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Reading Skills Teaching Strategies for Students with Learning Disabilities

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Abstract

The National Education Policy has emphasized education in Malaysia to improve reading, writing, and speaking abilities among all students, including students with learning disabilities. However the problem of reading among students with learning disabilities is getting more serious. This qualitative study was conducted to identify the opinions of special education teachers on the selection, implementation of teaching strategies for students that have multi-level reading problems as well as the impact of the strategy on them. Three study samples were purposely selected in Terengganu primary schools. Semi-structured interviews, observations, and document analysis were used in the data collection of the study. The results of the interviews were transcribed along with field notes and a daily teaching plan (RPH). Based on the results of this study, students with learning disabilities' learning styles should be given priority in the selection of teaching strategies. Multisensory strategies, interactive multimedia, and group mentoring were used to plan the teaching of reading skills. Students with learning disabilities showed both positive and negative effects on the strategies that the study sample undertook. Therefore, researchers in the future can refer to this study as a reference source on teaching strategies for students with learning disabilities that have multi-level reading problems.

Keywords: Reading Problems, Students with Learning Disabilities, VAKT, Interactive Multimedia, Group Mentoring

Introduction

'Education for All' is not just a mere slogan or ideal but a reality that we need to implement. This statement was supported by Haris and Khairuddin (2021) by saying that at the international education level, this slogan has prioritized a barrier-free learning environment, including students with learning disabilities. The Special Education Department was established to provide comprehensive and integrated education, fun and meaningful learning process as well as lifelong education to students with learning disabilities. At the same time, achieve the goal of elevating special education in Malaysia to produce productive individuals.

Thereby, teachers must prepare themselves with the knowledge and skills to educate students with learning disabilities to achieve learning goals, be independent, carry out activities of daily life and be a human being who can contribute to the country. This statement is supported by Ramakrishnan et al (2020) by stating that teachers should be experienced

with technology pedagogy and curriculum content knowledge, teaching strategies, self-efficacy and competence as planned in the Malaysian Education Quality Standard Wave 2 (SKPMg2).

Thus, Gutasan et al (2021) have stated that the National Education Policy Chapter 3 Article 3.1.2 emphasizes on Malay Language Education, in order to improve reading, writing and speaking ability among all students in Malaysia, including students with disabilities. In this context we can know the importance of four components in languages that is listening, speaking, reading and writing skills. Furthermore, reading skills have been selected as a main component to carry out this research study. Sermier Dessemontet et al (2021) have stated that reading ability is essential and necessary to access general education content, 21st century technology, and a variety of lifelong learning opportunities.

However, reading problems among students with learning disabilities has become more serious and require suitable teaching strategies to improve their reading skills from time to time. So in this study, researchers will identify how teachers make the selection and implementation of teaching strategies to students with learning disabilities that have multi-level reading problems in Terengganu as well as the effect of teaching strategies on their reading skills.

Literature Review

Based on previous studies, reading skills have been prioritized, at the same time, teaching strategies used to improve reading skills are also highlighted.

Reading skills are an important element to students with learning disabilities in primary schools (Botsas, 2017). This statement is also supported by Demirok et al (2019) reading skills are one of the basic skills needed by students to achieve knowledge, yet most students with learning disabilities face problems to read in the classroom.

Learning Styles

Learning style is a characteristic or method of one's choice to understand, acquire, process and remember information in a learning situation. In other words, learning style is students' learning pattern (Bawalsah & Haddad, 2020). In addition, each student is a different individual, so teachers must understand the differences in learning styles of each individual in order to select, plan and implement effective teaching and learning processes. Moreover, if the implementation of teachers' teaching strategies is appropriate to the needs of students, they can meet curriculum standards optimally (Myers, 2017). Thus, researchers can conclude that learning style can affect the behavior or learning performance of students.

