Development of Vocational Learning Program to Process Seaweed for Class XII Mild Intellectual Disability Children at SLB Negeri Cipatujah Tasikmalaya Regency

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Abstract

Every living human being is required to seek knowledge, one of which is through education. Intellectual disability are classified based on their level of intelligence, one of which is mild intellectual disability. Children with mild intellectual disability in general look or physical condition is no different from normal children in that their education requires skills for self-sufficiency. Learning programs for children with intellectual disabilities are focused on skills, one of which is seaweed processing skills. This skill program has been implemented but is limited meaning that the implementation of the program is maximum and needs to be developed, the research aims to obtain an overview of the development of vocational skills programs to process seaweed to be useful and...
can be a reliable skill. This research uses a descriptive method with a qualitative approach, data obtained through interviews, observation, documentation, FGD and validation. The results of this study show the ability of children with intellectual disabilities in participating in skill learning activities to be able to follow well, learning programs compiled by researchers and teachers are outlined in making more specific programs assisted by teams using the form of syllabus detailed in the Lesson Plan. The resulting form of learning program development includes the allocation of time, subject matter, material and media. This research is recommended to teachers to increase dedication and competence in learning activities.

**Keywords**

Development, Program, Seaweed, Mild Intellectual Disability

**Introduction**

Education is the most important thing in the life of all humans, this is why as humans have the right to get proper education, including for children with special needs.

Children with special needs or disability are limitations that a person has. It can also be said that children with special needs are considered not to have the ability to do things done by children in general because of limitations in sensory, physical, cognitive and other area functions, these limitations that result in interference with the achievement of children with special needs to their potential. In education, social and vocational, one of the children with special needs is a child with intellectual disabilities.

According to Kustawan in Fatimah (2017: 220) "intellectual disability are children who have significant intelligence below average and are accompanied by inability to adapt behavior that arises during development". A person can be categorized as intellectual disability according to below-average intellectual aspects, has obstacles in adjusting to his social environment and has obstacles in development, especially socialization in children so that they experience limitations in social abilities that have an impact on the activities they carry out.

Generally, children with intellectual disabilities need skills education that provides basic training and is carried out appropriately to children about daily life in order to be skilled in carrying out daily life. Through education, this skill can be used as a way for children with intellectual disabilities to get more meaningful and more realistic education and be able to do daily activities to achieve more independent life in future. Khotimah, (2019) states that

Talent, interests and qualifications are important aspects used to determine the provision of vocational education that is suitable for children with intellectual disabilities, but the lack of information obtained and not all talents possessed by children can be seen and easily found resulting in the difficulty of knowing the talents possessed by students so that in providing vocational
education more emphasis is placed on children's interests to be given the implementation of vocational education.

By education, it is hoped that the ability will always develop and will continue to grow over time and the potential directed is more focused on the goals of education.

It is explained in Government Regulation No. 22 of 2006 that the content of the curriculum of secondary and upper education units consists of 40%-50% academic aspects and 60%-50% vocational skill aspects, meaning that at that level students are given more skills education adjusted to to the child's condition. According to Iswari, (2007:15), "life skills education is defined as the ability to work in addition to the ability to be academically oriented".

At post-school, children with intellectual disabilities experience limitations in doing work so that they will be difficult to absorb in the world of work. Some parents are worried that their children cannot have a job as a life support when they are adults, for that children with intellectual disabilities need skills that can be a provision for the future.

According to Astati (1996: 154), pre-vocational is "activities carried out before individuals do certain work, what is important at this stage is how individuals maintain tools, use tools, get to know work and so on". Pre-vocational is an ability that must be possessed by individuals as a basis for developing into vocational abilities.

Schools have a responsibility in producing a generation of children who have special needs in preparing for independence to face the future. Vocational learning is necessary in preparing exercises for students to get used to independence. The more often you practice, the more honed the skills you have, so post-school students will have experience when they enter the world of work.

The area of the south coast of West Java which is a producer of seaweed commodities with red algae. Seaweed processing in the Cipatujah Beach environment is still limited, for example, only made as a side dish, jelly in wet or dry form so that it is only processed semi-finished.

There are several vocational lessons at SLB Negeri Cipatujah namely tata boga covering the ability to process the results of local wisdom cultivation seaweed because the sea is famous for its beneficial nutritional content, including containing Vitamin A, Vitamin B6, Vitamin B12, Vitamin C, Iron, Manganese, Magnesium, Zinc, Riboflavin, Niacin, Thiamine, and Calcium. One of the skills learned in school is the skill of processing seaweed into food that can be consumed by the community with good taste and has selling value. Processed seaweed can also be used as a characteristic food for children's skills at school.

To take advantage of abundant commodities and rich in nutritious content, seaweed processing is needed in accordance with the times.

