Preparation of Vocational Assessment Instruments in Training Skills to Make Ecoprints with Pounding Techniques for Class Xi Children with Mild Intellectual Disability at Slb Rifaliana Majalaya, Bandung Regency

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Abstract

Vocational skills are part of the concept of life skills in the school system. To develop children's potential to have skills so that they can compete in the world of work. Children with special needs need proper education to develop their potential to the maximum. One of the children with special needs is a child with intellectual disabilities. Generally, children with intellectual disabilities refer to general intellectual functions that are markedly below average along with deficiencies in behavioral adaptation and take place in development. Thus, it requires vocational training as a provision for independence. Ecoprint skills with pounding techniques are given to children with intellectual disabilities, before being implemented, an assessment is needed to obtain data on the abilities
and difficulties of children in carrying out vocational ecoprint skills with pounding techniques. This study uses qualitative descriptive methods, with observational data collection techniques, interviews, documentation studies, FGD and validation. The results showed that the ability of mild tuaagrahita children has differences in ability from one another. Based on the collaboration of teachers and researchers, it produced a vocational assessment instrument in training the skills of making ecoprints with pounding techniques which were then validated to teachers in two different schools with the existence of vocational assessment instruments in skill training, it can make it easier for children with mild intellectual disabilities to carry out ecoprint making with pounding techniques effectively and purposefully well. This research is recommended for schools, teachers, and researchers to be used as a guideline and reference for innovation to increase insight in the preparation of assessment instruments.

**Keywords**

Preparation, instrument assessment, ecoprint, pounding technique, mild intellectual disability

**Introduction**

Children with special needs need proper education to develop their potential to the fullest. According to Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System Chapter IV concerning the rights and obligations of citizens, elders, society and government, article 5 paragraph (2) which states that "citizens who have physical, emotional, mental, intellectual, and/or social disabilities are entitled to special education". In accordance with the article above that children with special needs also have the same rights in education. One of the children with special needs is children with intellectual disabilities.

According to Amin (1995:11):

Children with intellectual disabilities are those whose intelligence is clearly below average. In addition, they experience backwardness in adjusting to the environment. They are less proficient in thinking about abstract things, which are difficult and convoluted. They are lacking or backward or unsuccessful not for two days or a month or two months, but for eternity, not just in one or two ways But almost everything, even more so in such lessons as: composing, summing up the content of the reading, using symbols , counting and in all lessons of a theoretical nature Also they are lacking or inhibited in adjusting to the environment.

This is in line with the AAMD (American Association on Mental Deficiency) quoted by Grossman (Kirk &; Gallagher, 1986: 116) and translated by Astati (2015: 9) that: "Intellectual disability refers to the general intellectual function. They markedly being below average along with
deficiencies in behavioral adaptation and persisting in development."

Vocational skill is a basic ability inherent in humans. According to Amirullah and Budyono (2014: 21) explained that "skill is an ability to translate knowledge into practice so that the goal is achieved. desirable." Skills can develop, or improve with the learning process or based on various knowledge to become professional experts in certain fields.

According to Maharani (2018: 15) "ecoprint is a process of transferring shapes and colors on the surface of fabric." Ecoprint itself utilizes materials from plant parts that contain color pigments such as leaves, flowers, bark. Ecoprint can be done with several techniques, one of which is the pounding technique. The technique can be done anywhere with simple equipment. Ecoprint usually uses fabrics with cellulose and protein base materials such as silk, cotton, and linen. This is because ecoprint using many natural elements will provide optimal results if the fabric used also uses natural fibers. One fiber that is classified as natural fiber is cotton fiber.

Based on observations at SLB Rifaliana, Bandung Regency in November 2022, there is a vocational skills program for making ecoprints. However, at the time of the activity, the school did not have an assessment instrument to make ecoprints with pounding techniques.

In a study conducted by Pangastuti F (2021) on "Guidebook for Simple Batik Writing Skills for Children with Intellectual Disabilities in High School Level Independence Subjects "which discusses the selection of materials Teaching in accordance with the needs of children with intellectual disabilities can support the achievement of the goal of teaching vocational skills. Printed teaching materials can attract students' learning interest in batik art skills. In this study, we developed teaching materials in the form of a guidebook for writing batik skills for SMALB children with intellectual disabilities. The purpose of this development is to produce teaching materials in the form of picture manuals that are valid and effectively used by grade X students with mild intellectual disabilities in learning batik writing skills.

