

Adaptive Reading Learning Program for Children with Intellectual Disabilities in Inclusive Elementary School

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Keywords: Adaptive Reading Learning Program, Students with Intellectual Disabilities, Inclusive Elementary School.

Abstract: The problem that is often faced by elementary school teachers who hold inclusive education is the instruction implementation. This is partly due to the readiness of regular education institutions in the infrastructure, facilities and educational capabilities not yet available. This study intends to develop a reading learning program that is able to accommodate students with intellectual disabilities in inclusive primary schools. This research was conducted in three elementary schools of Cimahi city, West Java province with research subjects consisting of three students with intellectual disabilities, three parents of students with intellectual disabilities and three classroom teachers. This study using research & development approach through three stages. The first stage, exploring the objectivity of students' reading ability with intellectual disabilities and planning as well as the implementation of reading learning by classroom teachers; the second stage, the formulation of the adaptive program draft, which is further validated by the expert and the learning practitioner, and third stage is test of learning program implementation draft. Data collection is done through technique of test, interview, observation and documentation study. Based on the implementation of the program obtained the result that there is an increase in reading ability in students with intellectual disabilities and positive changes that occur in learning conditions reading in the classroom. The implications of the results of this study have been compiled a learning guide book which contains the basic provisions that give direction to how learning should be done especially in reading learning for students with intellectual disabilities.

1 INTRODUCTION

The ability to read has a high humanitarian function and a distinction between humans and other creatures (Sumarlin, 2013). Therefore, reading is a knowledge that must be possessed by everyone and plays a very important role in all aspects of human life, so that reading becomes a requirement of every human including students with intellectual disabilities. "Intellectual disability is a disability characterized by significant limitations both in intellectual functioning and in adaptive behavior, which covers many everyday social and practical skills. This disability originates before the age of 18. The complexity of problems and learning difficulties facing students with intellectual disabilities, consequences to the competence of the teachers in creating learning programs that are able to accommodate their learning needs. Failure accommodate students' learning needs with intellectual disabilities can adversely affect the

learning process further. This suggests that the program created by teachers in the inclusive primary school must be tailored to the ability of each student, either students with intellectual disabilities or students without intellectual disabilities, which in this study is known as "adaptation of learning programs" in inclusive elementary schools.

An inclusive elementary school is a regular primary school (a typical children's school) that receives children with special needs. They learn together, with the same teacher, the same place, and the same time. Consequently, to achieve the expected learning objectives, teachers must be able to adapt adaptations in teaching their students in these diverse classes.

Adaptation of learning programs for students with intellectual disabilities in inclusive Elementary School is based on the notion of humanism. Humanism views the individual from its uniqueness and potential. Humanism emphasizes the importance of individuality for free will in actualizing

themselves. The implication of learning, a teacher must be able to explore the potential that exists in the students, both strength and weakness, so that the implementation of learning in accordance with the needs of students, especially students with intellectual disabilities.

To explore students' potentials, both strengths, weaknesses, and student learning needs, teachers must perform activities known as assessments. Essentially, assessment is an activity to explore information about the ability, constraints, and learning needs faced by individuals as a foundation in the preparation of learning programs for the individual concerned. Three questions that are essential when the teacher conducts the assessment are: 1) what are the student difficulties / obstacles? 2) why the hardship happened? 3) in what ways did they complete their tasks? Thus, in preparing the adaptive learning programs for children with intellectual disabilities in inclusive elementary school's teachers should start with the results of assessment analysis in the form of student learning needs. The learning needs of students is what will underlie the determination of learning objectives, learning materials, strategies and evaluation tools used to determine whether the established goals are achieved or not. This explains that the position of the students becomes very central, because each component of the adaptation of the learning program is focused on the progress and needs of the students. The adaptive learning program is not solely based on learning objectives but is based on the results of the assessment. The adaptive learning program does not work for students but works with students. Therefore, each student must know what goals will be achieved, what tasks will be done, and how to do them (Payne and Polloway, 2001). Assessment as a comprehensive assessment, then teachers need information from various sources from family, community, or from other related professions such as doctors, psychologists, psychiatrists, and so forth. This is consistent with that suggested by Beirne (2002). that "with the diversity of problems children experience with intellectual disabilities ... they need systematic education and service treatments and multidisciplinary services". This opinion is reinforced by Handoyo (2010) who argues that: "Given that children with intellectual disabilities are children with complex and highly varied disorders, they require multidisciplinary and integrated treatment". It is realized that no man is perfect, everything knows, and everything can do it on his own. Bertolino and O'Hanlon (2002) points out "Not one to be confined by purist thinking", so the teacher

