Rapid Automatic Naming (RAN) - Based Reading Intervention for Children with Learning Disabilities

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Abstract: In addition to phonology, the cause of reading problems in children with difficulty learning to read can occur due to obstacles in Rapid Automatic Naming (RAN). The purpose of this study is to develop a reading intervention program based on Rapid Automatic Naming for children with reading difficulties. This study uses a qualitative research approach with the method applied in this study is a qualitative descriptive method. A reading intervention program based on Rapid Automatic Naming (RAN) for children with learning difficulties to read that can be used by teachers, parents or those in need in order to help children with learning difficulties in reading. The result of this research is the Rapid Automatic Naming (RAN) based Reading Intervention program.

Keywords: Children with Learning Disabilities, Reading Intervention Based on Rapid Automatic Naming (RAN).

INTRODUCTION

Language development is a complex process, a symbol of the referee sound (Mustika, Novianti & Nadiyah, 2023); (Ridwan, Novianti, & Koestieni, 2023) and specific learning disability are described as a disorder in one or more of the fundamental psychological processes underlying spoken and written language comprehension and use. (Nadiyah, et al., 2022). Strong literacy skills are a prerequisite for success in society (Lipka, & Siegel, 2012). Skills read can help child in following the activity process Study teach in that school impact on success they in learn. Past read child will obtain information, knowledge as well as experience new to get useful for life them.

Understand reading is the goal of reading and difficulty in interpret reading can cause children fail in school (Lipka, & Siegel, 2012). So that Want to No Want to child need provided Skills read maximum Possible until He can read with good and got understand the reading he read. this Of course be home work for parent and teachers, for can equip ability child in read.

Read is involving activities linkages between text and meaning reading (Nadiyah et.al, 2022). Read more from just recognize and understand words, ie understand what to read and relate to with existing knowledge owned. In other words, reading understanding means think while reading (Mikulecky & Jeffries, 2007)

There are many the evidence shows that reason main failure read caused by disturbances in phonological processes (Bradley & Bryant, 1983). Many studies in the last three decades have shown that many children experience it difficulty reading has barriers phonological processing in particular, children who experience constraint in Study read often have trouble in use spelling, connect sound with those who have associated with difficulty processing phonological (Rack, Snowling and Olson, 1992; Stanovich and Siegel, 1994). Findings This has produced stated hypothesis that obstacle processing phonological is reason main problem read on child difficulty Study reading (Bradley & Bryant, 1983)

Besides hypothesis about obstacle accepted phonology in a manner area, Wolf, and Bowers (1999) have propose that other processes are related with obstacle read known

with an alternative model, namely the one that has obstacle double, where obstacle the related with obstacle processing phonology and barriers in (RAN) Rapid automatic naming. processing phonological and RAN on skills read are independent.

Experienced child difficulty read, got indicated or including into the difficulty Study specific, the term 'difficulty 'Study specific 'means interference on one or more psychological processes basis involved in ability understand or use language, spoken or writing, which can appear in difficulty listen, think, speak, read, spell, or do calculation math, incl difficulty in perception, injury brain, dysfunction minimal brain, dyslexia, and development aphasia. Term the No including to in problem caused learning from damage to visual, hearing, or abilities motor; obstacle intellectual; disturbance emotional; or reason from environment, culture, or economy." (IDEA 2004)

According to the United State Department of Education (2006), about 80% of students identified have trouble learn basically own obstacle in Skills read. Many definitions about difficulty Study read or dyslexia that has proposed during this. one famous definition namely in 1994 by the Orton Dyslexia Society (Westwood, Sparrow, & Leung, 2001), According to Orton Dyslexia is one from difficulty Study marked specific with how difficult somebody in develop Skills a word, word recognition and fluency in say the word, usually reflect processing phonological which is not enough and have difficulty in frequent word coding No expected in relation with age and ability cognitive as well as abilities academic. dyslexia No caused Because obstacle common development or disturbance sensory (Westwood, Sparrow, & Leung, 2001).

obstacles experienced by difficult children Study reading is a barrier in written language (Pennington, 2009). The child experience problem in differentiate sound of the word heard similar or similar, they also have trouble when must spell words (Tunmer & Greaney, 2010). So as a teacher as well parents, us need be wary if child late reading and difficulty spell words.

Several previous studies have stated that besides obstacle phonologically, other barriers may also be involved such as RAN rapid automatic naming and Work Memory, which also influences reading difficulties and is as important as phonology (Cutting & Denckla, 2001). the current literature focuses heavily on phonological processing and RAN as causation main difficulty reading.

