



Teachers' Challenges and Strategies in Teaching Literacy Skills for Children with Special Needs

Irine Kurniastuti^{1✉}, Laurensia Aptik Evanjeli¹, Diana Permata Sari²

Pendidikan Guru Sekolah Dasar, Universitas Sanata Dharma, Indonesia⁽¹⁾

Psikologi, Universitas Sanata Dharma, Indonesia⁽²⁾

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Abstract

This research is motivated by the existence of various literacy problems in kindergarten and elementary school. The purpose of this research is to find out the challenges faced by teachers in teaching literacy to children and the teacher's strategy in teaching literacy to children with special needs. This research is qualitative research in which the data is collected through open-ended questionnaires and interviews and analyzed descriptively. Result:1) Not all teachers accompanying children with special needs have adequate knowledge in teaching basic literacy skills; teachers find it difficult to find appropriate learning programs and media to assist children with different abilities,2) Strategies to teach basic literacy: implementing adaptive learning programs, providing supporting facilities; using differentiated learning; teaching pre-academic abilities; learning with nature and all the senses in the teachable moment. Early childhood education is the formation period for preparing children to study in elementary school. Therefore, a collaboration between kindergarten and elementary teachers in teaching literacy is required.

Keywords: *literacy; children with special needs; learning strategies*

✉ Corresponding author : Irine Kurniastuti

Email Address : irine.kurniastuti@usd.ac.id (Sleman, Yogyakarta, Indonesia)

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Introduction

Reviews on teaching literacy for early childhood have actually been carried out a lot and provide input to teachers and parents in teaching literacy (Guo et al., 2013; Strickland et al., 2004), but problems in teaching literacy are still occurring and are things that continue to be discussed even in adolescence. (Asri et al., 2021; Bulgren et al., 2013; Klingner et al., 2010).

Specifically, this research discusses the challenges faced by early childhood and elementary school teachers in teaching literacy to children with special needs. Currently, teachers are experiencing challenges due to government regulations that allow students with special needs to attend inclusive schools. While practically, students with special needs often enter regular schools that are not ready to accommodate the special needs of each student.

Referring to Government Regulation Number 8 of 2016 article 41 (*Undang-Undang Republik Indonesia Nomor 8 Tahun 2016 Tentang Penyandang Disabilitas*, 2016), the government is obliged to facilitate people with disabilities to learn the basic skills needed for independence and provide opportunities for full participation in education and social development. The basic skills required for independence include the ability to read, write, and count (calistung).

These three basic skills are taught in the early stages of literacy activities and become the basis for the development of other more advanced literacy activities.

Practically, however, it is not easy to help children with special needs mastering early literacy skills. From the initial interview the author conducted, the teacher experienced various difficulties in finding the right method to teach reading, writing, and counting. Whereas, the government also expects people with disabilities to get proper accommodation in the field of education. This is contained in Government Regulation Number 13 of 2020 (PP, 2020) which explains that the provision of teaching is also aimed at preparing children to face upcoming life challenges. The provision of teaching is aimed at building daily life skills, including domestic skills and interaction skills in the community as well as in the workplace. Therefore, efforts are needed to achieve this noble goal. This study aims to find out the various challenges faced by teachers and the strategies that have been used as a result of good practice in the field in assisting children with special needs in learning to read, write, and count. The shared good practices are expected to be an inspiration for educators and companions for children with special needs.

According to Government Regulation No. 13 of 2020, adequate accommodation facilities for people with disabilities at least include the provision of budget support and/or funding assistance, provision of facilities and infrastructure for the preparation and provision of educators and education personnel, and curriculum provision. Additional accommodation that can be provided is in the form of compensatory services. Compensatory services are usually tailored to the specific needs experienced by each child. For example, orientation and mobility as well as Braille literacy for blind children; sound and rhythm perception development and speech development for deaf children; self-care development for mentally retarded children; movement development for children with disabilities; and fostering communication for children with autism.

