

The Implementation of Self-Safety Learning for Students with Intellectual Disability in Special School

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Abstract— The objective of this research is to describe the implementation and obstacles experienced by teaching in implementing self-safety learning for students with intellectual disability. The data in this descriptive research are collected through interview and observation regarding to the process of self-safety learning. The data are analyzed using descriptive qualitative technique. The results of this research show that there are obstacles in implementing learning method and using learning media in learning that causes the self-safety learning material has not been delivered completely and the learning purpose has not been achieved. Self-safety learning needs the implementation of method and media that consider the safety, security, needs and characteristics of students with intellectual disability in order to achieve the learning purpose.

Keywords—*self-safety, students with intellectual disability, media, method*

I. INTRODUCTION

Self-safety program is included in functional learning for students with intellectual disability. Functional learning is learning which delivers useful materials for the lives of students with intellectual disability. Several functional materials that need to be learned by students with intellectual disability are material related to simple academic, self-help, live in society and vocational skills [1]. Students with intellectual disability experience limitations in recalling, generalizing task or skills, and have low levels of motivation and material understanding that have impact on their learning or everyday activities [2].

Self-safety and simple skills learning for students with intellectual disability are done to optimize their skills in everyday activities that support independent life [3]. The material of safety learning in curriculum 2013 covers the knowledge about dangerous objects, dangerous animals, and how to avoid danger. The self-safety learning is aimed to teach the students to take care of themselves from dangerous objects, grow independence, and teach them about potentially dangerous situations and how to handle them safely [4]. The implementation of self-safety learning can help to achieve the purpose wanted by keeping close looks on learning components of students with intellectual disability.

Students' understanding about self-safety needs to be a concern of parents or teachers because it is related to everyday activities and is related to potentially dangerous objects. A cut that is caused by knife in the finger of a grade IV student, while other students put the knife on the floor during observation in SLBN 1 Bantul show that some of the students still have no knowledge about danger and how to avoid it. Another incident related to self-safety occurs when a student with intellectual disability is almost beaten by people for bringing a knife and walking around Bojong Gede village on February 22nd 2018, and on June 15th 2017, a fire in South Kalimantan takes the life of a woman with intellectual disability [7]. Another thing that has become the base for the importance of self-safety is because students with intellectual disability have a bigger risk to get injured compared to people in general [8]. Based on the facts found, material of self-safety for students with intellectual disability is needed. This article will be discussing about the process of self-safety learning for students with intellectual disability and the obstacles experienced by teacher during the learning process. The purpose of this research is to describe the implementation of self-safety learning for students with intellectual disability and the obstacles experienced by teacher during the implementation.

The rest of this paper is organized as follow: Section II describes the literature review. Section III describes the proposed methodology. Section II presents the obtained results and following by discussion. Finally, Section V this work.

II. LITERATURE REVIEW

This section presents the literature review.

A. *Self-Safety Learning for Students with Intellectual Disability*

Self-safety learning is a skill development for students in maintaining security and self-safety that functions in everyday life [9]. This definition explains about the importance of self-safety for students with intellectual disability in school, so that the students can protect themselves and do not always expect help from others. The need of students with intellectual disability to learn about self-safety is functional because it can be useful in everyday

life [10]. Things that need to be looked out for in self-safety learning are learning purpose determination, material organization, learning method implementation, and learning media use [11].

According to curriculum 2013 about self-help, the purpose of self-safety learning is so that students can keep themselves from objects that may harm them and so that they can grow independence [12]. Self-safety learning is expected to help students to reduce their dependence on adults and to acquire information about dangers without inflicting panic or fear [13]. The purpose of self-safety learning is achieved by delivering material about self-safety by using learning method and media.

B. Self-Safety Learning Material for Students with Intellectual Disability

The purpose of self-safety learning is achieved by delivering material regarding to self-safety. The learning material is a set of learning substances that deliver knowledge and skills in order to fulfill the competence in curriculum systematically [14]. Some of the self-safety materials in this article are; fire prevention, self-medication, recognizing dangers, knowing about electricity, dangerous objects and how to avoid dangers [15]. Self-safety competence for students with intellectual disability is delivered through self-development subject. It is based on the General Director of Primary and Secondary Education Regulation Number 10/D/KR/2017 and is a special program for students with intellectual disability. The self-safety material delivered to students with intellectual disability includes knowing dangerous objects, dangerous animals, staying away from dangerous objects, dangerous animals, natural disaster, and doing first aid [12].