is not the only source of problem solving. The source of the solution exists and is in the community and is in the social network created by the teacher. This means that learning needs to be considered as a collaborative effort between teachers, students and related experts, sharing along with their expertise and validity. Therefore, a teacher needs co creating solvable problems together with other related parties. This is important because teachers play a role in formation and coaching within the context of learning. Kirk and Gallagher (1986) argues that "classroom teachers cannot do everything. They need the help and support of personnel, both from psychologists, school counsellors, and parents. " Payne and Polloway (2001) argues that parental involvement is an essential and mutual support as a substitute for previous systems often found in special education, where there is a separation between family and school settings. Thus, it is reasonable that in the adaptive preparation of learning programs for children with intellectual disabilities in primary school is through a team approach. This team will work in collaboration from the assessment to the planning of the learning program.

Preliminary study results show that the implementation of learning for students with intellectual disabilities in inclusive primary schools has not been optimal. Some of the causes, among others, are the unavailability of special education teachers in schools, the low level of teacher understanding in student learning (Rahardja, 2017), the absence of optimal cooperation between schools with parents with intellectual disabilities (Aprilia, 2017). While the teachers at the elementary school at this time have not understood what the appropriate learning program to overcome the difficulties students with this intelligence defect. The condition of teachers in elementary school is very reasonable because they do not have special education background (Rahardja, 2017).

Many teachers in regular classes and special classes ask how they can accommodate the learning needs of students with intellectual disabilities. While at the same time teachers help all students meet the standards set by the government's curriculum (Mastropieri and Scruggs, 1997). Students with intellectual disabilities present in primary schools need appropriate educational services tailored to their level of difficulty and need to obtain appropriate educational achievement.

The results of preliminary studies conducted by researchers on some elementary schools in the city of West Java Province Cimahi show both teachers of

general education and parents of students with intellectual disabilities, they conduct their own activities individually, separated without clear coordination. This is consistent with that of Johnsen and Skjorten (2003) that: "traditionally regular teachers and special education teachers and parents are accustomed to self-sufficiency, the classroom becomes its own responsibility." In addition to the lack of coordination from various parties, the strategy of developing the academic aspect is not clearly planned regarding both the structure of the activities and the aspects that need to be developed; planning and execution of learning programs by teachers that are classical, so the program used tends to be the same for all students in the classroom for students with intellectual disabilities or for students who do not experience intellectual disabilities. This phenomenon is likely to have an impact on the achievement of non-optimal learning objectives and even support the increasing difficulty of teachers in teaching students with intellectual disabilities and exacerbating the barriers experienced by students with intellectual disabilities in inclusive elementary schools.

One alternative solution to the above problems is through research and development focused on "adaptive reading and learning programs for students with intellectual disabilities in inclusive elementary schools" This study intends to develop a learning program that is able to accommodate academic skills, especially reading in students with intellectual disabilities in inclusive elementary schools.

2 METHODS

2.1 Subject and Place of Research

This research was conducted in three elementary school at Cimahi, West Java Province with research subjects consisting of three students with intellectual disabilities, three parents of students with intelligence disabled and three elementary school teachers.

