

# *Creating Jumputan Batik with Active Learning Methods of Small Group Type for Students With Intellectual Disabilities*

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**Abstract**—This research purpose was to describe the program of making Jumputan batik (traditional Indonesian fabric) using Active Learning of Small Group type for students with intellectual disabilities in Loka Bina Karya (LBK) class. LBK was a level which was specially opened for the students after Senior High School who still needed vocational skill or filled the leisure time so that it could be directly practiced in the daily life. The students in LBK were about 18 – 39 years old. This research was done in 8 times meeting. The technique of data collection used the assessment test of work demonstration and observation result. The approach used was descriptive quantitative and the data analysis of descriptive statistic used percentage method. This research result indicated that from 10 research subjects, the students could do a Jumputan batik skill well. In the first meeting, the average value of 10 students was 58 or 58% doing the activity of Jumputan batik was implemented well. The value enhanced till the eighth meeting, the average value reached 87 or 87% doing the activity of pinch batik was implemented well.

**Keywords**—*batik; active learning; small group type*

## I. INTRODUCTION

The service for special need society had already got more attention this time; included in The 1945 Constitution Article 28-C Verse 1. It was stated that everyone deserved to develop through filling the basic necessity; deserved to get an education and to obtain the utility of science and technology; art and culture for enhancing the life quality and the humankind welfare. All citizens had freedom and rights to obtain social welfare; involved the disability carrier; included in Law No. 43; 1998; about the enhancement of social welfare effort of disability carrier. In the rules above; it was stated the things relating to the same service and treatment to obtain an education; position; rights; and obligation in all life aspects.

The education service toward the disability carrier was optimally attempted and programmed to fill the necessity and to enhance self-potential as the society. The definition of special education; according to the constitution No. 20; 2003 about the National Education System chapter 32; was that special education was an education for learners who had difficulty level in following the learning because of

the physic; emotional; mental; social deviations. Included in the education for special need children or special education was children with intellectual disability.

A person was stated intellectual disability when he or she had three main characteristics. Those were: having under average in intellectual function; indicating limitedness in two or more adaptive behaviour skills; i.e. self-nursing; communication; social skill; academic function; free time utilizing; and work. Both characteristics above could be seen before 18 years old [1]. In this way; a person was a classified intellectual disability when he or she had those three characteristics. When a person only showed one or two characteristics; he or she could not be stated intellectual disability yet.

Intellectual disability [2]; was a person who had significant intelligence under average and was accompanied by the disability in adaptation behaviour which appeared in development age. Students with intellectual disabilities got academic hindrance in such a way that the learning implementation or service required curriculum modification which was suitable with the children's needs or ability.

A good education for students with intellectual disabilities did not only prioritize the academic but more than that. The most important was giving skill provision so that after graduating the children could be participating in society and become independent individuals; i.e. they could produce a commercial thing. During this time; students with intellectual disabilities depended more to other people because of the lack of life-skills training included life-skills in sustaining themselves. Less optimal autonomous training and skill program made the students with intellectual disabilities did not sharpen the existed potential inside. With the less potential in students with intellectual disabilities; the society would underestimate and look the students with intellectual disabilities down. They were also a part of society who could develop their potential if they were trained continually.

Based on the observation in the field; especially in Loka Bina Karya (LBK) class AKW Kumara I Surabaya;

LBK was a level which was specially opened by SLB AKW Kumara I for students after graduating Senior High School who still required vocational skill or filled the leisure time so that it could be directly practised in daily life. The students in LBK were about 18 – 39 years old. However; along with the time; LBK class was not suitable for the purpose. The skills taught were only drawing; singing; cutting; and folding. There was not any form of particular; productive; and commercial teaching skills yet which was taught to provide the students at least one skill so that the program was not only focused on less productive skill. The researcher had the initiative to take the problem as the alternative of new productive and commercial programs. One of the forms of productive and commercial skills was making a Jumputan batik (traditional Indonesian batik) skill.

Besides; it did not require particular skill; the tools and materials for making Jumputan batik were also easy to find so that it did not require a too high cost. [3] the name of Jumputan was from the word "pinch". This word had comprehension relating with the way of making pinched fabric or *dijumput* in Javanese while [4] making Jumputan batik was a dipping process; i.e. a part of the fabric was tightly tied by following particular pattern before dipping with colour substance. Making Jumputan batik was not difficult. In the preparation step; students prepared the tools and the materials such as rubber band; pan; pail; scissors; fabric; and colour substance. Moreover; the making processes were: the fabric was tied by using a rubber band in such a way that it formed patterns and then it was given colour as much as we wanted. The tools; such as pan; pail; scissors; marbles; were to form a pattern; and mixer and the materials; such as fabric and dye; were not difficult. The tools and materials availability could be bought in many places so that the making process did not spend much cost. Besides that; the children could also make at home with their family.

From the explanation above; it was expected that through the program of making Jumputan batik the students with intellectual disabilities could enhance creativity so that in the future; the skill could be useful after graduating from school. The students with intellectual disabilities with their hindrance in communication and speech could not accept learning with conventional method focusing on the teacher who used speech method and thought more abstractly. Teaching students with intellectual disabilities had to be adjusted to their unique. Based on the hindrance belonged to the students with intellectual disabilities; it was required learning method which involved the students directly; experienced concretely learning; and gave behaviour change. One of the Active Learning models which could be applied was Active Learning method of Small Group type.

