

Curriculum And Learning For Down Syndrome Children Who Have Reading Difficulties In Inclusive School

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Abstract: Inclusive schools are educational institutions that accommodate all students, both normal students, and students with special needs, to get educational services according to their needs to create a friendly and fun learning atmosphere. Carrying out learning in inclusive schools, of course, requires a curriculum. Curriculum and learning are part of the education system that cannot be separated and interrelated. This study aims to develop a curriculum and learning program for students with special needs Down syndrome in grade 1 in inclusive elementary schools who experience problems in the early reading aspect because one of the prerequisites in early reading has not been met. This study uses research methods with a qualitative approach. Qualitative research is used to explore student profile information and learning profiles which are then used as the basis for developing curriculum and learning programs. The results of this study are to obtain a learning program that is to the needs of students obtained from the process of aligning the curriculum. Thus, it is recommended that teachers harmonize the curriculum based on the results of the assessment so that curriculum and learning programs are obtained that are in bye needs of students.

Keywords: curriculum, learning, reading difficulties, early reading, visual perception.

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INTRODUCTION

In essence, all children, whether they have special needs or not, have the same opportunity to get an education. Through education, children's potential can be optimally developed. Formal education can be obtained through schools. According to the Big Indonesian Dictionary, "a school is a building or institution for learning and teaching as well as a place for receiving and giving lessons (according to its level)."

Pratiwi (2015) argues that "schools that are considered appropriate for children with special needs are inclusive schools." An inclusive school is an educational service for children with special needs regardless of, their physical, intellectual, social, emotional, and other conditions so that they can learn together with normal children in public or regular schools that are tailored to the needs of children who have disabilities and have the potential for intelligence and special talents in a systemic whole (Tarmansyah, 2007; Ilahi, 2013). It can be concluded that inclusive schools are educational institutions that accommodate all students, both normal students and students with special needs, both temporarily and permanently, to obtain educational services according to their needs to create a friendly and fun learning atmosphere.

Formal elementary schools already provide inclusive education for students with special needs. However, when viewed from the level of readiness it is still not optimal because there is still a lack of adequate teaching staff regarding their educational background so in guiding students with special needs, especially in schools providing inclusive education there are still many challenges and obstacles. Based on an analysis of several journals conducted by Hanifah, et al (2021) stated that "it turns out that there are still relatively few accompanying teachers for special needs students with a background in the Special Education Study Program." Based on this, like it or not, elementary school teachers must have the ability to teach students with special needs in their classes. They are not taught in depth about how to teach students with special needs, but they still get material about children with special needs in inclusive education courses of 2 credits (UPI PGSD Curriculum, 2022).



Schools as implementing institutions of the education system certainly have components that must be met, one of the important components in education is the curriculum. A curriculum is a set of learning experiences that will be obtained by students as long as they take an educational process that has goals, content, and learning materials as well as a method used as a guideline for organizing learning activities designed to achieve certain expected educational goals (UU Sisidiknas, 2003; Fujiawati, 2016).

Curriculum and learning are integral to the national education system (Fujiawati, 2016). The two are interrelated and cannot be separated. A curriculum is a set of learning experiences that students will obtain as long as they follow an educational process. The curriculum is designed to be able to achieve the expected goals. The existence of the curriculum as a component of education is in a strategic position where its main role is as a guide in learning activities. Meanwhile, learning is a transactional process (giving each other reciprocity) between the components of the learning system, namely educators, students, teaching materials, media, tools, procedures, and learning processes to achieve a comprehensive change in students. In addition, assessment is a part of curriculum development activities. Assessment is an activity that becomes an integral part of the learning process (Anggraena, et al, 2022).

Based on the conditions in the field, class teachers who are graduates of the primary teacher education study program experience confusion about implementing learning for students with special needs in their class, especially in determining what kind of curriculum to use, so that learning for these students is equated with their classmates, which means that the curriculum for students with special needs is the same as the curriculum for other students.