2.2 Research Design

Research using research & development approach through three stages. The first stage, exploring the objectivity of students' reading ability with intellectual disabilities and planning and implementation of reading learning by teachers in the classroom; the second stage, the drafting of the adaptation of the learning program in

accommodating the skills of students with intellectual disabilities in inclusive primary schools. Furthermore, the draft adaptation of this program is validated by experts and draft revisions in accordance with expert suggestions and comments. Thus, the researchers have hypothetical adaptive programs. Research phase 3 is the test of the implementation by teachers in applying adaptation of learning programs that are able to accommodate students' reading skills with intellectual disabilities in elementary schools that are hypothetical. Implementation of learning comes with an observer consisting of a class teacher (college principal teacher), principal, and researcher. After the implementation test, the resulting adaptation of learning program in accommodating students' reading skill with intelligence defect in elementary school is tested its implementation. Here is a chart of the research procedures carried out in this study (see in figure 1).

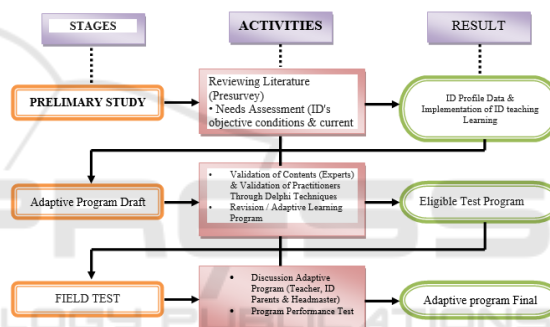


Figure 1: Flowchart research

2.3 Data Collection Technique

Data collection techniques used were interviews, observations, reading skill assessments and documentation studies. to collect data on the preparation of the adaptive draft of the learning program, the participants involved are experts in the field of education of children with intellectual disabilities, specialist in special education learning, and elementary school reading teachers, and parents of students with intellectual disabilities. In order to collect data on the adaptive implementation test of the learning program, the participants involved are the fourth-grade teachers, the teachers (the implementing colleagues who teach reading), all fourth graders of elementary school who are following graders reading learning including students with intellectual disabilities and school principals who will observe process of learning implementation.

2.4 Data Analysis Technique

Data analysis techniques in this study were conducted qualitatively. In connection with that, Bloom and Crabtree (2006) suggests that “qualitative data analysis ideally occurs concurrently with data collection so that investigation can generate an emerging understanding about research questions, which in turn informs both the sampling and the questions being asked”. The data analysis used in this research is based on the framework developed by Miles and Huberman (1992), where the research technique consists of three phases, i.e. data reduction, data presentation, and draw conclusions (verification). 1) Data Reduction is the process of selecting, focusing, simplifying, abstracting, and transforming data contained in the results of observations and interviews. Reduced data will provide a clear picture and make it easier for researchers to perform further data collection. 2) Display Data is how the data is presented. Display data in this study displays the information organized so as to facilitate the analysis of data that has been obtained in the form of a brief description. 3) Conclusion and Verification of data; The next step is to draw conclusions or verification. The conclusion in this study contains a description or description of an object that was previously still unclear so as to obtain a tentative conclusion as a basis in drawing the conclusions of the study.

3 RESULTS

3.1 Description of Student Reading Skills with Intellectual Disabilities

Physically the three subjects are in the fourth grade of elementary school, however academically, the subject has the ability to read in grade 1 semesters 1 and 2. The subject (A & C) has the ability to read vowels and most of the consonants (except f, q, v, x, z); Both the physical and social subjects do not show any abnormalities. The learning need to read the current subject is to incorporate the letters into KV syllables (Vocal Consonants); combining syllables into KV-KV. Subject (B) has the ability to combine letters into syllables with KV patterns; Both the physical and social subjects do not show any abnormalities. The learning need to read the current subject is to combine syllables into KV-KV patterned words.