In addition to the various activities above, the accommodation carried out by the school should be to ensure that the school literacy movement can run well. The literacy movement for children with special needs is basically aimed at developing listening, speaking, reading, and writing skills. The four skills are developed through each learning activity and adjusted to the obstacles experienced by children. At the elementary school level, children with special needs are usually taught to develop basic language skills (Agustin & Wiratama, 2021).

The implementation of the literacy movement in schools for children with special needs has not been widely discussed, thus encouraging Agustin and Wiratama to conduct research in 2021. Research conducted by Agustin and Wiratama discusses literacy in children with special needs which aims to describe the implementation of the literacy movement for children with special needs in inclusive schools. The subjects in their research were the principal, teacher, and one deaf student in grade VI. The research showed implementation of the school literacy movement by prioritizing an affective social environment and creating a comfortable and literacy-friendly physical environment. Implementation begins with the preparation stage then the development stage and ends with the learning stage. Constraints in implementing school literacy activities are related to the limited number of non-learning books, lack of teacher knowledge about literacy movements, reading corner facilities that are still not comfortable and the low motivation of deaf children in literacy activities. These obstacles were resolved by procuring additional reading books, involving teachers in training and workshops on school literacy, decorating reading corners to make them more attractive and comfortable and collaborating with parents to motivate and familiarize themselves with literacy both at school and at home (Agustin & Wiratama, 2021).

However, the further question is whether the procurement of reading books and moving the reading corner is enough to help the student with special needs? In connection with the challenges in developing literacy for children with special needs, it is necessary to find out more about what fundamentals are needed so that the literacy program can run well.

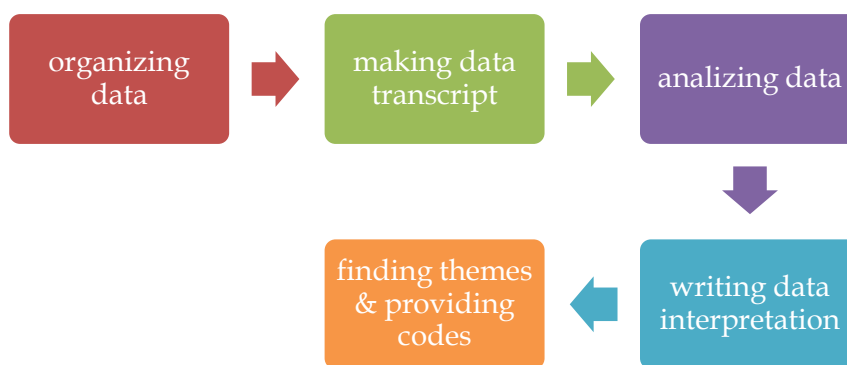
This fundamental can be found from identifying the problems and challenges faced by teachers in the field and also strategies that have been proven to help students learn literacy.

Methodology

This research is descriptive qualitative research. Descriptive qualitative designs are usually used to obtain answers to questions of particular relevance to practitioners and policymakers (Sandelowski, 2000). In particular, the purpose of this study is to directly describe the phenomenon of the implementation of literacy learning for children with special needs in terms of the challenges and strategies that have been used by teachers so that later they can be used as input in policies for learning with special needs children.

Data collection is done by making an open-ended questionnaire using Google Form. The researcher distributed this questionnaire to teachers in both inclusive and regular schools that accept children with special needs. The distribution period the questionnaire was started from July to August 2022. There were 13 respondents who filled out this questionnaire from Yogyakarta and Cilegon. The subjects of this study were consisting of early childhood teachers, elementary school teachers, special assistant teachers, therapists, and junior high school teachers. Next, the researcher conducted semi-structured interviews with two respondents consisting of one inclusive school principal and one psychologist from inclusive schools. These two subjects were chosen as respondents because they already have experience in handling special needs children in inclusive schools.

Data analysis was carried out based on steps from (Creswell, 2015) by organizing data, making data transcripts, analyzing data based on data descriptions, finding themes, providing codes, then writing interpretations of the meaning of the data. Data derived from questionnaires with open-ended questions were analyzed by finding common themes that emerged based on the transcription of the data. Data in the form of background were analyzed quantitatively such as data on educational background, length of teaching, and categories of children with special needs who had been accompanied. Data derived from interview data were analyzed descriptively. To ensure the accuracy of the data, a second interview was conducted with the respondents to confirm the points of the research results that have been found.