However, in essence, the ability of each child is different, both in terms of academic and non-academic. This fact requires teachers to be able to develop a curriculum that fits the needs and learning abilities of each student, especially for students with special needs who require modification and adjustment of the curriculum so that the curriculum used is suitable for their needs.

Furthermore, finding students who need curriculum adjustments is carried out through identification activities. According to the Big Indonesian Dictionary, "identification is the determination or determination of the identity of a person, thing, and so on." In other words, identification is an activity to identify. Based on the results of the identification, it was found that there were students with special needs with *Down syndrome* who experienced a *level of frustration* in their reading ability.

After identifying, to be able to formulate an appropriate curriculum for students with special needs can be done based on the results of the assessment. This assessment activity is a follow-up activity from the identification results. More in-depth assessments were carried out on aspects of early reading.

Reading is one of the four main skills that must be mastered, including a complex activity that is carried out and used to get the message the writer wants to convey through the pronunciation of words from printed or written materials that require a large number of separate actions, including the use of understanding, imagination, observation and also memory in the recognition of written language symbols as a stimulus to help the process of remembering what is read, to build an understanding through experience that has been possessed (Tarigan, 1983; Soedarso, 2004; Abdurrahman, 2012; Harianto, 2020).

Based on the results of the assessment, the reading difficulties experienced were caused by not fulfilling the prerequisites to be able to have skills in reading, namely visual perception, and auditory perception or linguistic awareness.

Thus, to achieve the expected learning objectives, especially in the aspect of reading, an effort is needed to achieve these objectives, namely formulating a curriculum that is to the conditions and needs of students. So that the curriculum used is by the conditions and needs of students, it is carried out through an identification and assessment process to identify, explore and collect information about student profiles including abilities, barriers, and current needs of students. Then carry out curriculum alignment based on the results of the assessment, create a syllabus and semester program, then lower it into the individualized educational program (IEP) and learning implementation plans.



METHOD

The method used in this research is a descriptive method with a qualitative approach. Qualitative research is used to extract data through identification and assessment activities, then develop curriculum and learning programs based on the results of the assessment. Data collection techniques using documentation studies, observations, interviews, and tests. The research was conducted at the Oto Iskandardinata public elementary school, Bandung Regency. The research subjects involved were 33 grade 1 students, one student with special needs with the specific type of Down syndrome, class teachers, school principals, and parents.

RESULTS

Identification is the initial activity carried out before the assessment activity. Identification of children with special needs is intended to find or mark a child classified as a child with special needs or not, which of course requires special treatment. Identification was carried out at Oto Iskandardinata Public Elementary School. The first step in carrying out the identification is to interview the principal school to conduct an initial screening of the existence of a class that has the lowest achievement and/or there are children with special needs. The results of interviews with the principal school showed that the class had children with special needs and had the lowest achievement in grade 1. Then interviews were conducted with the class teacher to find out the condition of the class, determine the material for the identification test, and make observations through *a checklist sheet identifying children* with special needs.

Furthermore, identification activities were carried out through tests on 33 students in the class. Aspects tested include aspects of reading, writing, and arithmetic. The scope of the material tested is based on the 2013 Curriculum. In the aspects of reading and writing based on the basic competencies of the Indonesian language subject and arithmetic based on the basic competencies of the mathematics subject.

The results of the identification of the aspects of reading, writing, and counting in grade 1 are presented in the following table.

Table 1. The results of the identification of reading, writing, and arithmetic

Category	Reading		Writing		Arithmetic	
	SMT 1	SMT 2	SMT 1	SMT 2	SMT 1	SMT 2
Independent Level (IDL)	26	19	30	25	27	23
Instruction Level (ISL)	7	2	3	6	6	9
Frustration Level (FL)	-	12	-	2	-	1
Amount	33	33	33	33	33	33

Students belonging to the category of *instruction level* and *frustration* level, proceed to the individual assessment stage. However, looking at the results of the identification of these three aspects, it turns out that many students fall into the *frustration level*, so analysis is carried out on students who experience *frustration levels* in all aspects to narrow down which students need priority to the next stage. Therefore, based on an analysis of the results of the identification carried out on all first-grade students at Oto Iskandardinata Public Elementary School, it was found that students who were at the *frustration level* in all aspects in class I Semester II are as follows.