3.2 Description of Teaching Learning of Student Reading Skills with Intellectual Disabilities

The teaching learning profile of the three subjects is a classical learning with the same material, method and aluation. No special treatment or service is given to the subject. The reason for the three subjects, because of the unavailability of special education teachers, has difficulties in dividing time, dividing the material, and the fear of neglecting attention to other students (non-disabilities). Therefore, learning is not different for all students, either in the material, the media, or metode and its judgments. Implementation of learning is based on programs made by Teachers Working Group (KKG) in the school cluster and then reproduced and implemented by teachers in each school. In other words, the learning program used by teachers is not based on students' learning abilities and difficulties and does not aim to meet students' learning needs, but to achieve the curriculum targets and package books provided by the central government. In classroom management, teachers do not make proper seating arrangements. One of the research subjects sat alone in the back, while the other students sat together with their friends, so the subject looked lonely, lacking the help of peer tutors, rarely interacting with friends during the lesson. The subject appeared to be busy with the books and toys. This has an impact on the condition of the subject which is increasingly no progress in the lesson especially in reading lessons.

3.3 Adaptive Learning Program Draft

Based on the objective condition of the subjects and the conditions of reading teaching learning in the classroom, as well as the literature review, researchers need to formulate a learning program that is able to accommodate the learning needs of each student in the classroom. The program in question is a syllabus and learning implementation plan (RPP) regularly modified both objectives, materials, methods and evaluation, so as to accommodate the learning needs of each student in the class in question. Modifications are based on the results of the assessment analyzes performed on subjects (students with intellectual disabilities). Assessment results obtained data on reading ability of subjects, reading difficulties faced by the subjects and reading learning needs. This data is the starting point for the preparation of the syllabus and RPP of this modification hereinafter referred to as "program adaptation". The program adaptation preparation

procedure begins with: 1) Establishment of Adaptation Team of the Program (classroom teachers, principals, parent subjects and researchers), 2). Assessment, 3) Adaptation of assessment results to curriculum 4) Develop syllabus 5) develop RPP. The developed RPP can be an integrated RPP and an individual RPP. The program adaptation draft is validated by experts and practitioners who then tested its implementation.

3.4 Test adaptive Learning Program

The test of learning program implementation of reading is done through three stages, namely pre-implementation, (discussion of team members), stage of adaptation implementation by class teacher and final stage (reflection of program adaptation). The implementation test results show that adaptation of the program is able to provide new knowledge to the general education teacher on the assessment and preparation of adaptation of the program that is able to accommodate the student's learning needs. Adaptation of the program is able to create an active, creative and fun classroom atmosphere. Adaptation of the program can improve student learning outcomes, so that the learning objectives that have been set can be achieved.

4 DISCUSSION

The problem faced by inclusive elementary school teachers is the implementation of learning. Yulianto (2012) suggests "Implementation of inclusion education at lower levels of education is more difficult when compared to higher levels ... learners have more mature independence and higher rational culture" ... The absence of the same perception among bureaucrats, education practitioners that inclusion education has not been considered a national program; The readiness of regular educational institutions both in infrastructure, facilities and educators' capabilities is not yet available. The core problem found in this study is the absence of a learning program that is able to accommodate students' reading skills with intellectual disabilities in inclusive elementary schools. One factor is the low level of understanding of teachers in teaching and learning of students (Rahardja, 2017), This is understandable, because teachers in primary schools are generally not having special education background. Besides that, also because of unavailability of special education teacher in school (Rahardja, 2017). The preparation of the teaching and learning program is essentially

an attempt to define procedures and systematize the learning process in certain situations in such a way that the student's behavioural changes take place. One form of educational service for children with intellectual disabilities is through adaptation of the program. Based on the grand design of national inclusion education that has been agreed in Palembang on 27-30 November 2007 (Yulianto, 2012) that the substance of the implementation of inclusion education is adaptation ... substantially indispensable in adaptation to inclusive education is adaptation of curriculum and adaptation of teaching and learning ... students with intellectual disabilities can adapt to a regular curriculum according to their ability " Adaptation of the learning program referred to in this study is a written document developed in a learning plan for children with intellectual disabilities based on the style, strength, and special needs of students in learning, so that students work with tasks appropriate to the conditions and motivations. In principle, program adaptation is a learning program based on the learning needs of each student. This study proves that the adaptation of the program is able to create an active, creative and fun classroom atmosphere. Adaptation of the program can improve student learning outcomes, so that the learning objectives that have been set can be achieved. This is supported by the grand design of the national inclusion education that curriculum adaptation can be done by 1) (a) taking the same basic competency and competency standard with the standard curriculum (regular and special education) but lowering the indicator (taking some indicators); or 2) Take the same competency standard with the regular curriculum and formulate its own competency standards. In essence, not all subjects and / or subject matter require adaptation. Only subjects and / or lesson metrics create difficulties as a direct result of the disorder requiring adaptation. The adaptation of the program is based on a humanistic philosophy which sees that "necessity is the basis for the emergence of individual behavior. Meeting the need for survival is very basic "