Reading Skills Teaching Strategies

Multisensory Strategies

The multisensory method is the implementation of the activity of the relationship between visual, audio, kinesthetic and tactile. In the implementation of the multisensory method, Moustafa and Ghani (2017) have explained that in the aspect of vision, students can learn to remember letters by seeing, pronouncing and writing. Next, in the aspect of hearing, students learn to identify the sounds heard by pointing to the letters correctly. In the kinesthetic aspect, students can use their fingers to practice writing or drawing in the air. Finally in the tactile aspect, the student can touch the 3D letter shape given by the teacher to reinforce the letter in the student's memory. This statement can be supported by Myers (2017) by stating that synthetic and phonetic based multisensory methods are writing.

Thus, the multisensory method can indeed improve the reading skills of students with learning disabilities from time to time. This statement is supported by Mostafa (2018) that the multisensory method not only improves students' reading skills, but it also involves student active in learning. This method has created a fun learning environment for students with learning disabilities (Morgan, 2019; Rohadi & Alias, 2021). In addition, an approach of integrating multisensory methods with text has been implemented to high-level students in schools (Romero, 2020). Students' reading skills and comprehension level have shown excellent achievement performance. Therefore, researchers can conclude that the design of multisensory activities can effectively help students learn new vocabulary, understand grammar, words and the texts.

Interactive Multimedia

The adaptation or combination of ICT methods with multisensory methods can also be known as interactive multimedia (Obradovi et al., 2015). Komalasari et al (2018) explaining that this interactive multimedia has been designed based on students with learning disabilities faced problems and their needs. Indirectly, it helps increase the interest of students with learning disabilities.

While many programs have been specifically designed to improve reading skills, students are more interested in using new technologies. This statement can be supported by Obradovi et al (2015) by stating the main benefits of ICT methods to students with learning disabilities are higher accessibility of learning through ICT and increased social interaction between peers. Besides, web-based education also enables students with learning disabilities to be proactive and independent, flexibility in time and space to access learning through ICT.

There are various multimedia teaching materials on Youtube, such as 'Didi & Friends' can be accessed for free. These materials can transfer knowledge and skills to students with learning disabilities while they are watching. This statement is supported by explained that multimedia media is the basis for developing learning and acquisition of vocabulary. Thus, researchers can conclude that interactive multimedia not only improves students' reading skills, but it also explores students' minds on memory and vocabulary development effectively.

Methodology

This study uses a case study design. This case study has involved a qualitative approach using semi-structured interview instruments, observation and document analysis. This study was conducted in primary schools in Terengganu. To conduct this study, 5 primary schools were selected from the population of 110 primary schools with Special Education Integration Program (PPKI) and Sekolah Kebangsaan Pendidikan Khas (SKPK). The researcher has made a selection of 5 people from the study sample with a few common aim that they require to be PPKI teachers, teach in special education at least 10 years and above, teach English or Malay subjects, and have students with learning disabilities that have multi-level reading problems in the classroom. Demirok et al (2019) have presented interview questions related to reading skills teaching strategies. So the researcher has selected 2 out of 5 study sample to conduct a pilot study in testing the suitability of the interview questions that have been modified from the previous research instrument. Field notes were given to the study sample to conduct observations during the teaching of reading skills. Daily Teaching Plan (RPH) is included as evidence of the implementation of the study. This study has used triangulation method through three different methods to collect study data to improve the validity of the study. In

addition, peer examination and cross-check of interview transcripts between study samples were also performed to improve the reliability of this study.

Findings of the Study

In the study findings, the researcher will discuss about the demographics of the study sample, data obtained from interviews that have been conducted on three study sample, observations of the study sample as well as the daily lesson plans of the study sample.

Study Sample Profile Data

In this study the researcher has performed a study on three study samples. Profile data regarding the study sample was obtained based on the interviews that were conducted. Based on Table 4.1, it can be seen that the total sample of female study is two people and male only one. Besides, the ages of the study sample interviewed were 35 years and above. Based on the data obtained also shows that two study sample who were interviewed achieved a Master's Degree in Education (Special Education) and another study sample achieved a Bachelor's Degree in Special Education. All the three study sample have taught and served in Special Education Primary Schools for 10 years and above. Two of the study sample are leader of PPKI while another study sample is a usual PPKI teacher.