Table 2. Recapitulation of data on students who experience *frustration levels* in aspects of reading, writing, and arithmetic

Name (Initials)	Reading		Writ	ing	Arithmetic		
	Score (%)	Category	Score (%)	Category	Score (%)	Category	
AMA	0	FL	33,3	FL	22,7	FL	

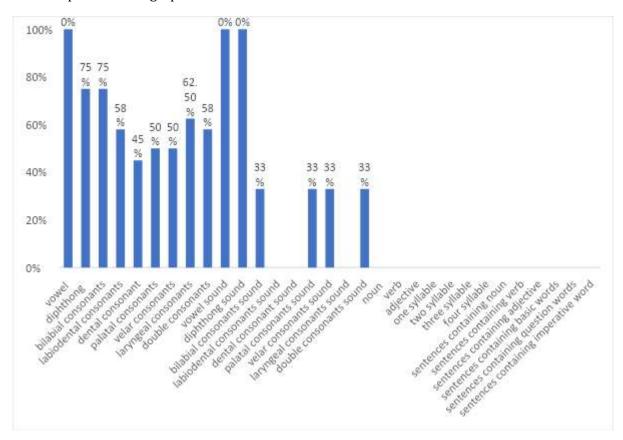
It was found that students with the initials AMA experienced *frustration levels* in the aspects of reading, writing, and arithmetic and scored the lowest in these three aspects compared to their peers, so these students continued to the individual assessment stage. In addition, based on the results of observations and checklist sheets, it is known that students with the initials AMA are students who have *Down syndrome*, with easily identifiable characteristics physically such as flat faces (such as the Mongolian race), slightly crossed eyes, small mouths, small head, and short neck.



Based on the recapitulation of the identification results, it turned out that these students experienced the lowest scores on the reading aspect, so the assessment was carried out on the reading aspect.

The assessment activity is intended to find out the profile of students including their abilities, barriers, and learning needs, in this case, the reading aspect, which is then used as the basis for preparing learning programs. This assessment activity included a preliminary reading test for the student concerned, a documentation study, and interviews with the homeroom teacher and parents to find out their learning profile.

Broadly speaking, the results of the initial reading assessment of students with the initials AMA are presented in graphical form as follows.

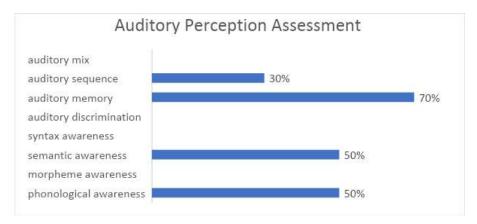


Graph 1. Graph of children's learning outcomes in the early reading aspect

Qualitatively, the results of the early reading assessment of AMA students showed that they already know some of the letters of the alphabet, but are often confused with almost similar letters, such as the letter "b" with the letter "d", the letter "p" with the letter "q", the letter "i" with the letter "F" with the letter "E", the letter "w" with the letter "m" and so on. There are some letters that he doesn't know yet and still remembers them. In addition, auditory AMA students can recognize several letter sounds, such as vowels, but there are still letter sounds that are often confused, such as the sound of the letter "b" with the letter "p", the letter "a" with the letter "h", and so on. . Based on the type errors in reading, AMA makes more substitution errors (replacing letters/words) compared to insertions (adding letters), omissions (removing letters), repetition (repetition of words), reversals (changing the position of letters in reading). , doing hesitation (stopping reading) and *word by word* (reading word by word). Quantitatively, these students got a score of 91 out of 208 scores and got a score of 43.75%. Where this number does not meet the initial reading ability and the cause of this disability must be sought. Therefore, further assessment must be carried out on aspects that form the basis of reading ability, namely aspects of auditory perception and aspects of visual perception.