C. Self-Safety Learning Method for Students with Intellectual Disability

Learning method is operational steps used to help students in achieving learning purposes [16]. The use of learning method can help to motivate the students in focusing, acquiring, understanding, and recalling information. The characteristics of students with intellectual disability are the concerns in determining the learning method. Results of a research reveal that suitable learning methods for students with intellectual disability are task analysis, exercise and simulation [17].

Task analysis method is a way of delivering learning material by dividing the material into several components and delivering them gradually. Simulation method is defined as a way of delivering material by using artificial situations that illustrate the real situations in order to understand certain concept, principle, or skill. The exercise method is a learning that is done to form habit through repetition [18] [19].

D. Self-Safety Learning Media for Students with Intellectual Disability

Media has important roles in learning and is included to be one of the things needed to be considered in implementing learning. Media is a message conveyer which facilitates communication and increase learning effectivity [20]. Learning media consists of all facilities that can be

used by teacher to facilitate the achievement of learning purpose. There are many kinds of media that can be used for learning, some of them are printed-media, graphic, photograph, audio, computer, video or real object [21].

Learning for students with intellectual disability requires media that is in accordance with the students' cognitive development so that the purpose of self-safety learning can be achieved. Media selection must consider the availability of facilities, students' characteristics and topic suitability [22]. Learning media that are considered suitable for students with intellectual disability are printed-media, audio-visual and other electronics media [23].

E. The Obstacles in Implementing Self-Safety Learning For Students with Intellectual Disability

Students with intellectual disability experience delays in development and low level of understanding that have impact in learning and everyday activities [24]. Based on the obstacles, self-safety learning for students with intellectual disability must be adjusted with the characteristics and ability of each student. A learning that is implemented in accordance with the characteristics and ability of the students is expected to achieve the learning purpose.

Facts in the field show that there are problems in the implementation of self-safety learning for students with intellectual disability. The problems occurred in the learning implementation show if there are obstacles in achieving the learning purpose. Factors that inhibit learning can be classified into 3 (three) groups, which are factors derived from the students, school and family environment. Factors derived from the students are learning attitudes, motivation, concentration, achievement, confidence, intelligence, and habit. Factors derived from school are curriculum implementation, method selection, media availability, and material mastery. Factors derived from family are economic ability of the parents, lack of attention given by parents to the student, excessive attention and parents' expectation of the students that is considered too high [25] [26].

Previous research shows the results of learning inhibition for students with intellectual disability viewed from family factor. The results of the research show that parents who are too worrisome and give excessive attention inhibits the independence of students with intellectual disability in everyday activities [27]. The results of the research show learning inhibitions derived from family factor. The difference of the research and this article lies on the inhibiting factor viewed. This article views inhibiting factors derived from school environment, which is the obstacles experienced by teachers in method selection, media availability, and material mastery on self-safety learning. Formulation of the implementation and obstacles experienced by teachers in method selection, media availability, and material mastery on self-safety is expected to give ideas about how self-safety learning supposed to be and so that the purpose of self-safety learning can be achieved.

III. PROPOSED METHOD

This research is a descriptive research that refers to Borg & Gall [28]. This research describes about the learning

process of self-safety material for students with intellectual disability. This research is conducted in 2 (two) special schools, they are SLB N 1 Bantul and SLB Wiyata Dharma 4 Godean which involves 6 (six) teachers in the process.

The data is collected through interview and observation about self-safety learning process. The interview is conducted directly with interview guidelines to reveal the obstacles experienced by teacher in self-safety learning, while the observation is conducted to observe the implementation of self-safety learning for students with intellectual disability. The data is analyzed by using descriptive qualitative technique, which is by selecting the data in which are in a form of interview results, observation note, and pictures that are in accordance with the learning purpose and presenting the results in a form of description or descriptive text regarding to the implementation of self-safety learning for students with intellectual disability.

IV. RESULTS AND DISCUSSION

This section presents the results obtained and following by discussion.