Picture 1. data processing scheme

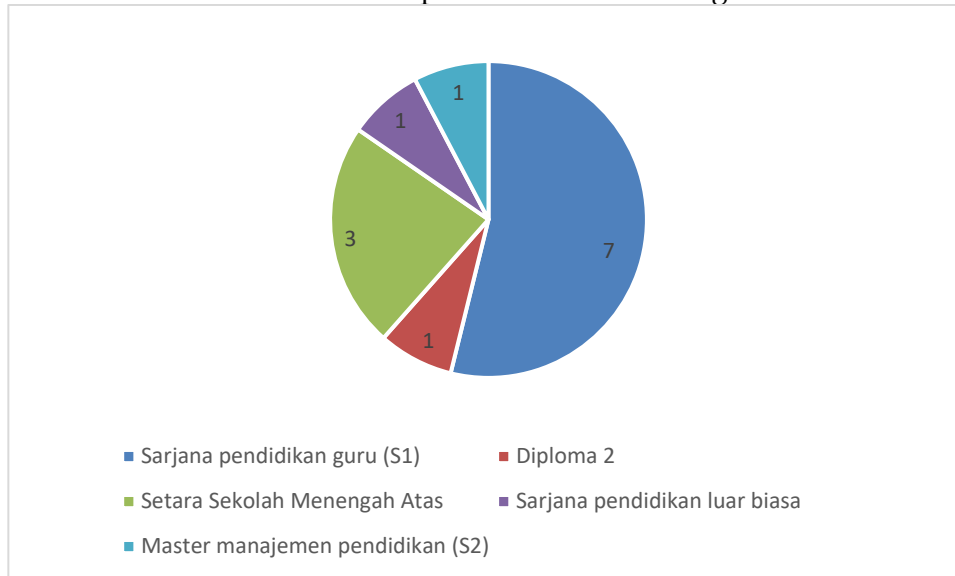
Results and Discussion

Based on the results of the online questionnaire survey, the following results were obtained:

Teacher's Education Background

Of the 13 respondents who filled out the questionnaire, it was found that the educational background of the school teachers in this study was not fully adequate for minimum academic qualifications. This is indicated by the level of education of teachers who teach in regular schools for early childhood, where some of the teachers only have education

equivalent to high school and have not taken teacher training. However, for inclusive schools that have been prepared, the teachers involved have met the qualifications of teacher schools where there are accompanying teachers who graduate from special school teacher education and teachers with master's education for education management. This diversity of educational backgrounds affects the ability of teachers to understand the needs of children with special needs and how to assist these children with special needs in learning.



Picture 2: Diagram of the Teacher's Educational Background

Teacher's Teaching Experience

In addition to the teacher's background, the teacher's teaching hours in schools also contribute to the experience of the teacher in identifying children's learning problems, finding the main problems faced, and finding appropriate strategies for handling them. 70% of the respondents in this study had less than 5 years of teaching experience. The respondent with the longest teaching experience has 21 years of experience. Teachers with less than 5 years of teaching experience reported more difficulties in identifying student problems and finding the right media in handling children with special needs.

Types of Children with Special Needs Who Have Been Accompanied by Teachers

Respondents said that they had accompanied children with various specialties while at school which included: motor disorders, autism, speech delay, learning difficulties, slow learners, deaf, speech impaired, mentally retarded, blind, quadriplegic, unsociable, and CIBI (Special Intelligence, Special Talent). From this data, it appears that regular schools and inclusive schools are choices for the community to send their children to school. Various disabilities are found in schools, meaning that teachers in regular and inclusive schools really must be equipped with knowledge about mentoring children with special needs in order to provide proper accommodation in accordance with Government Regulation No. 13 of 2020. School management needs to be improved so that they can provide budget support or funding assistance, provide facilities and infrastructure, prepare and provide appropriate educators and education personnel, and provide appropriate curricula.