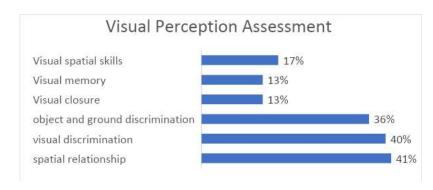
The results of the auditory perception assessment of students with the initials AMA are presented in graphical form as follows.



Graph 2. Graph of auditory perception assessment results

Qualitatively, the results of the auditory perception assessment of AMA students showed that they had fairly good phonological awareness, semantic awareness, auditory memory, and auditory sequences. This ability is shown in indicators including 1) phonological awareness, such as identifying vowel sounds and sound awareness 2) semantic awareness, such as pairing appropriate pictures, 3) auditory memory, such as remembering animal sounds and the following applause, and 4) auditory sequences, such as perform two verbal commands in succession. However, he has not demonstrated abilities in morpheme awareness, syntax awareness, auditory discrimination, and auditory integration, as well as some indicators of auditory sequence, auditory memory, semantic awareness, and phonological awareness. This inability is shown in indicators including 1) phonological awareness, such as mentioning the number of sounds in a word, 2) morpheme awareness, such as determining speech sounds, 3) semantic awareness, such as removing one of the sound words, 4) syntax awareness, such as understanding the meaning of a sentence, 5). a with u, and the vowel e with o. Meanwhile, quantitatively, these students got a score of 23 out of 72 scores and got a score of 31.9%.

In addition, the results of the visual perception assessment of students with the initials AMA are presented in graphical form as follows.



Graph 3. Graph of visual perception assessment results

Qualitatively, the results of the AMA student's auditory perception assessment showed that he demonstrated ability in 1) spatial relations, namely being able to place colored objects in the same space, 2) visual discrimination, namely identifying objects based on color, 3) object and background discrimination, namely showing an object from an accompanying background, 4) visual closure, namely showing the missing part of two identical images, 5) visual memory, namely showing objects that have been seen before, 6) visual-spatial skills, namely linking the position of objects in space with the object itself. In addition, AMA students demonstrated their inability to



1) spatial relations, namely placing a 2 and 3-dimensional object in the same space and placing an object in the same position space, 2) visual discrimination, namely identifying objects based on shape, size, number the same word and the same letter, 3) object and background discrimination, namely showing an object from an accompanying background, 4) visual closure, namely mentioning objects that are partially visible and complementing imperfect objects, 5) visual memory, namely showing back objects that have been seen before, 6) visual-spatial skills, namely mentioning the position of objects about the object itself and to other objects. Meanwhile, quantitatively, these students get a score of 35 out of 120 scores and get a score of 30%.

In addition to conducting tests on students, assessment activities are also carried out through interviews and to explore learning profiles so that the program that will be made is by the conditions and learning needs of students. Assessment activities carried out through class observation, interviews, and documentation studies related to class administration used then analyze the curriculum used in the class, whether it is suitable or not applied to these students, what are the philosophical, sociological, psychopedagogic, theoretical, conceptual reference foundations and the contents of the curriculum and how the curriculum model. The learning profiles explored include curriculum, learning approaches, learning models, learning strategies, learning methods, learning media, teacher teaching styles, learning resources, learning administration, learning materials, student learning styles, student concentration and learning motivation, and reading learning practices.

Based on the results of the assessment, the two conditions for reading ability experienced obstacles that had to be overcome first. Because the school for grade 1 at the time of conducting the research still used the 2013 Curriculum (K13), the curriculum program that was made included semester programs, syllabi, lesson plans, and individualized education programs (IEP). Lesson plans are made to serve students classically, and IEP is made for the students concerned because these students need individual learning programs to deal with problems of reading difficulties specifically.

Before making a syllabus, curriculum alignment is carried out based on the assessment analysis results with the theory or curriculum used, which will then produce syllabus material. In the aspect of visual perception and auditory perception, the theory used is based on experts from Abdurrahman, M (2012) and Jamaris (2013). Meanwhile, in the early reading aspect, the curriculum is based on the 2013 curriculum. After aligning the curriculum, the next step is to make a syllabus based on the results of the alignment. Then make a semester program based on the syllabus that was made before. The time allocation used is based on the time allocation per week in the Indonesian language subject, because reading is part of the Indonesian language subject.