TABLE 4.1 Study sample profile data

| Study Sampel | Nickname | Gender | Age | Level of Academic Achievement | Years of Teaching | Post |
|--------------|--------------|--------|-----|--|-------------------|-----------------|
| 1 | Mrs Wong | Woman | 40 | Master Degree in Education (Special Education) | 15 | Penyelaras PPKI |
| 2 | Mr Kang | Man | 35 | Master Degree in Education (Special Education) | 10 | Penyelaras PPKI |
| 3 | Mdm Noraziah | Woman | 48 | Bachelor Degree in Special Education | 23 | PPKI Teacher |

Study Sample Interview Data

In this study, the researcher has divided the data obtained from the interviews with three study samples into themes that related to the research questions. Based on figure 4.2, it can be seen that the interview data has been divided into three main themes, such as the learning style of students with learning disabilities, strategies for teaching reading skills to students with learning disabilities and the effect of teaching reading skills to students with learning disabilities.

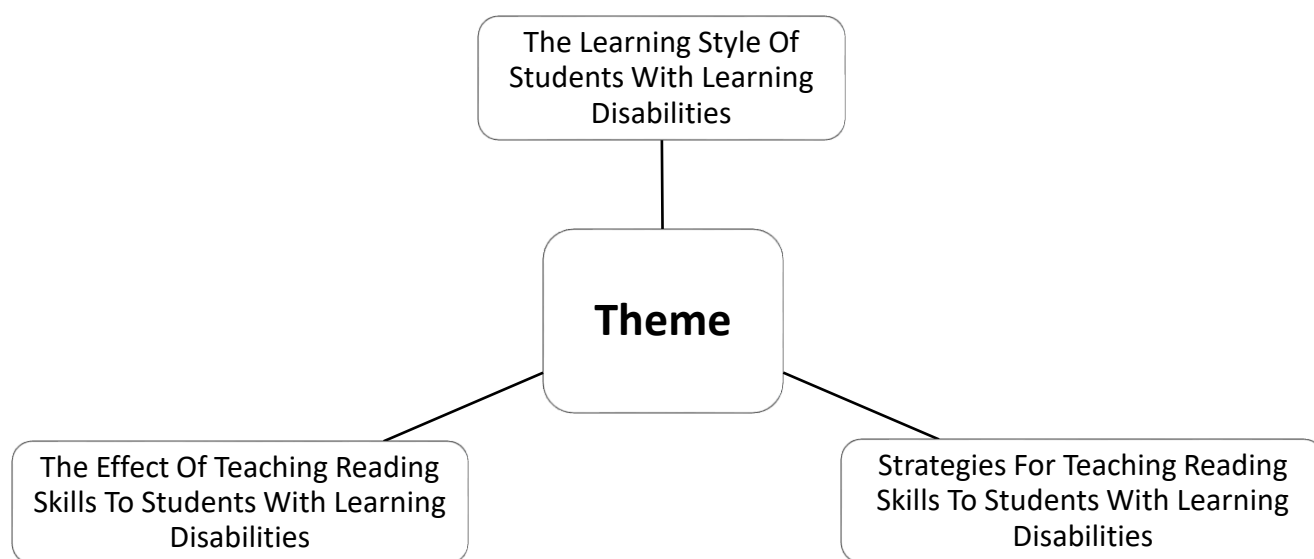


FIGURE 4.2 Themes were obtained from the interview data of the study sample

Learning Styles of Students with Learning Disabilities

Based on the data obtained from the interviews, the study sample has stated that before the implementation of the problem strategy of students with learning disabilities should be identified, then choose a strategy based on the learning style of students. For example, one of the study samples stated:

First of all I will identify this student's problem first... observe the student as he learns to read... know why he will face this problem... use the way they like in planning pdp...