A. Result

The results found in this research are the delivery of self-safety learning material, the use of learning media, implementation of learning method, and the obstacles experienced by teachers in implementing self-safety learning for students with intellectual disability. Based on the results of interview and material observation, in which the material is about knowing sharp objects and dangerous animals. Sharp objects introduced by teacher in learning process are scissor, knife and needle. The students have been introduced to parts of the sharp objects and their use. The reason for material of sharp objects to be delivered is that knife or scissor are objects owned by every family, for that reason the students must be introduced to parts of the objects so that the students will be more careful in using them.

The results found regarding to the method implemented in self-safety learning is the use of lecture and demonstration methods. Lecture method is implemented in every learning process because learning process still needs oral explanation from the teacher. The teachers' reason for choosing this method is so that it will be easy to organize the class, to prepare and implement the learning. The teachers have not tried to implement other methods such as exercise method because the teachers still concern about the security and safety of the students with intellectual disability that have low level of understanding.

The implementation of lecture method has not maximized the learning because the method does not involve the students to be active in learning process. It is one of the obstacles in self-safety learning. The material delivery has not been done maximally so the learning purpose has not been achieved properly. Demonstration method implemented when the teacher is showing the process of using knife to the students, so the students can observe how to use knife. The implementation of this demonstration method is also incapable to involve the students maximally

due to some consideration regarding to the security and safety of the students.

Learning components other than material and method that cannot be separated from learning process is learning media. The media used in self-safety learning for students with intellectual disability are picture media and real objects. The media used to introduce sharp objects are the picture of knife, scissor, needle, cutting vegetables, cutting fabric and sewing. Real objects media that are used to introduce sharp objects are parts of knife, scissor and needle, and the use of each sharp object. Real objects are used to introduce sharp objects because they can introduce the objects concretely and give real experience to the students. Characteristics of students with intellectual disability that have delays in development and low level of understanding become the main considerations in selecting the learning media. Unavailability of suitable media that is in accordance with the characteristics of students with intellectual disability has become an obstacle in implementing self-safety learning.

B. Discussion

Students with intellectual disability are individuals who experience delays in their cognitive ability and adaptive behavior. Adaptive behavior are one of the delays experienced by students with intellectual disability, in which it is the life skills needed by every individuals to live in a safe and socially responsible that includes the ability to associate well with others, the ability to follow the rules and ability in everyday activities such as to eat, shower, dress, working skills, and self-safety. Many materials delivered to students with intellectual disability require modification adjusted with the needs and ability of the students.

The results of this research show that material delivered about self-safety for students with intellectual disability is still limited. Material that has been delivered includes knowing sharp objects and dangerous animals. Previous research mentions about the material regarding to self-safety that should be learned by students with intellectual disability are safety on the road, avoiding accident in home (kitchen and bathroom), safety towards strangers, knowing the danger of fire, dangerous animals, the danger of electricity and first aid. These materials can be understood by students with intellectual disability if they are delivered systematically [29], [30].

Based on the research, there are still a lot of materials that have not been delivered to the students. Material about preventing or avoiding danger that have not been learned by students can be delivered by introducing and showing them how to use matches, candle and stove, explaining how to avoid danger such as by not leaving flammable goods next to candle or stove that is on fire, and trying not to leave the stove while using it, and if there is a fire then the students should run away for safety. Next material is about introducing electricity, the right way to use and the danger of electrical outlet. Another thing that should be learned by the students is about doing first aid that can be done as treating their wound, running for safety if there is a fire, and asking for help from adults.

This research also shows results related to the obstacles experienced by teachers in using media for self-safety

learning. Previous research shows that the use of planned media for students with intellectual disability can increase their interest and motivation and train them to be more active in learning in order to create an effective learning [31], [32]. Based on the results, the use of media is important in learning. Media that is used at the time are real objects and picture media that have their own advantages and weaknesses. Previous research about the use of live objects in learning for students with intellectual disability show that interest and motivation of the students can be increased by learning using authentic material [33]. The use of real objects must keep close looks on the danger caused by the real objects, the use and care needed by looking at security and safety factors. While the use of picture media can increase learning interest and stimulate visual learning style that shows the actual size to the students [34].