In addition to making syllabi and semester programs, it also makes lesson plans and IEPs. Lesson plans are made to facilitate classical learning while IEP is made for students with special needs who require a separate curriculum. The lesson plan created contains several components that refer to Permendikbud Nomor 81A Lampiran IV tentang Pedoman Umum Pembelajaran dan Permendikbud Nomor 65 Tahun 2013 tentang Standar Proses, lesson plans components include: 1) school data, subjects, and class/semester, 2) subject matter; 3) time allocation; 4) learning objectives, basic competencies and competency achievement indicators; 5) learning materials; 6) learning methods; 7) media, tools, and learning resources; 8) learning activity steps, and 9) evaluation. Meanwhile, the components in the IEP include students' current level of ability, general learning objectives, specific learning objectives, descriptions of services (materials, methods/media, learning processes), and assessments.

The approaches, models, strategies, methods, media, and learning resources used to take into account the learning profiles and student profiles that have been compiled from previous assessment activities.

The lesson plan made follows the material being taught in the class, namely in Theme 7 concerning Objects, Animals and Plants Around Me Sub-theme 2 Animals Around Me Lesson 2 for 1 x meeting. The selected subjects, namely Indonesian Language and physical education subjects follow the syllabus previously made by the class teacher. The approach used is a scientific approach, contextual learning models, lecture learning methods, discussions, demonstrations, and questions and answers, the learning materials are in the Indonesian Language regarding



notification expressions and in physical education subjects regarding locomotor and non-locomotor movements, as well as the learning media used includes whiteboards, markers/chalk, laptops, drawings, paper, colored pencils, reading text, projector, and PowerPoint.

In the IEP formulation, based on the priority scale, the individualized educational program is on the aspect of visual perception. This does not mean that aspects of auditory perception and reading are not handled. However, the first treatment is carried out on the visual perception aspect first, then on the auditory perception and reading aspects by the semester program that has been made.

The PPI that is made is on the aspect of visual perception, the subject of visual discrimination, and the sub-topic of identifying objects based on letters that are almost the same. Learning material about distinguishing the letters b and d, p and q, m and w, and n and h. The media used include *flashcards*, *worksheets*, *sandpaper letters*, pencils, and erasers. The method used is the *direct instruction method*.

The implementation of learning is carried out classically, meaning that students with special needs learn together with other students at the same time and place. However, learning services are provided according to their needs, so in some activities they are different but in other activities that do not need special handling and based on needs being able to participate in joint activities, it does not rule out the possibility that learning is carried out together.

In Indonesian subjects, when other students learn about notification expressions, students with special needs learn about visual discrimination identifying objects based on letters that are almost the same. Furthermore, in physical education subjects, because based on the results of the assessment students with special needs do not experience motor barriers and can take part in the same learning as other students, then these subjects can be carried out together and the curriculum used is the same.

DISCUSSION

Identification is the activity of recognizing or marking something, which is interpreted as a screening process or process of finding cases, namely finding children who have abnormalities/problems, or the process of early detection of children with special needs (Yuwono, 2015). Based on the results of identification through interviews, tests, and observations, it was found that there were students with special needs with *down syndrome* in class I with the initials AMA who experienced *frustration levels* in all aspects, namely reading, writing, and arithmetic.

Reading or writing is one of the main learning at the elementary level and forms the basis for other skills and influences the process of improving students' abilities both in academic life at school and in community life (Mulyati, Tt: Sugiarti, 2012). Based on these assumptions, the assessment is continued on aspects of reading or writing. However, looking at the identification results, AMA students got the lowest score on the reading aspect, so further assessments were carried out on the reading aspect. Lerner (in Abdurrahman, 2012, p. 200) suggests that "through reading, students can explore their talents and potential, stimulate reasoning, train concentration and increase school achievement. In addition, through reading activities while studying other subjects. Therefore, children must learn to read so that they can read to learn."