(Study sample: Mdm Noraziah)

In addition, the selection of suitable strategies is very important in determining the performance of students' skills. For example, Mr. Kang chooses teaching strategies according to students' interests and preferences so that they can focus on learning. He narrated:

... I prioritize the way students learn... some students like to play, like to watch videos, like to listen to music, like to draw... use the way they like, they will be more interested in learning, do not feel bored...

(Study sample: Mr. Kang)

In conclusion, the interview data for the first theme has answered the first question that when making strategy selection, teachers need to identify students' problems, observe the interests and ways that students like, then determine the suitable strategy.

Strategies for Teaching Reading Skills to Students with Learning Disabilities

Interview data with the study sample have shown that there are three main strategies that they implement to students with learning disabilities, such as multisensory strategy (VAKT), interactive multimedia and group mentoring.

Multisensory Strategy (VAKT)

Multisensory strategy is learning through the human senses. Through interviews with three study samples, it can be seen that all three study samples have used teaching involving visual senses, auditory senses, kinesthetic senses and tactile senses to strengthen and deepen the memory of students with learning disabilities. For example, Mrs. Wong has involved three

sensory in her teaching that is watching instructional videos as visuals, proposing sounds heard as auditory, touching 3D -shaped letters and using dough to form letters as tactile. She narrated:

... Showing an 'ABC' video and pupils singing together ... pupils proposing sounds according to the video ... giving alphabet cards pasted with green beans, strings, buttons and other 3D materials ... being able to feel the shape of the alphabet through touch. ..give the dough to the pupils... make the shape of the alphabet based on the card shown...

(Study sample: Mrs. Wong)

In addition, Mdm Noraziah has run a game that they have modified by involving learning using sensory. She narrated:

... Match finding game ... I flip over all the cards and the pupils try to pair each card correctly... read the words on the cards... arrange the puzzles and tell me what pictures can be seen and read the words...

(Study sample: Mdm Noraziah)

Interactive Multimedia

Interactive multimedia is a combination of multisensory strategies with information and communication technology strategies. In the interview data with the study sample, it can be seen that all three study samples have used interactive multimedia in teaching students with learning disabilities to read. For example, Mdm Noraziah has used audio recordings to record their songs and voices. This audio is used for repetitive learning of reading skills to students with learning disabilities. She narrated:

... I sang the song while pointing to the lyrics of the song in the English textbook using the pupil's fingers. I will repeat this method 3 times, after that I record my song using a mobile phone and play the audio to the student...

(Study sample: Mdm Noraziah)

Besides, remedial activities or reading skills enrichment activities in the form of online quizzes and training modules using computer software can also improve the reading skills of students with learning disabilities. For example, Mrs. Wong has produced quizzes and modules that are suitable to the students' skill level. She narrated:

... Provide online quizzes or training modules using computer software... students need to listen to the audio of the syllables available and choose the answer how to spell KV or KVK correctly. Or I put the spelling KV or KVK, students have to choose the correct audio...

(Study sample: Mrs. Wong)

Group Mentor

Group mentors are those selected students who are authorized or instructed to guide their peers who have not mastered learning. Based on the interview data obtained, it can be seen that two of the study sample have selected more intelligent students or high level students to be mentors to intermediate level students and weak level students. Their task is to guide their friends to practice reading correctly. They have narrated:

... High level students become group leaders to intermediate level students. The group leader here needs to guide his friend to read correctly.

(Study sample: Mdm Noraziah)

... Conduct group mentoring activities. For example, I asked one of the smarter students to sit next to the weaker student and guide his friend to read.

(Study sample: Mr. Kang)

Overall, this second theme has answered the second research question that is, teachers have used multisensory strategies (VAKT), interactive multimedia and group mentoring to help students with learning disabilities improve their reading skills.

