher provides actions to train Zd to concentrate and reduce things that interfere with students' memory. The accompanying teacher repeatedly teaches to read inverted letters, string letters into words and syllables, and increase concentration by using flashcard media, which Zh students must hold. With such a technique, students are more concentrated on learning to read. Other researchers also explained the same thing in their research to improve reading skills in dyslexic children. The teacher gave actions using the multisensory method, namely assembling letters into syllables, and then giving visual stimulation by writing words on the blackboard. And auditory stimulation by how students pronounce the sound of the word (Kamza, Husaini, & Ayu, 2021).

The study's results on children with Down syndrome showed a significant increase in reading ability. This is evidenced by the rise in the mean at the time of pretest and posttest. The compromise on the pretest had a value of 35, while the settlement on the posttest with a value of 36. So it can be concluded that the flash card method is effective in improving the reading ability of children with Down syndrome in SD YAPITA Surabaya.

3.4. Students with Special Needs with Dyslexia Barriers

For Zd students, the literacy ability score has increased based on the description of the examination items. All items have grown where they were quite capable at the beginning, and after being given the initial reading material action with flash card media, they became competent. The obstacles experienced were dyslexia, where students could read, but in some letters, there were pronouncing errors or reverses such as d read d. In such children, reading ability can be improved by practicing concentration and reducing things that interfere with students' memory and concentration.

Beginning reading at the low-grade level of elementary school (grades 1-3) is carried out in three stages: 1) pre-reading stage, where students are taught about values that must be applied in reading, such as attitudes when reading, and how to care for books. , how to open and close the book, how to hold the book, and how to see the writing; 2) the reading stage, where students are taught about pronunciation or imitating the teacher in saying words, the intonation of simple words and sentences, letters that are widely used in simple words or sentences that students often hear, and meaningful new words; 3) the post-reading stage, where the teacher provides conclusions or reinforcement of material about what has been done at the reading stage (Somadayo, Samad, Lamanca, & Mahrudin, 2017).

The implementation of flashcards in early reading learning in this study was carried out using effective learning cards containing images, text, or symbols to stimulate students to remember and improve their understanding of the meanings in written materials. The framework of thinking in this research is as follows:

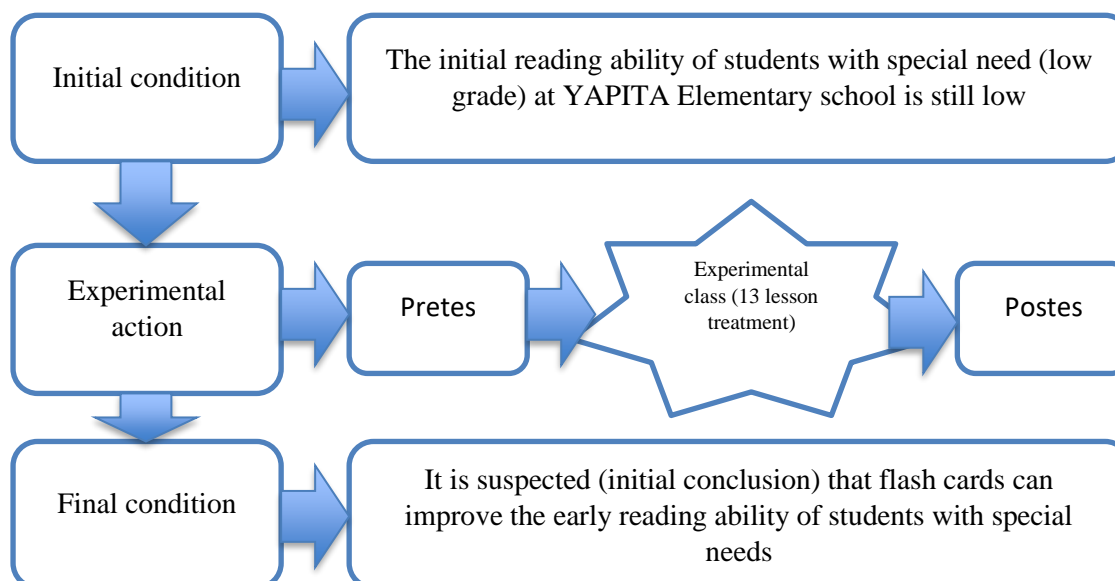


Figure 1. The Framework of Thinking in Research

Before teaching beginning reading, educators must ascertain whether students already have the basics of reading ability or reading readiness that students must master. The reading readiness abilities include 1) the ability to distinguish auditory; 2) the ability to make sound-symbol relationships; 3) oral language skills; 4) image interpretation; and 5) progress from left to right (Dhieni, Nurbiana, Fridani, Lara, Muis, Azizah, 2005). Therefore, the first step in this study was to determine the students' initial conditions.

In general, a change in examination scores or an increase in scores before and after giving reading material with flash card media to improve literacy skills indicates an increase in reading ability in each child. This is in line with the theoretical concept of flashcard media, which has a cognitive function that the existence of a visual symbol or image contained in it can make it easier for students to understand and remember the information or messages contained in the picture so that students can re-express what they have learned. In addition, flash card media also has an affective function, namely that flashcard media can make students enjoy learning (or reading) with illustrated text (Arsyad, 2011). Of the ten students with special needs in SD YAPITA who became the research subjects, they had different characteristics of learning models in following the experimental action process in improving literacy skills (reading the beginning).

4. CONCLUSION

Flashcard media can improve the literacy skills (reading at the beginning) of students with special needs at YAPITA Elementary School. This follows the results of the paired sample test statistical analysis (paired sample statistical test), which obtained significant results of $0.007 < 0.05$, which means the significance of the test reading skill score statistic is smaller than the limit of significance value. Thus, there is an influence between flashcard learning media on improving literacy reading skills (reading the beginning) of students with special needs at YAPITA Elementary School. The literacy ability (reading at the beginning) of students with special needs can increase due to the attractive appearance of flash card media, equipped with images, text, and various colors that make students more enthusiastic about participating in learning and make it easier to understand the concepts being studied.

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