Furthermore, Abdurrahman (2012, p. 200) argues that "the ability to read is a basic ability to master various fields of study. For example, solving math word problems requires the ability to read to understand the content of the problem to be worked on. If a child at early school age cannot immediately read, then he will experience many difficulties in learning various fields of study in the following classes.

Reading is one aspect of language skills which is the activity of spelling or reciting writing as a process of forming symbols/signs/writing which is preceded by the activity of seeing and understanding writing into meaningful sound forms (Sugiarti, 2012; Dalman, 2014, Harianto, 2020). Based on the results of the initial reading assessment, AMA has not been able to read patterned syllables, words, or sentences. In addition, AMA has not been able to identify sounds or distinguish similar letters such as the letter "d" with the letter "b" the letter "p" with the letter "q, the letter "n" with the letter "h", read consonants in small print. (p, d, l, n, r, t, z, j, y, kh, g, ng, h, f, q, v, x), reads capitalized consonant letters (P, M, V, F, D, N, R, T, Z, J, Y, KH, G, NG, H, F, Q, V, X),



reading patterned syllables, reading words, and reading sentences. In addition, based on the type of children's reading errors, AMA makes more substitution errors (replacing letters/words), such as changing the letter "p" to "b", the letter "F" to "E", and so on.

The identification results show that AMA students are children with Down syndrome. Down syndrome is a disorder that belongs to a group of children with intellectual disabilities or mental retardation. Down syndrome is a disorder that occurs as a result of an abnormality in chromosome 21, so it is called trisomy 21 which fails to separate itself so that children with Down syndrome have an excess of chromosomes to 47. Marta (2017) suggests that "body development and brain performance will change if there are extra or abnormal chromosomes, and that is what causes down syndrome, physical and mental retardation, because down sydrome is one of the causes of mental retardation, where children who are retarded in language, speech, mental retardation are caused by a disorder on the central nervous system and in speech therapy this condition is called dyslexia, usually experiencing difficulties in matters related to learning because of their slow attention, metacognition, memory and generalization abilities compared to normal children. Thus, linguistic awareness or auditory perception and visual perception awareness with reading are interrelated. Like two sides of a coin that cannot be separated, between one side and the other. Therefore, reading skills must be built by these two aspects. So, the assessment continued on the aspects of visual perception and auditory perception to find out how the child's ability in the aspects of visual perception and auditory perception is a prerequisite in reading skills.

Therefore, children with Down syndrome experience failure in academic aspects, one of which is learning to read. Reading difficulty is a condition that causes problems in perception, especially those that affect reading ability, namely linguistic awareness or auditory perception and visual perception (Rochyadi, 2010; Oktadiana, 2019; Nurani et al., 2021). Thus, linguistic awareness or auditory perception and visual perception awareness with reading are interrelated, like two sides of a coin that cannot be separated from one side to the other. Therefore, reading skills must be built by these two aspects. Thus, the assessment continued on the aspects of visual perception and auditory perception to find out how the child's ability in the aspects of visual perception and auditory perception is a prerequisite in reading skills.

Visual perception is the cognitive ability to interpret and process the stimulus that has been received or seen through the sense of sight and then becomes knowledge about the object needed to solve problems and respond to environmental demands (Abianti, Alsa & Pudjibudojo, 2000; Kurtz, 2006; Matlin, 2009; Nanik, 2012; Jamaris, 2013). Visual perception is needed to carry out various daily activities, such as academic activities (reading, writing, arithmetic) or choosing the right chair color according to the room. According to Jamaris (2013, p. 139), "disability in reading is caused by various factors related to difficulties in visual perception." Students who have difficulty learning to read experience one or more difficulties in processing information, such as the ability to convey and receive information.

Visual perception plays a very important role in visual information, especially in reading (Frostig, 1966; Jamaris, 2013). Children who experience problems in the development of visual perception will have difficulty recognizing, remembering, and organizing the visual impressions needed to understand the written symbols encountered in the learning process, especially in reading and arithmetic (Frostig and Maslow, 1973; Kurtz, 2006). The ability to read is a basic ability that must be owned by every student to be able to master various other subjects.