Research conducted by Marnengsih (2022) suggests that pounding techniques in ecoprints are effective for children with mild intellectual impairment. In learning to give motifs to fabrics through making ecoprints, good fine motor skills are needed. Fine motor is the use or organization of small muscles that require coordination between hands and eyes seen from the results of assessments that have been carried out. With this ability, the subject can be taught the skill of giving fabric motifs through pounding techniques in ecoprint.

Instrument is a tool used to collect data or information that is useful to answer research problems. According to Soendari and Mulyati, (2015: 5) "Assessment is the process of collecting comprehensive data or information about the potential of an individual as a consideration in developing programs or provide appropriate interventions so that individuals can develop more optimally".

Assessment is an activity carried out by someone (in this case a skill
teacher) to reveal the child's ability at the time of assessment related to learning skills that will be given and the results of the assessment are used as a reference for the preparation of skill learning programs. Such as: compiling lesson plan, PPI, and other teaching materials; arranging learning component; implement, assess and supervise the implementation of skills learning programs.

To obtain accurate data from students to be assessed, adequate instruments are needed. There are two types of assessments seen and the tools they use, namely: formal assessment and informal assessment. Formal assessment requires high expertise, long time, and very large costs.

Based on the quote above, assessment is the process of collecting data and processing information to determine the development of children with mild intellectual disabilities making ecoprints with pounding techniques. So the tools used in assessment are called assessment instruments. Assessment instrument is a tool used to collect data or information to reveal the condition of the subject to be assessed or evaluated.

Provision of ecoprint vocational skills material with pounding techniques, namely so that children with intellectual disabilities can have skills that can be used as provisions when the child with intellectual disabilities graduates. From school and ecoprint skills with this pounding technique can be a business field that is quite promising.

Vocational is the skill of making a product related to a particular field of work found in the community. According to Anwar (2004: 20) "Life skills education programs are education that can provide practical skills, including, related to the needs of the job market, business opportunities and economic or industrial potential that exist in the community".

Thus, vocational skills are part of the concept of life skills in the school system. To develop your potential to have expertise so that you can compete in the world of work.

**Research Methodology**

In this study, researchers used a qualitative approach with a type of descriptive method. The descriptive method is a research method that serves to solve a problem faced at this time. Related to this research, that according to Sugiyono (2013: 7) stated that: "Qualitative research is research based on postpositive philosophy, which is used to examine the object of research in conditions as they are naturally, where the researcher acts as a key instrument, the way data collection is triangulated (combined), and the analysis used is inductive, and the results of the research emphasize meaning rather than generalization."

This study describes a situation that actually occurs, researchers try as widely as possible to find and collect data to analyze so as to produce conclusions that can be in accountable.

The method used in this study describes the current situation using
research instruments. As stated by Sugiono (2009: 76) "research instrument is a tool used to measure observed natural and social phenomena, specifically this phenomenon is called variable research."

Data collection techniques carried out by researchers in the form of observation, interviews, documentation, FGD and validation.

Observation instrument according to Sugiyono (2018:229) "Observation is a data collection technique that has specific characteristics when compared to other techniques." Based on the explanation above that observation is a technique that can be used to collect and record at the time of observation it lasts.

The next data collection technique is an interview instrument, according to Sugiyono (2018: 467) "Interview is a data collection technique if researchers want to conduct a study to find problems that must be researched, and also if the researcher wants to know more in-depth things and the number of respondents is little or small." Based on the explanation above, this interview technique is one way to get information through the process of conversation between researchers and sources.

The next data collection technique is documentation, according to Sugiyono (2018: 476) "Documentation is a way used to obtain data and information in the form of books, archives, documents, numerical writing and pictures in the form of reports and information that can support research." Based on the explanation above, the documentation techniques collected include photos of activities and photos during the implementation of research in order to be more supportive.

Focus Group Discussion (FGD) is conducted in data collection techniques. In simple terms, it can be defined as a discussion carried out by a group systematically and purposefully about a particular issue or problem. According to Irwanto (2006: 1-2) "FGD is a systematic process of collecting data and information on a particular very specific problem through group discussion".

From the explanation above, it can be concluded that FGD is a process of collecting problem-specific data through group discussion, FGD is often used as a secondary research method to complement quantitative research and/or as a triangulation technique.

