Identification and Assessment of Children with Intellectual Disability in Inclusive School

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ABSTRAK

Pemahaman yang mendalam mengenai anak disabilitas grahita merupakan hal yang penting karena akan berhubungan dengan pemberian kebutuhan pendidikan dan pengajaran yang tepat bagi mereka. Tujuan dari artikel ini untuk mendeskripsikan konsep identifikasi dan asesmen anak disabilitas grahita, ruang lingkup asesmen, teknik asesmen, dan tahapan asesmen pada anak disabilitas grahita. Penelitian ini menggunakan metode studi literatur untuk mengkaji permasalahan berdasarkan topik yang diteliti. Penguasaan keterampilan pedagogik guru kelas reguler diperlukan dalam melakukan identifikasi dan asesmen sehingga apabila hasil analisis asesmen akurat akan memberikan layanan pendidikan yang tepat bagi anak disabilitas grahita di sekolah inklusif.

Kata kunci: anak disabilitas grahita, identifikasi, asesmen, guru, sekolah inklusif.

ABSTRACT

A comprehensive understanding of children with intellectual disabilities is important, as it directly informs the provision of appropriate educational and instructional strategies for them. This study aimed to explore the concept of identification and assessment of children with intellectual disabilities, including the scope, techniques, and stages involved in the assessment process. This study used literature review method to examine various issues related to the topic under study. Enhancing reguler teachers' pedagogical skill is essential in carrying out identification and assessment, ensuring that accurate assessment results lead to the provision of an appropriate educational services for children with intellectual disabilities in inclusive schools.

Keywords: children with intellectual disability, identification, assessment, reguler teacher, inclusive school.



INTRODUCTION

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Inclusive education is an education system that provides opportunities for all students to learn together, regardless of physical, intellectual, social emotional, linguistic or other conditions (Hornby, 2021; Kauffman & Hornby, 2020). The existence of inclusive schools is proof of governments' commitment to ensure access to quality education for children with special needs by effectively meeting their diverse needs in a way that is responsive, accepting, respectful and supportive.

The responsibility of understanding and serving children with special needs is not only for special teachers, but also regular teachers who work in inclusive school (Adaka et al., 2022). Special teacher collaborates with reguler teacher in determining the minimum learning mastery standard limits, analyzing childrens' assessment, giving proper handling methods, and discussing the division of tasks in class (Berlinda & Narvoso, 2018).

Assessment is preceded by identification. Identification is an activity to ascertain whether a child is truly classified as children with special needs after there are visible abnormalities both in terms of intellectual, physical, sensory and motor skills. Identification and assessment is an initial screening to identify disability categories and their characteristics (Widiastuti et al., 2017). This also applies to children with intellectual disabilities.

Children with intellectual disability are characterized by a limited mental capacity and difficulty with adaptive behaviors such as managing money, managing schedules and daily routines, or having problem with social interaction (Hallahan et al., 2014; Parmenter, 2011). Intellectual disability originates before the age of 18 and may result from physical causes, such as autism or cerebral palsy, or from non-physical causes, such as lack of stimulation and adult responsiveness, lack of nutritious foods that affects the brain cells (Nabeel, 2017). Classification of cognitive impairment is divided into four categories namely: mild intellectual disability who has intelligence oquotient (IQ) 50-70, moderate intellectual disability who has IQ 35 to 49, severe intellectual disability who has IQ 20 to 34, and profound intellectual disability who has IQ less than 20.

Identification and assessment of children with intellectual disabilities are a crucial process in determining the level of severity, characteristics and providing appropriate interventions. Idhartono et al., (2023) stated that identification and assessment aims to ensure that services provided to children with special needs can be right on target and in accordance with the child's characteristics. Identification and assessment process involve attentive observation of the child's behavior or characteristics (Emmanuel, 2014). However, assessment practices in inclusive schools often face various challenges and problems. Some common problems that regular teachers often encounter in assessing children with intellectual disabilities in inclusive schools are as follows.

a. Lack of experts

There are limited number of psychologists in schools and a limited number of special teachers who can be collaborated with in conducting assessments for children with intellectual disabilities.

- b. Limitations of assessment tools
 - Availability of assessment tools are often inadequate to comprehensively measure various aspects of the development of children with intellectual disabilities, especially those with complex characteristics.
- c. Lack of regular teachers' understanding about children with intellectual disabilities. There are many regular teachers who do not understand about intellectual disabilities, including the characteristic, causes, how to carry out assessments, and appropriate treatment methods. This can hinder an accurate assessment process.