Vocational development in SLB is very useful for the development of children’s skill with special needs in daily life. Vocational activities as a means to develop the ability of independence of children with intellectual disabilities as
post-school provisions. Aims to develop existing skills in children, based on this competence students with special needs can work according to their interests. One of the skills learned in school is the skill of processing seaweed into food that can be consumed with good taste and has high selling value. Seaweed is one of the abundant crops produce on the coast of Cipatujah which can be processed into traditional food that is easily available and much loved from various groups ranging from children to adults and is a hallmark of skills in SLB Negeri Cipatujah.

Based on the description above, researchers are interested in researching "Development of a Vocational Learning Program for Seaweed Processing for Class XII Mild Intellectual Disability Children in SLB Negeri Cipatujah Tasikmalaya Regency"

**Research Methodology**

In a study, a method is needed that is in accordance with the problem to be revealed. The method that is in accordance with this study is the descriptive method where this method is an attempt to find. The definition of descriptive method according to Subana (2005: 26-27) is as follows:

The descriptive method is a method that tells and interprets data related to situations that occur and are experienced now, attitudes and views that are symptomatic of the present moment, relationships between variables, conflicts between two or more conditions, influence on a condition and differences between facts.

From the description above, the descriptive method is a method used to solve problems faced in the present/ongoing by taking steps of - collecting, classifying and analyzing or reports with the main purpose of reporting about a situation objectively in a real situation in the present.

Based on the above understanding, researchers used a qualitative approach that is considered most in accordance with the problem to be researched. Moleong suggests (2006:9) as follows:

Qualitative methods are used because of several considerations, first, the adjustment of qualitative methods is easier when faced with plural reality, second: this method presents directly the nature between the relationship between researchers and respondents, third: this method is more sensitive and more adaptable to many sharpening of mutual influences on the patterns of values faced.

The qualitative approach is essentially to observe an object or person, both individuals and groups, in a certain living environment in accordance with the reality on the ground. With a descriptive method and qualitative approach, it is hoped that it can achieve the desired goal, namely the development of a vocational learning program to process seaweed for class XII children with mild intellectual disability at SLB Negeri Cipatujah Tasikmalaya Regency. Data collection techniques used in this study were observation, interviews, documentation, FGD and validation. Observation is a direct observation activity
carried out by researchers so that factual data will be obtained in accordance with research needs. According to Sobir (2011: 15), observation is "Data collection in which the investigator makes direct observations of the symptoms investigated, whether the observation is carried out in the actual situation or the artificial situation held". This observation technique is intended to determine the objective conditions of the location and the phenomenon to be studied.

Interview techniques are used by asking questions orally to certain people. This is in line with Margono's opinion (2010: 165) that interviews are: "A tool for collecting information by asking a number of questions orally to be answered orally as well". Thus, interviews are a way to obtain data directly dealing with individuals. In this study interviews were conducted with school principals and teachers.

Documentation study is the collection of data by studying, reviewing regulations, books and documents that have relevance to the problem under study. This is in accordance with what Herdiansah stated (2011:143) that the documentation method is "One way that qualitative writers can do to get an idea from the subject's point of view through a written medium and other documents written or made directly by the subject concerned". Documents collected include student biodata, grade recaps, photos of activities at school.

The study also conducts data analysis so that researchers can simplify the data in a form that is easier to read and interpret. After the data has been analyzed and simpler information has been obtained, the results of the analysis are interpreted to seek a broader meaning, as stated by Moleong (2008:214) as follows:

Data analysis is an effort made by organizing data, sorting it into manageable units, synthesizing, searching and finding patterns, discovering what is important and what is learned, and deciding what can be told to others.

Broadly speaking, the data analysis used is Analytical Induction meaning that after the data is collected, the author immediately processes it by interpreting and analyzing then drawing conclusions and discussing to achieve the expected goals. According to Moleong (2008:215) the stages of data analysis are: "Data reduction, data display, data verification and drawing conclusions while the subjects in this study were 1 (one) school principal, 1 (one) teacher, and 3 (three) children.

Research Result and Discussions

The results of the research carried out by researchers are as follows:

Research Results

Based on the results of research on the ability of children with intellectual disabilities in learning the skill of making crackers from seaweed, they have been able to carry out the learning process according to the instructions of the teacher,
from preparation, implementation to evaluation. These vocational skills are made and compiled in the form of a syllabus which is then described in the Lesson Plan while at the time of its implementation it begins with an introduction, process and closing activities, as a follow-up the teacher conducts remedial, enrichment and development.

In the form of developing a learning program, seaweed processing skills were developed with material on making crackers from seaweed ingredients, in terms of time it was developed into 10 meetings held once a week. Each meeting is 8x45 minutes, providing training in terms of marketing the results to stalls near the school, parents, and nearby stores and also adding media so that activities are videotaped for learning to underclassmen.

The validation results were given to two different schools SLB Winaya Bhakti Cibalong and SLB Aisyiyah Kawalu, validators provided input related to this vocational program, from validator one gave input in the form of additions in terms of cleaning seaweed with clean running water so that root dirt attached to seaweed became clean, while validator two provided input in the development of a seaweed vocational program given periodically in schools.