The final data collection technique is validation, according to Arikunto (2010: 211), "Validity is a measure that shows the levels of validity or validity of an instrument". Research instruments can be said to be valid, if the tool is suitable for measuring what is to be measured.

**Results Of Research and Discussion**

**Research Results**

Based on the results of research through observation and interviews at SLB Rifaliana Majalaya, Bandung Regency, a discussion was carried out on...
ecoprint skills with pounding techniques as follows: Can be trained and developed over time with guidance and direction according to the instruments that have been made. To improve ecoprint skills for children with mild intellectual disability by using pounding techniques. Things that must be mastered in this pounding technique include: the ability to recognize tools and materials, the ability to use tools and materials and the ability to maintain tools and material.

The ability to learn ecoprint with the pounding technique for children with mild intellectual impairment has differences in ability from one another. This is because children with mild intellectual disability have different cognitive, motor, and emotions, so that during the process of applying ecoprint skills with child pounding techniques Mild intellectual disability is needed special assistance so that the application of ecoprint with pounding techniques can be carried out effectively.

Activities carried out by researchers in ecoprint skills with pounding techniques for people with mild intellectual disability begin by inviting children to the room that has been provided, then children are given an introduction to tools and materials that will be used in ecoprint skills with pounding techniques. As well as how to apply ecoprint tools and materials with pounding techniques. In order to find out the ability of children with intellectual disabilities in this skill, an assessment was carried out. Assessment instruments are tools used by researchers to collect data or information on children related to ecoprint testing with pounding techniques. The basis for making this assessment instrument is aimed at optimizing ecoprint skill activities with existing pounding techniques but does not yet have an assessment instrument.

Ecoprint skill assessment with pounding technique is the first step that is carried out before doing ecoprint skills with pounding technique. The assessment instrument begins by compiling a grid that has a table format consisting of aspects, sub-aspects, and indicators that are developed into instrument items to conduct assessments for children with mild intellectual disability. Assessments that are the result of teacher and researcher collaboration are validated on teachers with different schools which aims to improve and implement ecoprint skill assessment instruments with pounding techniques for children with mild intellectual disability. The first validator, a teacher at SLB Permata Hati, Sumedang Regency, provides input or suggestions in the assessment instrument items on the indicator of installing ceramics in giving additional points of cleaning and choosing flat ceramics, installing leaves in giving additional points Clean the leaves and select the leaves to be used, and do pounding in give additional points of hitting – beat slowly until the leaves are all pounded. While the second validator, namely a teacher at SLB YKS 1 Majalaya, Bandung Regency, argues that providing input or suggestions in the assessment instrument items on the indicator of clearing materials is given two additional points to clean the plastic if it is not damaged and dispose of materials that are no longer in use. After validating the instrument is in accordance with the content/ theory, so it can be used as a guide in carrying out ecoprint skills with pounding techniques.
Table 1
Form of Instrument Preparation Ecoprint skill assessment with pounding technique (FGD Results and Validation)

<table>
<thead>
<tr>
<th>No</th>
<th>Sub Aspects</th>
<th>Indicator</th>
<th>Thread of Instrument</th>
<th>Capabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Get to know the tool</td>
<td>1.1.Pointing the tool</td>
<td>1.1.1 Demonstrate ecoprint tools pounding technique: hammer, ceramic and basin</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.2.Inserting tools</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>1.1.2 Mention ecoprint tools pounding technique: hammer, ceramic and basin</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>1.3.Distinguish the tool</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.1.3 Distinguish ecoprint tools pounding technique: Wooden hammer with iron hammer, ceramic with tile, large basin with small basin</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Get to know the ingredients</td>
<td>2.1.Indicating ingredients</td>
<td>2.2.1 Show the material of ecoprint pounding technique: Fabric, plastic, double tip and leaf</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2.2.2 Mentioning ecoprint materials pounding techniques fabric, plastic, leaf and double tip</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Preparation</td>
<td>2.3.Distinguishing materials</td>
<td>2.2.3 Distinguish ecoprint materials pounding technique: cotton with duct tape, plastic with plastic mesh, rod, double tip with duct tape</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Practice</td>
<td>4.1.Taking materials</td>
<td>4.1.1. Take materials for ecoprint pounding technique</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4.2.Installing ceramics (validator 1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4.2.1. Cleaning and choosing flat ceramics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4.2.2. Putting on the fabric on the ceramics in a certain area</td>
<td></td>
</tr>
</tbody>
</table>
| 4.4. Doing pounding | 4.7.1. Perform pounding with Steps:  
| | 4.7.1.1. Put the left hand near the leaf to be pounded  
| | 4.7.1.2. Do pounding by using a hammer against the leaves that have been arranged before  
| | 4.7.1.3. A little crush is not too slow and not too loud  
| | **4.7.1.4. Hit slowly until the leaves are all in pounding**  
| 5 | Maintaining tools | 5.1. Cleaning tools  
| | 5.1.1. Tidy up tools  
| | 5.1.1.1. Taking the hammer  
| | 5.1.1.2. Keeping the hammer in place  
| | 5.1.1.3. Taking ceramics  
| | 5.1.1.4. Saving ceramics in place  
| | 5.1.1.5. Taking basin  
| | 5.1.1.6. Washing the basin thoroughly  
| | 5.1.1.7. Putting the basin in place  
| 6 | Maintaining materials | 6.1. Cleaning up materials  
| | 6.1.1. Tidy up the material:  
| | 6.1.1.1. Taking plastic  
| | 6.1.1.2. Eliminate plastic if it is not damaged  
| | 6.1.1.3. Folding the plastic  
| | 6.1.1.4. Storing plastic in its place  
| | 6.1.1.5. Taking fabric that has been ecoprinted  
| | 6.1.1.6. Drying the cloth in the place provided  
| | **6.1.1.7. Disposing of materials that are no longer in use**  