Effects of Reading Skills Teaching Strategies on Students with Learning Disabilities

Based on the data obtained from the interviews, it can be seen that all three people of the study sample have stated that the implementation of strategies improves the reading skills of students with learning disabilities. For example, Mrs. Wong has explained about student achievement. She narrated:

... Most of the students have shown advanced tolerance performance for their reading skills. Only lower level students show slower improvement...

(Study sample: Mrs. Wong)

Moreover, students with learning disabilities have shown side effects such as being more confident to tell stories, give opinions, communicate, read letters, syllables and text more clearly and fluently. For example, Mr. Kang has explained about the positive attitude of students towards learning. He has narrated:

... Prefers to learn to read... learns with more fun... prefers to go to study class... is more confident to read Malay texts... uses Malay to interact... likes to read Malay short story books.

(Study sample: Mr. Kang)

In conclusion, this theme has answered the third research question that is the teaching strategies implemented not only improve the reading skills of students with learning disabilities, but it also changes the behavior and attitude of students towards learning.

Observation of Study Sample

Observations were carried out by all three study samples on students with learning disabilities in their schools. They have recorded each changes of students towards the implementation of teaching strategies in field notes provided online. Based on the field notes recorded by the study sample, researcher can see the effect of implementation strategies towards low, intermediate and high level students clearly. For example, lower level students can sound KVK syllables with guidance, students have shown a positive attitude towards learning, more confident in reading language texts and there are also students who like to read Malay short stories. In conclusion, the observation data provided were relevant to the interview data with the study sample and answered the third research question.

Study Sample' Daily Teaching Plan (RPH)

Based on the RPH that was attached during the interview with the study sample, it can be seen that they have carried out the activities presented with students with learning disabilities. For example, teachers have shown instructional videos, played minion checkers and provided guidance to weak and intermediate students in doing training activities. In addition, the effect of implementation strategies on students with learning disabilities has also been shown in the RPH reflection section. For example, reflections in the RPH have shown that students with weak, medium and high levels reading problems have achieved the set objectives, except that weak students still need remedial interventions to improve their reading skills. Overall, the RPH of the study sample is relevant to the data obtained from the results of interviews with them. At the same time, it has answered the second and third research questions.

Discussion

Based on the findings of this study, researchers will discuss the data obtained according to three main themes, that is the learning style of students with learning disabilities, strategies for teaching reading skills to students with learning disabilities and the effect of teaching strategies on students with learning disabilities.

Learning Styles of Students with Learning Disabilities

In this study, all study samples have stated that they identify the students' problems and observe the way students learn while making the selection of teaching strategies. For example, Mrs. Wong has recounted:

... No matter low, intermediate or high level students, I observe the problems they face, after that I choose teaching strategies based on their interests and preferences...

(Study sample: Mrs. Wong)

This statement is supported by Bawalsah and Haddad (2020) by explaining that the way students learn something is also referred as learning style.

Meanwhile, each individual with learning disabilities has a different way of learning, so special education teachers need to examine clearly to select a more suitable teaching strategy. For example, Mr. Kang has explained the various interests of his students. He narrated:

... Students like to play, some like to watch videos, some like to listen to music, some like to draw...

(Study sample: Mr. Kang)

Based on this statement, researchers can relate that learning styles can be divided into visual learning styles, auditory learning styles and kinesthetic learning styles (Yusop et al., 2020). Then teachers can choose a variety of suitable strategies to plan and implement lessons to students.

Visual learning style is a student who is more likely to learn something through what is seen. Auditory learning style is those who prefer to learn through what is heard such as sound, song, audio and sound recording. Kinesthetic learning style is a student who prefers to learn while making something or moving.

Finally, researchers can conclude that it is important for special education teachers to understand the learning style of a student with learning disabilities in making a selection of suitable teaching strategies, in order to improve their reading skills effectively.