It is not surprising that special education experts agree that one of the footholds in the preparation of the learning program should start from the learning needs of students, because students are individuals who will learn. For that program adaptation is the right way in learning to teach students in order to avoid the occurrence of failures in the learning process.

This study proves that in the program implementation stage obtained the result of improved reading ability in students with intellectual disabilities and positive changes in the condition of reading teaching learning in the classroom. This is supported by the results of Lynch's research (Lynch,

1994) on the effectiveness of the adaptive program indicating that the experimental group in 32 students with adaptive programs was significantly higher in ability than the control group, they were more interactive in learning. This implies that the learning process based on the students' learning needs as desired in the adaptation of the program further helps the achievement of student learning objectives. Another problem found in Cimahi elementary school is the unavailability of Special Education Teachers, thus becoming one of the obstacles in the process of implementation of learning for children with intellectual disabilities. Yulianto (2012) "The implementation of inclusive education as an educational innovation should involve various parties according to their expertise".

The first step in adaptive programming is to form a team (Abdurahman, 2012). It is realized that no man is perfect, everything knows, and everything can do it on his own. Bertolino and O'Hanlon (2002) puts it "Not one to be confined by purist thinking" so the teacher is not the only source of problem solving.

This means that learning needs to be considered as a collaborative effort between team members. Ideally these team members are multidisciplinary. For the current Indonesian situation, at least the team members consist of special education teachers, public education teachers, principals and parents, because they are the ones who really understand the students' whereabouts. Teachers in elementary schools are already familiar with the preparation of RPP. This is the basis of strength in making adaptation of programs that can accommodate the learning needs of each student. With the adaptation of this program, teachers are expected to learn to teach students with intellectual disabilities without disrupting the implementation of learning to students in general.

Physically the three subjects are in the fourth grade of elementary school, while academically their learning needs especially in reading are in the 2nd semester curriculum semesters 1 and 2. While emotionally and socially the three subjects do not show any abnormality. Learning profile that has been experienced by the subjects is learning that is classical, so it has not been able to accommodate the learning needs. The main factor is the unavailability of a special program to accommodate the subject's learning needs, so that the subject's ability is not progressing.

Therefore, it is necessary to formulate an adaptive learning program that is able to accommodate the learning needs of each student in the classroom. The meaning of the program adaptation is a learning program that is based on the learning needs of each student formulated based on a previously established team. The program's work

steps begin with team building, assessment, adaptation of assessment results to curriculum, syllabus development and development of lesson plans. The implications of the research results are compiled by a learning guide book that contains basic provisions that provide direction on how learning should be done especially in reading learning for students with intellectual disabilities.

5 CONCLUSIONS

Physically the three subjects are in the fourth grade of elementary school, while academically their learning needs especially in reading are in the 2nd semester curriculum semesters 1 and 2. While emotionally and socially the three subjects do not show any abnormality. Learning profile that has been experienced by the subjects is learning that is classical, so it has not been able to accommodate the learning needs. The main factor is the unavailability of a special program to accommodate the subject's learning needs, so that the subject's ability is not progressing. Therefore, it is necessary to formulate an adaptive learning program that is able to accommodate the learning needs of each student in the classroom. Adaptation of the program in question is a learning program that is based on the learning needs of each student formulated based on the team that was formed previously. The program's work steps begin with team building, assessment, adaptation of assessment results to curriculum, syllabus development and development of lesson plans. The implications of the research results are compiled by a learning guide book that contains basic provisions that provide direction on how learning should be done especially in reading learning for students with intellectual disabilities.

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