RAN, defined as how much fast children can mention presented visual stimuli in a manner constantly, which are very familiar, such as: numbers, letters, objects, and colours, RAN has stated as predictor strong reason reading (Blachman, 1984; Compton, 2003) With RAN is included in tool screening can help with easy identify at risk children have trouble read, so you can give intervention earlier (Georgiou, Parrila, Manolitsis, & Kirby, 2011)

METHOD

A. Approach Study

In study this, author will use approach qualitative, that approach qualitative is approach taken in a manner intact to subject research and researchers become instrument in research, results approach explained in the form of words according to empirical data. With thereby study This is something Suite activities that require data in the form of information about development of intervention programs read through the RAN for child difficulty learn.

Applied method in study This is method descriptive qualitative. According to Mukthar & Putri (2013) method study descriptive qualitative is A method used researcher For find knowledge theory to research on one time certain. Through method This writer

want to describe development of intervention programs read through the RAN for child difficulty learn.

B. Data Collection

On research This is the technique used namely:

1. Interview

Interview is meeting of two people for exchange information and ideas through ask answer, so awakened A meaning in something topic certain (Sugiyono, 2008). Interview is technique data collection used as studies introduction For help find something problem to be researched.

Type interview used in study This is interview structured interview structured is method data collection is done researchers who have know with Certain about information to be obtained (Sugiyono, 2008), because it, before do interview, researcher has prepare instrument form questions written For every respondent. Besides bring instrument as guidelines interviews, researchers also brought tool help record what can help smoothness implementation interview.

On research This will done interview with teacher. data you want researcher get from results interview is about ability read child difficulty learning in schools, intervention programs read there at school during This

2. Observation

Observation done For see something behavior that occurs in the field used as proof supporters. Observation that is something activity observations made in a manner direct in accordance with conditions that occur in the field (Creswell. 2016). In study this, type observations used is observation participation passive, where the researcher come to place the activity of the person being observed, but No follow involved in observed people's activities. Observation in study This that is activity For observe ability read child difficulty learn at school.

3. Studies Documentation

According to Sugiyono (2008), documents is notes past events passed. Document Can in the form of text, pictures or works someone. Studies documentation is complementary from use method observation and interview in study this. Studies documentation needed For see notes / books related students interests, skills and abilities child at location study For do assessment.

In study This studies documentation done with see notes / books students and teachers for know ability child in reading, intervention program read there at school during these and intervention programs read through RAN.

C. Data Analysis

Data analysis is something business that requires a continuous process in reflect on data Keep going continuously, must There is questions later analysis written For develop A target text For answer question research (Creswell, 2016). In study This technique used is the Miles and Huberman model, ie in a manner Keep going continuously analyze data up to felt enough. So in study This technique data analysis performed including:

1. Data reduction

According to Sungadji (2010) data reduction is an internal process select and center attention to simplified raw data. Data reduction is Keep going continuously during the research period before the data actually collected

Steps taken that is analyze data about ability child in understand reading. For know difficulty what have child, sums up steps and referrals from various reference, discard data if No important so that produce required information.

2. Data presentation

After data reduction is complete, then furthermore data presentation. Presentation of data is the process of compiling data from results collected information For can make something conclusion or action (Miles & Huberman, 1994). On research this is the data that has been organized served in form description and text narrative.

3. Interesting conclusion

Conclusion is answer the problems and goals outlined before, conclusion must arranged in a manner critical and focused. For can make something conclusion so need For make, try and analyze. conclusion generally is summary what have explained before. So stage final in study This that is take conclusion from activity before that will served in form narration.

D. Instruments

No	Question		Aspect	Sub Aspect	Technique	Data
1	Question How ability read child difficulty learn in school? —	1. 2. 3.	Aspect Pre read Read start Read carry on	Sub Aspect 1.1. Phonological awareness 1.2. Phonological Memory 2.1. Mention Lowercase Vocals and Consonants 2.2 Mention Capital Letter Vocals and Consonants 2.3 Mention Vocals and Consonants 2.4 Reading KV Pattern Syllables 2.5 Reading VK Pattern Words 2.6 Reading CVK Pattern Syllables 2.7 Reading KKV Pattern Syllables 2.8 Reading KVV Pattern Syllables	Technique Observation Interview documentation	Data source Child and teacher
				2.9 Reading V-KV Pattern Words		
				2.10 Reading KV-KV Pattern Words		
				2.11. Read Word Pattern V-VK/KV-VK 2.12 Reading KV-CVK Pattern Words		

No	Question	Aspect	Sub Aspect	Technique	Data source
			2.13 Reading the KVK- KVK Pattern Words 2.14 Reading the KKV-KV Pattern Words / KKV-KVK 2.15 Reading KV-KVV Pattern Words / KVK-KVV		
			3.1 activating word meaning 3.2 understanding sentences 3.3. making inferences 3.4. comprehension monitoring 3.5 understanding text structure		
2	How is the intervention program read there at school during this?	intervention programme read there at school	 instrument assessment Implementation Assessment Programming _ Program implementation Evaluation 	Interview and documentation	Teacher
3	How is the intervention program read via RANs?	intervention programme read through RAN	 Objective Aspect Stages 	Document	Literature
	How intervention program validation read through RAN	intervention program validation read through RAN	Content of the intervention program read through RAN The suitability of the program with what is needed by the teacher in intervene child have a hard time Study Practicality and clarity use of intervention programs read through RAN	Expert judgment	Expert