These problems can cause negative impacts toward children with intellectual disabilities. They do not receive appropriate intervention (Taryatman & Rahim, 2018), which can hinder their optimal development. The individual education program and special program which are given to children with intellectual disabilities do not suit their individual needs and are therefore less effective (Kubiak & Shevlin, 2015). Children with intellectual disabilities often experience negative stigma and discrimination from their family, peers and society. Based on these problems, it can be concluded that regular teachers must have good pedagogical competence so they can play an active role together with special teachers and other professionals in implementing the identification and assessment of children with intellectual disabilities in inclusive school.

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The aim of article is to determine the concept of identification and assessment of children with intellectual disabilities, techniques for assessing children with intellectual disabilities, and the sequence of implementing assessments for children with intellectual disabilities. Accurate and comprehensive assessments are very important to recognize the potential and needs of children with intellectual disabilities. By knowing the potential and individual needs of children with intellectual disabilities, appropriate intervention programs can be designed to maximize their development. Assessment results can be used as a basis for making decisions regarding educational placement, therapy services, and other supports. Periodic assessments can be used to monitor childrens' development and evaluate the effectiveness of the intervention program that has been provided.

METHOD

This study was a literature review that attempted to explore the definition of identification and assessment, scope of assessment, techniques of assessment in inclusive education setting, and how children with intellectual disabilities assessment are conducted. This research utilized various written sources such as books and articles which relevant to this study. A literature review is a description of the literature relevant to a particular field or topic. It gives an overview of what has been said, who the key writers are, what are the prevailing theories and hypotheses, what questions are being asked, and what methods and methodologies are appropriate and useful. As such, it is not in itself primary research, but rather it reports on other findings (Snyder, 2019).

RESULTS AND DISCUSSION

Identification and Assessment of Children with Intellectual Disability

Identification is an activity of recognizing and marking something, finding children who have abnormalities/problems or can be said to be a process of early detection of children with special needs (Yuwono, 2015). Identification is carried out by parents, teachers and other education personnel as an effort to carry out a screening process for children who experience disorders (physical, intellectual, social, emotional and behavioral) so that they can provide appropriate educational services (Syamsi & Dharma, 2023). Identification aims to capture children with special needs from heterogeneous environments to look for the special characteristics of each child (Heward et al., 2017). Identification for children with intellectual disabilities is carried out if regular teachers encounter students who show difficulties in academic learning, especially in the areas of reading, writing and arithmetic, students have difficulty understanding abstract things, students have difficulty in thinking critically, students have difficulty in adapting to their environment (Hallahan et al., 2014; Heward et al., 2017).

Regular teachers can consult with professionals such as psychologists or special education teachers in identifying children with intellectual disabilities. A need is established to consult experts such as psychologists and other professionals based on

the problem for further screening tests (Hitipeuw & Pujaningsih, 2017). Once it is discovered that the child has an intellectual disability, professionals refer the child with an intellectual disability to be placed in a special school for children with intellectual disabilities, where this child will be observed further to see whether the child really needs special education.

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Schools carry out evaluations and monitor the progress of children with intellectual disabilities. If the child shows significant progress, for example the child does not need special services, the parents will be given education and advice on how to maintain the progress achieved by the child and what steps to take next (Monika, 2018). If based on the evaluation results, the child requires special services, parents will be advised to continue placing their child in a special school or the child can study in an inclusive school. This depends on the educational needs of children with intellectual disabilities and the availability of special services that can accommodate the learning needs of children with intellectual disabilities in inclusive schools. The decision to place children with intellectual disabilities in special schools or inclusive schools rests on the parents (Lara & Saracostti, 2019).

After the identification process is carried out, the next step is to carry out an assessment (Hallahan et al., 2014; Heward et al., 2017). Assessment is a process of gaining comprehensive information regarding an individuals' whereabouts which can be used as a basis for preparing service or learning programs for the students according to their needs (Astati et al., 2018). Assessment is carried out with the aim of r collecting data that will be used in planning and implementing the learning process. Furthermore, the assessment aims to: (1) determine the children abilities in every aspect such as language abilities, motor skills, cognitive abilities, and adaptive abilities, (2) the assessment helps teachers in placing and determining educational programs, they are individualized educational program and special program service, and (4) determining learning strategies, educational assessment, and following up on learning outcomes.