Challenges Faced by Teachers in Accompanying Children with Special Needs

Not All Teachers Have Sufficient Knowledge in Assisting Children with Special Needs

The teachers who were respondents in this study were not all under the auspices of inclusive schools, but they had to accompany children with special needs who took part in learning activities at school. This situation makes the teachers not ready to accompany the children with special needs. Teachers find it difficult to find suitable programs for children

with special needs with different characteristics and cognitive abilities. These teachers need help so they can better accompany children with special needs. On the other hand, inclusive schools already have a pseudo teacher who helps in the learning process in classroom. However, teachers in inclusive schools also still need additional knowledge in preparing learning programs for all children, including accompanying classes with a large number of children with various needs and abilities.

The limited knowledge in assisting children with special needs is not only a problem in regular schools but also inclusive schools. In 2016, Tarnoto conducted research on 18 inclusive schools in Yogyakarta City and found various problems faced by teachers. Various problems faced by teachers related to school readiness in implementing inclusive schools are the lack of teacher competence in dealing with children with special needs, lack of parental care for children with special needs, the number of children with special needs in a class, and the lack of cooperation from various parties such as the community, professional experts and the government (Tarnoto, 2016).

Setiawan et al. conducted research in one of the inclusive schools in Central Lombok and found that there are still several obstacles faced by teachers in implementing inclusive education, namely: obstacles in identifying and conducting initial assessments of children with special needs; constraints in terms of inclusive learning planning; obstacles in the process of implementing inclusive learning in the classroom; and obstacles in terms of implementing the evaluation and determining the level of student achievement (Setiawan et al., 2020). Munajah et al. (2021) conducted a study in an inclusive school in one of the districts of Banten province. The findings from their research is that there are supporting capacities and obstacles in implementing inclusive education despite various efforts made by schools.

From the various studies above, the implementation of inclusive education in Indonesia is still diverse and has various obstacles even though many efforts and good practices have been carried out. If inclusive schools still have many challenges in implementing inclusiveness, then regular schools are no less challenging. Improving the service quality in all schools needs to be improved on an ongoing basis with the cooperation of all parties, both teachers, parents, children, school committees, government/foundations, and also the community to provide proper accommodation for children with special needs.

Teacher Difficulties in Finding the Right Program in Handling Children with Special Needs

Respondents in this study said that they experienced challenges and also difficulties in learning together with children with special needs, especially in literacy because of the following:

Language Literacy

In developing language literacy, in this case the ability to read and write at the basic literacy level, teachers experience the following challenges on table 1.

Based on the data table 1, there are many challenges faced by the teachers. It is not only the matter of reading and writing taught in school but basic things that enable children to write and usually be taught in preschool such as ability to focus (concentrate), fine motoric skills, and other cognitive problems such as weak memory students who require repetitive instruction. In order to overcome the literacy challenges, we can adopt the literacy movement applied in Special School (SLB).

Special School basically has to develop children's language skills which include listening, speaking, reading, and writing skills. Therefore, the implementation of the literacy movement in SLB must develop these four skills in each learning activity and be adjusted to the obstacles experienced by children, as well as the level of the education. For this reason, the implementation of literacy in inclusive schools should also be developed by following the scheme of this special school. Teachers need to make various efforts so that children are able to listen, speak, read, and write according to their specific needs.

Table 1. Challenges in teaching language literacy

Weaknesses in the hand muscles and fingers of children so that it is difficult to hold writing tools can lead to difficulty in writing and the writing looks like scribbles (bad)

Poor children's fine motor skills

Children's poor visual skills including in distinguishing colors

Poor children's ability to receive instructions, loses focus, and forgets easily

Children need to do repetitive learning

Children have difficulty spelling letters and understand that words are a series of letters

Children have difficulty in spelling words that have affixes (easy spelling of words such as "suka", "makan", "minum", "roti" dan "meja" can be spelled and pronounced well, but children have difficulty spelling and reading longer words such as "memperoleh", "mengingat", "melindungi", "keramaian"; and

Children are able to read but are not able to analyze the content of the reading. The difficulties faced make it difficult for children to solve various things in everyday life that require problem solving based on the content of the reading.