RESULT AND DISCUSSION

Result

Instrument Assessment

Based on results interviews and studies Instrument documentation used by the teacher during This is an assessment instrument development meil stone is also an assessment instrument academic read, then the teacher also assesses from the results of children's writing and also the results test read child

Implementation Assessment

Implementation assessment based on results interviews and studies ongoing documentation This the teacher does based on results from daily teacher observations on activities Study teaching, where the teacher observes every student and finally find felt child experience difficulty read

Programming

Based on results interviews and studies teacher documentation still generalize learning programs in children have a hard time read with Friend classmate other, that is use k13, only just For troubled child reading the teacher gives task more For At home namely reading and writing exercises. Teachers also use method steel with spell.

Program implementation

Based on results interview and studies documentation On the implementation of the program the teacher does drill method or and also method spell.

Evaluation

Based on results interviews and studies documentation evaluation conducted by the teacher namely accompany student moment learn.

Discussions

There is ample evidence that the main cause of reading failure is caused by disturbances in phonological processing (Bradley and Bryant, 1983; Wagner and Torgesen, 1982; Siegel and Ryan, 1988; Stanovich, 1988, 1992; Olson et al., 1989; Shankweiler and Liberman, 1989; Felton and Brown, 1990; Snowling, 1991; Torgesen, Wagner and Rashotte, 1994). Several previous studies have stated that apart from phonological barriers, other barriers may also be involved such as RAN rapid automatic naming and Work Memory, which also affect reading difficulties and are as important as phonology (Cutting & Denckla, 2001; Swanson & Alexander, 1997). However, obstacles phonological Not yet explain all reason difficulty read. Intervention programme based phonology Not yet capable intervene difficulty read completely (Bus & van IJzendoorn, 1999; Foorman & Torgesen, 2001; Parrila, Georgiou, & Corkett, 2007), and children who experience difficulty read Possible just own Skills good phonology in preschool (Blomert & Willems, 2010; Puolakanaho et al., 2007; Parrila, Georgiou, & Corkett, 2007). As a result, researchers increase the focus of research them on something else, namely RAN. Wolf and Bowers (1999) propose that the automatic rapid automatic (RAN) is second core barrier in difficulty read. They argue that underlying process RAN performance contributes to capability read independently beside from Skills phonological.

RAN, defined as how much fast children can mention presented visual stimuli in a manner constantly, which are very familiar, such as: numbers, letters, objects, and colors, RAN has stated as predictor strong reason reading (Blachman, 1984; Compton, 2003; De Jong, & Van der Leij, 1999; Landerl & Wimmer, 2008; Lepola, et.al, 2005; Liao, Georgiou, Parrila, & Liao, 2008; Powell, et.al, 2007; Scarborough, 1998; Schatschneider, et.al, 2004). Intervention pre read with RAN can used as Exercise for help student in practice visual stimulation and help child in repair obstacle reading caused by the RAN bottleneck Alone as the second predictor from difficulty reading (Blachman, 1984; Compton, 2003; De Jong, & Van der Leij, 1999; Landerl & Wimmer, 2008; Lepola, et.al, 2005; Liao, Georgiou, Parrila, & Liao, 2008; Powell, et.al, 2007; Scarborough, 1998; Schatschneider, et, al, 2004).

Besides intervention read child with phonology so intervention read with rapid automatic naming (RAN) as predictor second from difficulty read need developed too. Intervention programme-based phonology Not yet capable intervene difficulty read completely (Bus & van IJzendoorn, 1999; Foorman & Torgesen, 2001; Parrila, Georgiou, & Corkett, 2007), and children who have trouble read Possible just own Skills good

phonology in preschool (Blomert & Willems, 2010; Puolakanaho et al., 2007; Parrila, Georgiou, & Corkett, 2007).

So, researcher increase the focus of research them on something else, namely RAN. Wolf and Bowers (1999) propose that rapid automatic automation (RAN) is necessary There is as test nor intervention read for child difficulty read. Intervention programme read based on Rapid Automatic Naming (RAN) for child difficulty Study read has been validated by three experts including 2 SLB teachers and 1 inclusion teacher, with conclusion that intervention program read based on Rapid Automatic Naming (RAN) for child difficulty Study read can used with A little repair

CONCLUSION

Based on results research and discussion, can pulled conclusion that the child is having trouble Study read experience obstacle in read among them child have trouble in pre read, read start, and read further, besides because obstacle phonology child difficulty read it have trouble in rapid automatic naming. Intervention programme read there at school during This just focus on reading practice with spelling and only on phonology just.

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