Jamaris (2013, p. 84), states that the process of visual perception can be divided into several parts, namely: visual discrimination, visual figure ground, visual closure, visual memory, visual sequential memory, visual form constancy, visual-spatial relationship, and visual -motor integration. Based on the results of the visual perception assessment, AMA students experienced obstacles in placing a 3-dimensional object in the same space, placing an object in the same space, identifying objects based on shape, identifying objects based on size identifying the same letter, showing an object from an accompanying background, mentions partially visible object, completes imperfect objects, shows the missing parts of two similar images, shows objects that have been seen before, associates the position of objects in space with the objects themselves, mentions the position of objects about the object itself and mentions the object's position about other objects.



Meanwhile, auditory perception is the ability to recognize, and understand the sounds heard and interpret them (Abdurrahman, 2012; Jamaris, 2013). Difficulty in processing auditory perception can be interpreted as difficulty in processing the meaning of the sound heard. Abdurrahman (2012) suggests that the scope of auditory perception is phonological awareness, auditory discrimination, auditory memory, auditory sequence, and auditory integration. In addition, Jamaris (2013, p. 80) suggests auditory perception includes auditory discrimination, auditory synthesis, auditory memory, and auditory sequence. Based on the results of the auditory perception assessment, AMA students experienced difficulties in identifying vowel sounds at the beginning, mentioning the number of sounds in words that begin with vowels and consonants, determining the long speech sounds from one syllable to two syllables, determining the long speech sounds from two syllables with three syllables, remove one of the sounds in the word, pair the appropriate picture, understand the meaning of the sentence, identify the same final sound, identify almost the same final sound, identify different final sounds, carry out 2-4 verbal commands simultaneously sequentially, as well as combining the vowel sounds a with I, a with u and e with 0.

The form of initial reading difficulties experienced by students is difficulty distinguishing letters that are almost the same shape (Aprilia, 2021). This relates to the ability of visual perception. The ability of visual perception has a significant relationship in reading skills because if a child has good visual perception then his reading achievement will also tend to be good, because in principle, good visual perception can help or facilitate children in seeing and learning something that is visualization (Alsa , 2000; Astria, 2016)

Visual discrimination abilities such as identifying similarities and differences of letters and words are one of the important components in visual perception to improve reading skills and are important parts and are the initial stages of learning to read (Mayer. 1986; Lerner, 2000; Gore, 2004; Roe & Smith, 2011; Jamaris, 2013). Aprilia (2021) suggests that "difficulty distinguishing letters that are almost the same shape can cause students to stammer in reading because students are unsure of their abilities." Therefore, the design of the learning program is prioritized on the visual discrimination ability of the sub-subject to identify objects based on the same letter. Roe and Smith (2011) suggested that individuals can be trained in their visual discrimination abilities, through repeated experience and practice. Usually, increasing visual discrimination can be done with training or tutoring. The assessment activities carried out aim to collect information about the current student profile, including abilities, barriers, and needs. The results of the assessment of AMA students showed that reading ability experienced problems because reading prerequisites related to visual perception and auditory perception experienced obstacles, so the 2013 curriculum used in schools did not match the conditions of these students, so it required efforts to create an accommodative curriculum.

Rusmiyati (2017) suggests that "accommodative curriculum is a national standard curriculum that is adapted to the talents, interests of students with special needs. The development of an accommodative curriculum is carried out by each educational unit providing inclusive education. This accommodative curriculum is applied to four models namely duplication, modification, substitution, and omission as well as in four components namely purpose, content, process, and evaluation. In inclusive education, the curriculum used is the regular school curriculum or the modified national curriculum according to the stages of development of children with special needs, taking into account their characteristics and level of intelligence. The national curriculum consists of 3 models, namely the regular curriculum model, the regular curriculum model with modifications and the Individuaizedl Learning Program (IEP) curriculum model.