Scope of Assessment of Children with Intellectual Disability

Assessment in special education is divided into two, namely academic assessment and developmental assessment (Hallahan et al., 2014). In carrying out assessment and preparing individual learning programs, a multidisciplinary team consisting of people from various disciplines will be involved. This team consists of psychologist, regular teacher, special teacher, therapist, guidance and counseling teacher, other medical personnel such as doctors and nurses, and the parents (Dor, 2019). The results of this assessment are then used to determine individual learning programs, including the type of special program services and the intensity of special program service for students, including placement of students in schools. Thus, children with intellectual disabilities will receive educational services that suit their needs (Hallahan et al., 2014; Heward et al., 2017).

Academic Assessment

1. Assessing reading skills

Reading is an extension of the language process. Reading allows an individual to exchange or share information. Reading also represents the way most information is presented and learned at school. Reading assessment for children with intellectual disabilities for instance: reading the dates listed on the calendar, reading medication instructions, reading their own names, reading symbols in public facilities (the symbol for men restroom and the symbol for women restroom). The reading ability which is measured in children with intellectual disabilities tends to be functional reading (Parmenter, 2011).

2. Assessing writing skills

Writing activities are identical to handwriting. Handwriting refers to the motor activities involved in writing. Teachers can observe the writing abilities of children with intellectual disabilities, for example through writing activities from left to right, how the children holding a pencil, writing their own name, writing letters, copying writing, thickening the writing, thickening the lines, and tracing. When assessing writing ability, teachers can also look at the dominant hand used.

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3. Assessing math skills

Numeracy is closely related to mathematic. Mathematic is a field of study that studies numbers, time, space, volume, geometry and arithmetic referring to the calculations carried out. Activities carried out to assess the numeracy of children with intellectual disabilities for example: counting the number of object using concrete object or having addition and subtraction.

Developmental Assessment

Developmental assessment is an assessment used to determine aspect of student development, obstacles experienced in student development, and determine appropriate intervention (Hallahan et al., 2014). There are 5 scopes of development assessment for children with intellectual disabilities, namely: a) cognitive abilities, b) communication skills, c) motor skills, d) social and emotional development and e) adaptive behavior.

1. Assessing cognitive skills

The aim of assessment is to collect childrens' information which includes skills in classifying objects, skills in sorting objects, skills in arranging objects, for example from smallest to largest, and skills in correspondence and conservation. This information will help teachers understand children's development, especially in basic cognitive development.

2. Assessing communication skills

The aspects assessed are the extent of speaking ability, the extent to which children with intellectual disability understand the language and instructions. Teachers are also assessing receptive and expressive language.

3. Assessing motor skills

This assessment can help teachers understand the motor skills of children with intellectual disabilities. Motor skill is divided into two, namely gross motor skills and fine motor skills. Gross motor skills are movements that use a large group of muscles and usually require strength. For example jumping, running, walking fast. Fine motor skills are movements that only use small muscles and tend not to require a lot of effort. For example, grasping and squeezing objects.

4. Assessing adaptive behavior

Adaptive behavior refers to the ways individuals meet their personal needs as well as deal with the natural and social demands in their environments. Aspect measured in adaptive behavior of children with intellectual disabilities such as eating, bathing, and dressing. Teachers need to see whether they carry out daily activities independently or still depending on others' assistance.

Techniques used in Assessing Children with Intellectual Disability

There are several assessment techniques that can be used in carrying out assessment, as follows.

1. Norm-Referenced Test

Norm-referenced test is a test which is carried out to compare a child's abilities with the abilities of normal children. This test is carried out on a group of children, the scores obtained by children with intellectual disabilities are compared with the group scores.

2. Criterion-Referenced Test

Criterion-referenced test is a test that is carried out to compare childrens' abilities with several criteria relevant to the school curriculum. Marlina (2015) believes that the results of the criterion reference test are somewhat difficult to interpret and the quality of the criterion reference test is also difficult to be known. Therefore, criterion-referenced tests are rarely used by teachers or by assessment teams to gather comprehensive information about a child's condition. It is because there are many other instruments that are able to measure childres' abilities and these instruments also have high validity and reliability.

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3. Informal inventory

This assessment technique is used to assess childrens' achievement in relation to the school curriculum. This instrument is used to determine childrens' abilities in the areas of reading, writing and arithmetic. The stage of compiling an informal inventory includes determining what areas of curriculum that will be assessed; separating portions of the curriculum according to the childs' age, class and skill level; analyzing the curriculum according to parts that are testable and teachable; creating question for each aspect of curriculum that is being assessed; reducing the number of questions so that they can be arranged perfectly, and ordering the tests from easiest to most difficult (Marlina, 2015).