Discussion

Based on the results of the description of the Development of a Vocational Learning Program for Processing Seaweed for Class XII Mild Intellectual Disability Children at SLB Negeri Cipatujah Tasikmalaya Regency, it is known that the purpose of learning vocational skills is to improve the skills of students with intellectual disabilities in doing a job, especially in processing seaweed. This is in line with the theory presented by Janawi (2013: 56) that the learning objective is not the mastery of the subject matter, but the process of changing the behavior of students in accordance with the goals to be achieved. The purpose of education for children with mild intellectual disability is to prepare them to get a job that suits their interests and abilities so that vocational education is needed for children with mild intellectual disability. Vocational skills learning programs should be designed according to the potential of children with mild intellectual disabilities and aim to train children in special jobs and direct children to prepare children for the jobs they will choose.

Seaweed as the main raw material for making seaweed crackers contains carrageenan which can function as a developer, chewy, chewer and natural preservative (Cokrowati et all, 2020: 93-99). The results of research by Septiana et al, (2012) explained that the addition of E. Cottoni seaweed as much as 20% can increase the crispiness of fish crackers and does not reduce the degree of development. However, the addition of seaweed of more than 20% to 40% can reduce crispness and liking and reduce the degree of cracker development. So the addition of seaweed to crackers can replace harmful crunchers such as borax. Seaweed provides advantages that have a distinctive savory taste, crispy and also have many benefits for the health of the human body.
The core activities carried out by vocational teachers include stages in seaweed processing, starting from introducing tools and materials, practicing and demonstrating manufacturing procedures and packaging procedures. Core activities are activities that emphasize the process of forming student learning experiences with learning resources (Budiyarti, 2014: 21). The conclusion of the core activity in vocational learning processing seaweed is the process of learning experiences for children in learning activities.

After finishing learning in the core activity, the teacher concludes the material that has been given to the child and closes by cleaning up the learning place and praying. This activity is an indication and assessment of vocational learning activities that have been studied. The development of vocational learning programs for processing seaweed begins with harvesting wet seaweed products taken from the sea by seaweed fishermen in the area around the coast of Cipatujah. Then the wet seaweed products are dried in the sun for two to three days until the seaweed dries. After drying then the seaweed is packaged so that seaweed storage becomes durable and lasts several months. Next, dried seaweed is washed thoroughly and then removed the roots and boiled until cooked boiling. Seaweed is then drained and blended until smooth with spices and then mixed with tapioca flour. After mixing, then kneaded until smooth then in an elongated oblong shape and wrapped in banana leaves then steamed for 30 minutes. After cooking then left until cold then sliced thinly and arranged there is a tray and then dried in the sun until dry for about 2 to 3 days. After the seaweed crackers are dry, then fried into hot oil until fluffy for a few seconds, then remove and drain. Ripe crackers are seasoned with flavoring and then packaged using small, medium and large plastic standing pouches.

The development of vocational programs to process seaweed is scheduled every 2 times a week, namely Tuesday and Thursday. Vocational activities last from morning to noon. The results of sea crackers are marketed in the school cafeteria and the products are also included in the school bazaar.

Conclusions and Recommendations

Based on the results of research on the development of vocational learning programs processing seaweed, it can be concluded as follows:

Conclusions

Children with intellectual disabilities are those whose intelligence is clearly below average, and experience limitations in adaptive behavior or adjustment to the environment and occur during development. They have limitations in academics, so learning skills is learning that can equip children in their lives.

Education for children with mild intellectual disability is education provided as a provision of knowledge both in the academic field and in the field of skills that benefit children to develop their potential. Given the above, self-
development learning, especially dressing, is very necessary to support children's confidence in skills that can produce independence in the future.

By learning to process seaweed in schools that are programmed and well arranged, it is hoped that children can more easily understand the learning, so that it can be a provision for children.

The research facts found are the variety of abilities and characteristics of children, so that the implementation of vocational skills learning has not been evenly distributed. In the implementation of learning, teachers provide examples with practice, not with words that are not quickly understood by children and teachers try to motivate students so that they become happy in learning and do not get dull quickly, and learning is directed more at skills that are easy to do.

Recommendations

The recommendation that will be conveyed in this study are intended for:

a. Principal

At this time the media/tools used in vocational learning are incomplete, so the teaching and learning process will be disrupted when learning skills are carried out. Given the importance of media/tools in the process of learning skills in schools, the principal as the policy holder is expected to complement the learning tools/media. This can be done by budgeting school funds for the provision of practical tools or making proposals for infrastructure assistance to related agencies.

b. Parents

Given the characteristics of children with mild intellectual disabilities who easily forget and have difficulty in re-expressing a memory and limited learning time of children at school compared to at home, therefore parents should establish cooperation and communication with schools for programs implemented at school. By communication between parents and teachers, hopefully parents can help children in learning at home in accordance with learning programs implemented in schools such as skills programs.

c. Researcher

Further researchers can use the results of this research as consideration or study to produce learning programs that are better, interesting, and easy to understand by children, and learning is directed more at skills as provisions in their lives in the future.

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