(validator 1)  

(Validator 2)  

(from Validator 2)
Discussion

The discussion in this study aims to see the form of ecoprint skill assessment instruments with pounding techniques for children with mild intellectual disability who experience several problems. In the definition of the American Association on Mental Deficiency (AAMD) quoted Aistani and Mulyati (2010: 14) in Grossman (Kirk and Gallagher, 1986: 116) suggests that "Mental retardation refers to significantly subaverage general intellectual functioning resulting in or adaptive behavior and manifested during the developmental period". Intellectual disability refers to a below-average general intellectual disorder along with a lack of adaptation and progresses in the developmental period. In that problem there are problems in the academic field so that children with intellectual disabilities need to be equipped with skills that can encourage independence.

This is in line with Amin's opinion (1995: 15) which states "Children who have intelligence below average, experience behavioral obstacles, adjustments and occur during their development."

Assessment is an assessment activity that aims to collect data on child development, both developmental tasks and the development in academic. Soendari and Mulyati (2010: 4) suggest that "assessment is a process of collecting information that will be used to make considerations and decisions related to children's learning".

Based on the facts that researchers found in the field, researchers agree with the theory put forward by several experts who say that children with intellectual disabilities need vocational activities even though they require a long time due to obstacles in intelligence so that they need help from teachers in every step of the activities given.

The assessment in this study helps make it easier for teachers to find out the abilities, difficulties and needs of children so that the services provided will be right on target.

Conclusions And Recommendations

Based on the results of the analysis obtained from the field, the following conclusions can be drawn:

Conclusion

From the results of the study, it can be concluded in general that this research has been running effectively. With a number of vocational assessment instruments in skill training, it can make it easier for children with mild intellectual disabilities to carry out ecoprint making with pounding techniques effectively and purposefully well. The preparation of these skill assessment
instruments can be based on learning programs, methods, time, cost sources, and places to improve ecoprint skills with pounding techniques for children with mild intellectual disability.

**Recommendations**

In this study recommendations are aimed for teachers, schools and researchers, as below:

**a. For Teachers**

Research results are expected to be used as one of the guidelines for teachers and increase insight in the preparation of assessment instruments. Teachers must also continue to improve their abilities in the preparation of assessment instruments so that learning can produce the achievement of vocational skills for children with mild intellectual disabilities effectively and purposeful.

**b. For School**

It can be used as a reference for innovation and motivation for schools to improve the skills of children with mild intellectual impairment with a learning program that begins with the preparation of assessment instruments first long ago. In addition, in order to improve the quality of schools in learning vocational skills for children with mild intellectual disabilities.

**c. For Future Researcher**

It is expected to develop this research on broader subjects and can compile instruments to the next material other than vocational and this research can be used as a reference to develop appropriate programs for children with special needs.

**Bibliography**


Gallagher & Kirk. (1986). *Educating Exceptional Children 5th*, Boston:
Houghton Mifflin Company.