Furthermore, Rusmiyati (2017) mentions curriculum models that can be used in inclusive learning, curriculum models for ABK can be grouped into four, namely: 1) duplication model, 2) modification model, 3) substitution model, and 4) omission model. The curriculum model used for AMA students is using curriculum substitution and curriculum modification models. The curriculum substitution model is to replace the curriculum with another weighted curriculum, this model is used to develop reading maturity in the aspects of visual perception and auditory perception, while the modification of the curriculum in the reading aspect is to change or adjust according to the conditions, needs and abilities in the reading aspect.



The method chosen to increase the ability of visual discrimination is the *direct instruction method*. *Direct Instruction* is a strategy and approach used by teachers by providing lessons in simple, structured arrangements and steps using clear instructions, repetition through practice, clear feedback, and evaluation (Gore, 2004; Zahriani, 2014).

Important components according to Magliaro, Lockee & Burton (2005) in carrying out the *Direct Instruction model* are the role of (1) instructor, (2) task analysis, (3) modeling, (4) scaffolding, (5) prompts (6) feedback and (7) amplifier. The three stages of the *Direct Instruction model* described by Engelmann and Rosenshine (in Magliaro, Lockee & Burton, 2005), namely: (1) the preliminary stage, which includes gathering initial information and conveying objectives, (2) the presentation (teaching) stage, which includes analysis tasks and modeling, (3) training stage, which includes scaffolding, prompts, feedback, reinforcement.

Based on the learning profile, the subject requires an individual approach and a variety of methods that suit his learning style and can meet his learning needs. The *Direct instruction model* is believed to be able to meet the learning needs of these children. Because, according to Westwood (2008) "the *direct instruction model* emphasizes the learning process with precise, clear and procedural stages provided by the teacher, using the *scaffolding method* to help children according to their needs before doing assignments independently, providing opportunities for children to practice their skills independently. independently and provide repetition or practice repeatedly with an assessment so that the child knows where the mistake is as soon as possible and is done individually.

The learning methods used to teach AMA students are: (1) lectures, (2) task analysis, (3) modeling/demonstration, (4) practice, (5) *scaffolding*, (6) *prompts*, (7) feedback, and (8) reinforcement in the form of *positive reinforcement*.

The stages of the *direct instruction method* used to improve the visual discrimination abilities of AMA subjects consist of 4 stages, namely:

- 1. Preliminary stage
- 2. Teaching stages
- 3. Stages of training, the exercises given are in the form of structured exercises
- 4. Evaluation stage

The media used are *worksheets, sandpaper letters,* pencils, colored pencils, and erasers. In addition to individual learning given to students, learning programs are made for students as a whole including AMA students in them which are included in the lesson plan (RPP). The material provided is by the learning book which is used as the main reference in class, namely Theme 7 Sub-theme 2 Learning 5.

The approach used is a scientific approach. According to Akhyar HM Tawil, (2014), "a scientific approach is an approach based on facts or phenomena that can be explained with certain logic or reasoning, not based on guesswork, fantasy or fairy tales." The scientific approach encourages students to actively observe, ask questions, search for data through experimentation, conclude using reasoning, and communicate their findings. By the approach to the 2013 curriculum that applies in the school, the goals are to be achieved by students in general. The learning model used is the contextual learning model. According to Johnson, contextual learning is an educational process that aims to help students see meaning in the subject matter they are studying by relating it to the context of their daily lives, that is, to the context of their personal, social, and cultural environment. The methods used varied, namely the method of lectures, demonstrations, question and answer, and discussion.

CONCLUSION

Curriculum and learning are integral parts of the education system which are interrelated and cannot be separated. A curriculum is a set of learning experiences that students will obtain as long as they follow an educational process. The curriculum is designed to be able to achieve the expected goals. The existence of the curriculum as a component of education is in a strategic position where its main role is as a guide in learning activities.

For students' competencies to develop optimally, teachers should be able to make curricula and learning according to the needs of students obtained from the assessment results.



This curriculum and learning are based on the results of student assessments, of course, each student has different needs. Teachers can apply this curriculum development and learning flow to students who experience problems in implementing learning in class so that the curriculum used is to the conditions and needs of their students. In addition, in carrying out curriculum development and learning, teachers should have this expertise.

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