4. Analyzing student work

The teacher observes and analyzes something produced by children with intellectual disability. Children work that can be analyzed includes work papers, responses to questions orally, children artwork, and homework. Teachers can analyze what areas are still experiencing difficulties and need to be improved.

5. Observation

Observation is the activity of observing carefully the symptoms being studied. Observation is usually used to obtain information about specific behaviors such as social skills, academic achievement, and self-development skills.

6. Checklist

A checklist is a list containing the names of the subjects and factors to be studied. Teacher places a checklist ($\sqrt{}$) on the checklist worksheet.

7. Rating Scale

Rating scale is a list containing behavioral characteristics that must be recorded in stages. So, it is almost the same as checklist but observed variables are arranged in sequence according to their needs.

8. Interview

An interview is structured conversation where one participant asks questions, and the other provides answers. The interviewer asks questions to which the interviewee responds, usually providing information. Reguler teachers can conduct interview to gain information regarding the ability and learning needs of children with intellectual disabilities. Teachers can conduct interview with parents, family members, or ask the student directly.

9. Questionnaire

A questionnaire is a structured set of questions designed to collect specific information from a person or group of people. It is a popular method for gathering data on various topics, such as opinions, attitudes, behaviors, preferences, and demographics. Questionnaire is used to collect data by asking a number of questions or written statements to the parents, family member, or the closest parties of children with intellectual disability.

10. Case conference

Case conference is a meeting of several people who are members of a small group with the aim of discussing the problems of a person or several people and then interpreting these problems to find a solution/follow-up. Through case

conferences, the process of solving student problems is carried out not only by relying on special education teachers, but can be done collaboratively, involving various parties who are considered competent and have an interest in the problems faced by students with special needs.

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However, case conference is limited and closed. This means that not all parties can be included in case conference, only those who are considered to have direct influence and interest in the students' problems may be involved in case conference. Likewise, any discussions that appear in case conference are confidential.

Conducting Assessment of Children with Intellectual Disability

Assessing children with intellectual disability involves a comprehensive evaluation to understand their cognitive abilities, adaptive behavior, and thestrengths and weaknesses (Hallahan et al., 2014; Heward et al., 2017). This assessment is essential for providing appropriate support, education, and interventions. Assessment can be given in the form of tests or non-tests with formal and informal procedures. The steps in carrying out the assessment are as follows.

- 1. Children with intellectual disabilities are identified through observation and interview.
 - Parents and other parties who are having close relationship with children with intellectual disability can be involved in this process.
- 2. Students who show significant problems are referred to relevant experts according to their needs.
- 3. Assessment is carried out on students who have been referred as needed. Assessment can be given in the form of tests and non-tests with formal and informal procedures. Formal assessment is carried out by professionals and informal assessment is carried out by teachers. The result is used to determine individualized educational programs.
- 4. The experts decide services that will be provided to children with intellectual disability according to the result of assessment. It can be educational program and compensatory education. Compensatory education is a type of educational program designed to help make up for any educational deprivation that students may have experienced due to their disability.
- 5. The implementation of educational program and compensatory service are carried out in accordance with the individualized educational program produced by reguler teacher, special teacher, and assessment team.
 IEP is the basis for preparing lesson plan and compensatory education, so every child with intellectual disabilities has his/her own IEP, which is adjusted to his/her abilities.
- 6. Educational assessment is carried out to determine students' learning abilities. The result of educational assessment is to review the program that was prepared and implemented. This cycle will continue until educational program is in accordance with the needs of children with intellectual disabilities. If necessary, another assessment can be carried out, redesigning educational programs that are already running and re-implementing program that has not been achieved by children with intellectual disabilities.

CONCLUSION

The assessment of children with intellectual disability needs collaboration from professional team with knowledge in the area(s) of suspected educational needs. Reguler teacher is cooperating with other practitioners and specialists in order to get a comprehensive picture of the students' current condition, students' strength and learning obstacles experienced by the student and to design individualized education

program that meet their unique needs. The scope assessment of children with intellectual disability is academic assessment and developmental assessment. Techniques assessment are criterion-referenced test, norm-referenced test, informal inventory, analysis of student work, observation, checklist, rating scale, interview, case conference, and questionnaire. It is important to note that the specific assessment tools and procedures used may vary depending on the students' age, disability, and individual needs. The goal of comprehensive assessment in special education is to develop a comprehensive understanding of a students' strengths and challenges, and

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design individualized education program that meet their unique needs.

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