However, if children with special needs have not yet reached the basic skills of reading and writing, it is necessary to conduct pre-reading and writing training. This is done if the learning difficulties experienced also include developmental learning difficulties, namely various difficulties related to the mastery of prerequisite skills. Usually, children who do not have learning difficulties will have mastered motor, perceptual, language, cognitive, and social skills before entering elementary school. However, children with learning difficulties often require more systematic teaching. Teaching students with special needs, for example children with intellectual disabilities, requires the provision of learning materials with intense practice, various instructions to develop basic abilities and are given explicitly, systematically and consistently (Alnahdi, 2015). Children need basic skills before being taught to write and read. As shown in the data, for example, there are children whose hand muscles are still weak and need muscle training before being taught to write.

Numerical Literacy

In developing numerical literacy, the challenges faced by teachers are as table 2.

Table 2. Challenges in teaching numerical literacy

Children easily forget and lack of focus in remembering various kinds of numbers and mathematical symbols so that it hinders the learning process;

Children write numbers upside down;

Children have difficulty understanding the concept of arithmetic operations (multiplication and division);

Children have difficulty counting numbers more than 10 (tens, hundreds, thousands, etc.); and

Children have difficulty in applying mathematical concepts in the use of money so they still have difficulty solving problems in everyday life.

In particular, numerical literacy activities for children with special needs have not been widely discussed. However, based on the learning outcomes of the Decree of Head of the Research and Development Agency and Books Number 28 of 2021, children with special needs need to be taught functional mathematics, which means they are often encountered in daily activities so that the independence of children will develop optimally. For example, the Number element that is often found when looking for home address (numeration). In addition, there are many other elements of mathematics related to their daily activities that need to be learned so that they become independent and not dependent on others.

In research (Dyah Worowiras tri Ekowati et al., 2019) numeracy literacy is defined as a person's ability to use reasoning. Reasoning means analyzing and understanding a statement, through activities in manipulating mathematical symbols or language found in everyday life, and expressing these statements through writing or orally which also involves systematically organized exact knowledge.

In order to become a habit, of course, the practice of thinking mathematically needs practice. For example, learning to count needs to be prepared early on. This is necessary so that children do not experience difficulties when dealing with problems that require analytical and reasoning abilities when children grow up. The easiest thing to do is to get used to learning to count in everyday life (Skwarchuk et al., 2014).

Certainly, in order to support children with special needs in regular and inclusive schools, teachers need to understand that before children are able to solve mathematical problems related to numerical literacy, children need to master mathematical concepts and skills. Several predictors of mathematical abilities that can be taught to children are symbolic and non-symbolic number sense, understanding mathematical relations, counting skills and basic skills in arithmetic (Aunio & Räsänen, 2016).

The thing that becomes a concern when teaching mathematical concepts to students with special needs is that these children do not develop like children in general. For example, children with learning difficulties in mathematics usually have the characteristics of spatial relationship disorders, abnormalities in visual perception, visual-motor associations, perseveration, difficulties in recognizing and understanding symbols, and difficulties in language and reading. Therefore, it is necessary to pay special attention to the children with special needs so that the activities that support numerical literacy can be adapted to the specificities they face. For example, the use of concrete media to help children with visual perception abnormalities.

Digital Literacy

With the right support, young children with disabilities can achieve their life goals. Just like a person in common, they want to pursue their goals, dreams and hopes in an attempt to become citizens of the world. It is clear that digital literacy skills are very important for children with special needs to master. Digital literacy is required to participate in higher education, to apply for jobs, and to complete job assignments. So far, people with disabilities are at a disadvantage when it comes to learning these skills. Despite these barriers, individuals with disabilities want to learn and want to be able to learn digital literacy skills. Digital literacy curricula and teacher training are needed to help, not only children to develop, but also the teachers who accompany them (Lowenthal et al., 2020). The use of appropriate technology can be used as a tool to help teachers achieve the objectives of the curriculum if it is adapted to the specificity of the child, for example the use of technology to help children with special learning difficulties to be able to focus better (Riga et al., 2017).