Based on the weaknesses of the media used by considering the security, safety and achievement of the learning purpose, a learning media that is in accordance with the characteristics and the needs of students with intellectual disability is needed. Media that can be used is a combination of audio and visual such as video program or education television, video or instructional television, film and audio slide program [35], [36]. Characteristic of audio-visual media that uses the senses of hearing and sight, gives consistent information, and can be repeated according to the characteristics of students with intellectual disability that have low level memorizing capability, so the material has to be delivered repeatedly. Result of previous research show that the use of audio-visual media in learning gives positive effect to the students. The students can experience new learning atmosphere, a class that is more interactive, interesting learning, the students are more enthusiast and motivated to learn [37].

Computer based media can be in form of multimedia, interactive video, interactive game, e-learning, m-learning and blended learning. Based on the result of previous research, a computer-based media that can be used by students with intellectual disability is multimedia [38]. Multimedia is a combination of several media in a form of presentation or independent learning program. Multimedia is a kind of media that combines text, audio, video and still or moving picture [39]. Multimedia can be used as a learning media for self-safety learning of students with intellectual disability.

Components of multimedia can present the material repeatedly and consist of text, audio, video, still or moving picture and interactive link. Text in multimedia can present the self-safety material, the picture can present the basic concept of self-safety such as displaying the picture of matches, candle, stove, and electrical outlet, plug, and steps of doing first aid. Audio can be used to read the material text so that even though the students have yet to know how read but they can learn the material through the audio. Video can present about the use of potentially dangerous objects and how to avoid the danger. For example, video about how to use sharp objects, how to use stove, or how to use electricity. Interactive link can be used to return or continue to the material wanted to be learned according to needs. Multimedia can be used independently by students,

make them active and let them choose the material [38]. Another consideration in choosing multimedia is security and safety factors of the children. The use of real object can endanger the safety of children if they do not know how to avoid danger. The results of research show that the teachers are have problems in implementing learning method. The methods determined by teachers are lecture and demonstration. Another research shows that the results of implementing demonstration method is not maximum for learning because this method is dominated by teachers and does not involve the students to be active in learning [40]. Based on the results, implementation of other methods that are considered to be eligible for self-safety learning of students with intellectual disability is needed. Methods that can be used are task analysis, exercise and simulation.

Analysis method is a methods used to deliver material one by one in order to achieve learning purpose [41]. The use of this method can make it easier for students in receiving the material in more detail and systematically. Task analysis method can be implemented in delivering self-safety material, for example in the danger of electricity material to introduce the steps of using electricity correctly and how to keep self away from danger.

There are other methods that can be implemented in self-safety learning for students with intellectual disability. Research shows that simulation method can train and give realistic experience to the students that will encourage generalization to real life situations by still keeping close looks on the security and safety of the students [29]. Within the self-safety material, simulation to the process of saving self from fire and treating burns, scratches, and cuts can be implemented.

Exercise method is also one of learning method that can be implemented in self-safety material. Exercise method is a learning activity done repeatedly with a purpose to strengthen the material understanding. The implementation of exercise method is known to be more effective and efficient in learning [42], [43]. This method is in accordance with the characteristics of students with intellectual disability that have low memorizing capability and need material repetition.

The implementation of an effective learning can be determined from the correct implementation of learning method. Learning method in general is aimed to guide learning and make it possible for every individual to learn according to his or her ability. Every method has its own advantage and weakness compared to the other. According to the research, lecture, demonstration, exercise, task analysis and simulation methods can be implemented in learning for students with intellectual disability. The implementation of method can be adjusted with the material wanted to be delivered so the learning purpose can be achieved.

The results of this research also show other material delivery regarding to self-safety of students with intellectual disability to give understanding about dangers, how to avoid them and how to do first aid is needed. Further research which focuses on learning media for delivering self-safety material that is in accordance with the characteristics and

needs of students is needed in order to achieve the learning purpose.

V. CONCLUSION

This research shows that self-safety material has not been delivered completely. The material delivery is not complete due to method implementation and the use of learning media. The material about avoiding danger has not been delivered to students. The material delivery will be complete if it is delivered by using suitable method and media. The methods used by teacher are lecture and demonstration methods still need to be combined with other methods that are in accordance with the characteristics and needs of students with intellectual disability. Methods that can be used are task analysis, exercise, and simulation. Learning media that are available in schools and are used for Self-safety learning by teachers are real object and picture media. The teacher does not have media that considers the safety, security, needs and characteristics of students with intellectual disability in order to achieve learning purpose.

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