Strategies for Teaching Reading Skills to Students with Learning Disabilities

Teaching strategy is a method or process of special education teachers used in teaching and learning for students with learning disabilities. Based on the interview data obtained from the study sample, it can be seen that multisensory strategies, interactive multimedia and group mentoring are their main teaching strategies.

Multisensory Strategy (VAKT)

Multisensory strategies are teaching and learning process that involve the sensory parts of students such as visual, auditory, kinesthetic and tactile. Through the findings of the study, all study samples have used multisensory strategies in conducting the teaching of reading skills to students with learning disabilities. This is because Moustafa and Ghani (2017) have stated that this strategy allows students with learning disabilities to learn through the sensory and yet reinforce their learning outcome. For example, Mrs. Wong has implemented teaching

strategies that involving visual, auditory and tactile for alphabet recognition while Mr. Kang has involved visual and tactile in alphabet recognition activities for students with learning disabilities. When describing the implementation of the strategy, he stated:

... prepare a card that I have finished writing letters with candles and make a magic show ... pupils use a coloring paint brush on the card ... letters that I have finished writing with embossed candles ... feel fun ... want to repeat. ... give the dough to him to learn to make the shape of the alphabet ...

(Study sample: Mr. Kang)

This statement is supported by Morgan (2019) by stating that multisensory teaching strategy allows students with learning disabilities to be more focused in learning, at the same time, they will be more enjoy with the learning environment.

Furthermore, Mdm Noraziah and Mrs. Wong used multisensory strategy by modifying games such as finding pairs of cards, puzzles and minion checkers that involve visual and kinesthetic. For instance she describes the implementation of the strategy:

... Minion checkers game... some squares have to answer questions, get prizes and impose fines ... on these squares I have provided related reading exercises... happy to play, at the same time, they also practice to read words and sentences...

(Study sample: Mrs. Wong)

This strategy has created a fun learning environment for students with learning disabilities (Lau & Tahar, 2021). This statement is agreed by Myers (2017) by stating that non-static learning such as games can increase the interest of students with learning disabilities towards learning through a fun environment. Games can also strengthen their memory through repetitive activities in the process of playing.

Interactive Multimedia

Interactive multimedia is a combination of multisensory strategies with information technology (IT) strategies (Obradovi et al., 2015). Through the findings of this study, all study samples have applied interactive multimedia in teaching reading skills to students with learning disabilities. For example, Mdm Noraziah and Mr. Kang have recorded audio and songs in order to teach reading skills for their students. Speaking about this strategy, Mr. Kang stated:

... Use audio to record how the syllables KV and KVK sound... play the audio repeatedly to them to pronounce the syllable sound...

(Study sample: Mr. Kang)

Therefore, online quizzes and learning training modules using computer software can also be designed, modified by special education teachers to suit the level of reading skills among students with learning disabilities. For example, Mrs. Wong and Mr. Kang have designed, modified and produced quizzes and exercises that are interesting and suitable to the students' reading skills. Speaking about this strategy, Mr. Kang stated:

... Produce instructional videos... send to their parents via Whatsapps and Google Classroom apps... can access the videos at any time as long as they have internet access. In the video there is also a quiz session for them to answer questions orally...

(Study sample: Mr. Kang)

This strategy allows teachers to carry out activities repeatedly to students with learning disabilities. Students can also access the audio and video with their friends for reading exercises. Obradovi et al. (2015) have agreed with this statement by stressing that

the main benefit of multimedia strategies is that the material is easily accessible to students with learning disabilities and enhances their interaction.

Group Mentors

Group mentoring is a strategy that suggested by the study sample during the interviews. This strategy is used to enhance interaction among students with learning disabilities, at the same time, practicing students' reading skills. However, through the findings of the study, it can be seen that this strategy is more suitable for high-level students. This is because only those who have mastered it correctly can guide other students to practice reading skills. For example, Mdm Noraziah and Mr. Kang have implemented this strategy as an enrichment activity to train the use of language among students with learning disabilities.