Research conducted by Tohara, Shuhidan, Bahry, & Nordin (2021) shows that the digital literacy skills model consisting of cognitive, technological and ethical skills as a basic guideline for exploring digital literacy learning can be used as a digital literacy improvement strategy for children with special needs. This concept has been tested as a preliminary study involving 5 teachers teaching children with special needs. Similar studies need to be further improved in order to find suitable models according to the specificity of children (Tohara et al., 2021).

Teachers in schools have yet to find the right model for teaching digital literacy for children with special needs. The data obtained from this study, the use of digital media for students with special needs is far from the definition of digital literacy. Teachers and parents still think that when students can use mobile phones to make calls and watch videos from YouTube, they are said to be digitally literate. Even though this child is not necessarily capable of using digital media as a means of communication, exchanging messages or conveying

messages in writing or graphically and using digital media as a means of self-expression or a tool for data analysis.

In other uses related to teachers and parents, the meaning of digital literacy can actually be expanded, namely as the ability of teachers and parents to find information from various applications that can be used to help students learn. Not only using existing application tools, but teachers and parents need to learn consciously how to choose and buy from the many applications available on the market that suit students' needs (Draper Rodríguez et al., 2014). This ability also needs to be taught to teachers and parents but often missed.

Lack of Cooperation Between Schools, Teachers, and Parents

Of the various difficulties faced by teachers, lack of cooperation between teachers and parents is one of the common difficulties. Children with special needs usually have learning programs need to be repeated at home. However, not all parents are ready to provide assistance at home. Programs that need to be repeated at home are not carried out by the parents. This is also supported by data that not all parents are able to understand the characteristics of children with special needs, so they do not want to carry out a series of learning programs to help children learn. There are parents who actually take their children for treatment to traditional healers or to alternative medicine, thus hampering the development of children and delaying the proper handling of children. This delay in handling, for example, is like a child who has entered the age of 12 years but is not yet fluent in the ability to read, write, and count. This challenge is also seen in the results of research during the Covid-19 pandemic and children have to study from home. When support from parents is lacking, literacy teaching for children is also hampered (Asri et al., 2021).

The cooperation from the school, which is still felt to be lacking from the respondents, is the provision of appropriate facilities and infrastructure to assist in developing the ability of children with special needs. Teachers will be greatly helped by the presence of a special room to help children with special needs carrying out remedial learning, learning concepts specifically with special media and a special atmosphere. Unfortunately, not all schools provide adequate facilities as stated in the standard of facilities and infrastructure for inclusive school administrators (Rumia Rosmery Simorangkir, 2021).

Good Practices of Learning Programs in Assisting Children with Special Needs Based on Experiences from Teachers, Special Assisting Teachers, and Principals of Inclusive Schools

There are good practices of mentoring children with special needs in the field, especially in inclusive schools. In this study, interviews were conducted with an inclusive school principal and a psychologist who worked in an inclusive school. This data mining is carried out to find good practices or strategies that have been carried out by the school in handling children with special needs. The findings that can be summarized by researchers are as table 3.

Based on the data table 3, there have been many good practices carried out by various practitioners in the field which benefit the children being mentored. The results of this research need to be disseminated because it becomes a good practice that can inspire other practitioners as well as various studies that have been done before.

In 2018, Anafiah and Andini conducted research at an inclusive school in Yogyakarta (Anafiah & Andini, 2018). The results of their research indicate that inclusive education practices are getting better. At this inclusive school, differences between children are highly valued. Class activities are planned to take into account the background conditions of the children. Activities carried out in class encourage children to communicate with each other. In learning, children are involved emotionally and reflect the joy of learning. This school does not use the terminology of children with special needs where children are not seen from their special needs but the potential that can be developed from the children. Teachers in this school are also expected to be able to reduce and overcome negative behavior toward children with

special needs. In the learning process, all children are taught to help each other. All student activities are firmly and purposefully supported. Although there are some children with special needs in this school, the teachers never consider them as someone who is troublesome. All children are given equal opportunities to take part in special activities in class. Children are also encouraged to take elective activities (such as music, drama, physical education, etc.).