[5] explained in concept about the meaning of Active Learning; i.e. a process of teaching-learning activity which the learners were involved intellectually and emotionally so that the subjects really took a role and participated actively in doing the learning activity. Active learning was learning

which focused on the learners' activity and participation which involved several aspects in reaching the education purpose including the aspects of cognitive; affective; and psychomotor while Small Group work was a learning method focusing on the students. The students were demanded to obtain knowledge by themselves through cooperation. By placing the learners in a group and gave them a task; the students would be depended on each other to finish the task given; so it also trained the ability to interact with other students. In this Small Group strategy; students were grouped in a group with 3-4 students. The students would cooperate to make Jumputan batik product; but each member had their position and responsibility. This learning was designed to sustain the learning situation in the class; to create a fun learning climate by inviting the students to participate in all learning processes. The individual did learning as an effort to obtain behaviour change.

## II. METHOD

The arrangement of the research method was the way used to present and analyze the data to get the fact for problem-solving. In this research; the result of data collection about making jumputan batik using Active Learning method of Small Group type which would be presented in the form of a number and then it was described; so the researcher used a quantitative approach with descriptive method. [6] a descriptive statistic was a statistic used to analyze the data by describing the data which had been collected as the way it was without intending to make conclusion prevailing for general or generalization.

After the data had been collected; the next step was to process or analyze the data including preparation; tabulation; and applying data suitable with the research approach. Then; to describe the result of making jumputan batik skill; it was used analysis descriptively using percentage. The percentage formula; as proposed [7] ; was as the following:  $P = \frac{x}{N} \times 100\%$  Explaining: P = Percentage f = Frequency N = total respondent 100% = fixed number.

The assessment way in this research used test of work demonstration; i.e. a test done by observing and assessing the students' activity which did or indicated certain work. [8] about the standard of education assessment explained that the assessment of learners' learning result covered the competence of attitude; knowledge; and skill which have done in balance so that it could be used to decide the relative position of each learner toward the standard which had been determined. The educators assessed the skill competence through work assessment; i.e. the assessment which demanded the learners to demonstrate competency using the practice test; project; and portfolio assessment. The work demonstration was one of the examples of the learners' work assessment.

### III. RESULT AND DISCUSSION

#### A. Result

Based on the descriptive analysis using percentage method; it indicated that the students with intellectual disabilities' skill in making jumputan batik using Active Learning method of Small Group type from the aspects of psychomotor; affective; and cognitive were very good. In a psychomotor aspect; the students knew the skill of making jumputan batik which they could be made. In each meeting; students continually understand how to make and apply it to other things such as bag; table cloth; and handkerchief.

Making jumputan batik in the form of results such as a handkerchief; table cloth; veil; and bag by considering applying to a functional product could give innovation and creation and could motivate the students so that their work result could be sold and the students' autonomous appeared. This learning had the purpose of adding skill to the students and enhancing the students' creativity; motivation; and autonomous.

In a cognitive aspect; the students also began to be able to explain everything abstractly about jumputan batik; although it was not very good. It was required several times repeating material about jumputan batik so that the students could explain shortly and simply; however; they were communicative to other people. In each meeting; the enhancement of value and percentage happened to all assessment aspects. Those were: psychomotor aspect; affective aspect; and cognitive aspect. In the first meeting; the students' average value was 58 or 58% the activity of making jumputan batik was implemented well. The value continually enhanced until the eighth meeting; the average value reached 87 or 87% the making batik activity was done well.

#### B. Discussion

The skill was a very important thing for students with intellectual disabilities to learn because most of the students with intellectual disabilities were weak in the academic area. A program done in practice facilitated the children to understand the learning intention and purpose and the children would have minimum one skill which could be applied in life. In a program; the students sharpened not only their psychomotor ability but also the affective ability and cognitive ability.

The Active Learning of Small Group type was one of the active learning types where the students were divided into several small groups; and they cooperated to do the task which had been designed before by the teachers with the provisions that each member still had their position and responsibility.

Based on the observation result during eight times meeting; the subject learnt the skill of making jumputan batik quickly and could build communication with friends in a group quickly although they were still helped by the

special auxiliary teacher several times because the students with intellectual disabilities' socialization ability were low. The students were given interesting skill and made them happy so that the learning purpose was achieved and the students mastered it. From the research above; it could be concluded that continuously repeating could give the result which continually enhanced and lasted in the long term.

The research about jumputan batik to intellectual disability had already done by [9] with the title: Observing the process of learning jumputan batik for students with intellectual disability in Surakarta. The process of making jumputan batik used the learning model of PAIKEM (Active; Innovative; Creative; Effective; and Fun Learning). The teacher created the learning atmosphere as interesting and as happy as possible. For learning method; the teacher used speech method when he or she conveyed the material; the question-answer method was used in every meeting; and the usage was very flexible; the teacher also used demonstration method to practice making jumputan batik directly which was then followed by the students.

Next; the research by [10] with the title: The application of making bundling batik skill to enhance the fine motoric ability of intellectual disability children which the result of this research was that the students experienced enhancement in fine motoric ability. The learning method applied in this research was the teacher demonstrated every step of the activity directly; from pulling till cutting fabric. Children also followed every step done by the teacher so that they understood what it was being taught.

### IV. CONCLUSION

Based on the research; ten students with intellectual disabilities could make jumputan batik with Active Learning method of Small Group type well. In every meeting; there were value and percentage enhancements to all assessment aspects; i.e. psychomotor aspect; affective aspect; and cognitive aspect. In the first meeting; the average value of 10 students was 58 or 58% the activity of making jumputan batik was implemented well. The value continually enhanced until the eighth meeting; the average value reached 87 or 87% the activity of making jumputan batik was implemented well.

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