... High level students become group leaders to intermediate level students. The group leader here needs to guide his friend to read correctly...

(Study sample: Mdm Noraziah)

... Conduct group mentoring activities. For example, I asked one of the smarter students to sit next to the weaker student and guide his friend to read.

(Study sample: Mr. Kang)

Ultimately, researchers can conclude that special education teachers can use multisensory strategies, interactive multimedia and group mentoring to teach students with learning disabilities based on their reading skills. Thus, further developing ideas on strategies for teaching reading skills in order to plan and implement strategies more effectively to students in the future.

Effects of Reading Skills Teaching Strategies on Students with Learning Disabilities

The use of strategies that are suitable to the needs of students, then the curriculum standards meet optimally (Myers, 2017). Based on the findings of this study, all study samples have shown that the selection and implementation of suitable strategies has improved the performance of reading skills of students with learning disabilities. For example, all three study samples have stated that students show improvement in reading skills with different time periods. They have narrated:

... After repetition, rehabilitation, and enrichment are carried out, students will show better performance in their reading skills...

(Study sample: Mr. Kang)

... Clever pupils, showed an increase... for each pdp session. Moderate students, on the other hand, showed an increase in... of about 1 to 2 weeks. Weak students take up to 1 month to master...

(Study sample: Mdm Noraziah)

On the other hand, the implementation of this strategy also influences the behavior and attitudes of students with learning disabilities towards learning. Mostafa (2018) and Komalasari et al. (2018) have supported this statement by explaining that multisensory strategies and interactive multimedia strategies enable students with learning disabilities to actively engage in learning and improve reading skills. For example, Mrs. Wong has explained the positive changes among students with learning disabilities after the implementation of the strategy. She narrated:

... More daring to tell stories in front of people, some like to learn the language, some can interact with others using Malay, some like to sing and memorize song lyrics in textbooks...

(Study sample: Mrs. Wong)

However, there are also students with learning disabilities who show negative changes towards the implementation of strategies. This is because they have not mastered or slower to master than their classmates, so they begin to be easily discouraged and unsure of themselves. For example, Mdm Noraziah has narrated the situation and attitude of students who have not mastered the skills yet. She narrated:

... Don't like to study, tired of wanting to sleep in class, sad and crying, don't want to practice, want to go home...

(Study sample: Mdm Noraziah)

In conclusion, this study has shown that the selection of teaching strategies that are suitable to the students' reading skills level is very important. This strategy can affect the students' performance in mastery reading skills from time to time. Teaching strategies can also bring about changes in the behavior and attitudes of students with learning disabilities regardless of the positive or negative effects.

Conclusion

This study showed that a special education teacher should know the reading problems of his students, and at the same time, know the learning styles of the students. Then, the special education teacher should design, plan, and implement appropriate instructional strategies, such as multisensory strategies, interactive multimedia, and group mentoring to effectively improve the reading skills of students with learning disabilities. The three teaching strategies selected by the study samples had positive and negative effects on students' reading skills. On the other hand, they also showed positive and negative attitudes and behaviors toward the selected reading strategies.

This qualitative study has some limitations as it only uses data from three selected samples in Terengganu. Therefore, the findings of this study only include self-assessment, perspective and experience sharing of the study sample, as well as the implementation and impact of reading skills teaching strategies on the students of the study sample. Nevertheless, this study has demonstrated the importance of selecting and implementing teaching strategies for mastering the reading skills of students with learning disabilities. Therefore, special education teachers and other researchers can refer to this study to identify students' problems, examples of strategies and the effects of strategies on students with learning disabilities in the current situation.

The researcher suggested that the study of teaching strategies should be conducted over a longer period of time in order to investigate and collect more data on the selection and implementation of teaching strategies for reading skills of students with learning disabilities in the future. In addition, a field study design with a quantitative and qualitative approach is proposed to more thoroughly investigate the teaching strategies of special education teachers for students with learning disabilities and to develop the findings of the study more holistically in the future.

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