Table 3. Good practices

It is necessary to identify the type of specificity as early as possible from children with special needs to determine the academic treatment program. For example, when a child is detected as a student with low working memory ability, it is necessary to have strategies from the teacher such as repetition and simplification of questions.

The need for a good support system from families, teachers, and schools. From the family, it is necessary to cooperate with parents. From the teacher's side, knowledge, insight, and especially the attitude of a teacher towards children with special needs are needed. From schools, offices, and related agencies, it is necessary to support infrastructure and sources of knowledge. One more thing that is important is the attitude of friends and other parents who view children with special needs positively.

Children with special needs require special handling in learning. Teachers and parents need to focus on the positive things about their children. Explore the potential and interests of children and arrange individual learning programs that are in accordance with the potential and interests of children that are adaptive and flexible.

Give appreciation to the smallest things in the child's development in all aspects to increase the optimism of the children.

Use all of the children's senses to help them learn more optimally. Provide ample opportunities for children to get closer to nature and learn with all their senses.

Children have a sensitive period in learning something, thus provide appropriate stimulation at the right time. When the stimulation is too late, it takes a very big effort to practice these learning skills in the future. Teachers/parents need to see teachable moments in children, when the child wants to learn something. When a child tries to learn something, fails, and keeps trying, that's the right time for a child to learn because he learns with full motivation (Bailey, 2002).

The limitation experienced by most children with special needs at school is the difficulty to focus and concentrate. It is important to make sure children have these abilities before entering school age. Activities that can help children in concentrating are doing sports and physical activities. For example: cycling, swimming, basketball, climbing, carrying a container filled with water, various stacking games, and various games that require concentration such as memory cards and so on.

Saadati & Sadli (2019) also conducted research at an inclusive school in Yogyakarta. The school implements inclusive education based on self-development and nature. The purpose of implementing inclusive education in this school is to form a paradigm for school and community members to think inclusively towards various forms of difference. In implementing inclusive education, this school is based on the self-development of children. Programs in schools are tailored to the interests and talents of children. The programs provided include a research interest class, photography interest class, cooking interest class, gardening interest class and theater interest class. The learning methods used are also varied and fun so that the learning process takes place effectively and efficiently. In practice, classroom teachers are assisted by shadow teachers or accompanying teachers for children with special needs.

This study has limitations, namely the absence of a holistic evaluation as conducted by (Wardani & Astuti, 2022) which uses the CIPP assessment model (context, input, process, product) so further research needs to be carried out including selecting a more specific theme according to the context for certain types of specialties. Further research also needs to be carried out so that the school literacy movement program can be evaluated and improved such as research on literacy conducted in regular schools using various modules and learning media

(Hidayah et al., 2022; Nugraha, 2022; Nuri et al., 2022; Shafar et al., 2022). It is just that the various studies mentioned have not involved children with special needs. In addition, it is also necessary to map the difficulties faced by children in learning reading literacy and find the right method and be able to improve the child's self-concept from reading activities because this literacy problem is also a matter of increasing the child's self-concept (Hornery et al., 2014).

Efforts to increase literacy for children with special needs need to be improved. Various studies related to increasing literacy still need to be done. Good practices need to be shared. Implementation of the use of methods, media, and learning strategies according to the specificity of children needs to be carried out and published because information about this will be very useful for teachers and student assistants in finding inspiration to provide proper accommodation, especially in regular schools that accept children with special needs. Teachers need to get education on mentoring children with special needs in order to be able to work together with various parties in providing appropriate accommodation in learning.

Conclusion

Both regular schools and inclusive schools have various challenges in assisting children with special needs. The selection system that has not been standardized has resulted in many children with special needs entering regular schools and not receiving proper treatment. Teachers still need to improve their knowledge in accommodating children with special needs, and so does the school management. Even though there are many challenges faced by teachers in teaching literacy skills to children with special needs, the data in the field show that there are also many good practices that can be shared with teachers in both early childhood and elementary school programs. Good practices from this field can be considered and become a reference for teachers to accommodate the needs of children with special needs.

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