3N Taxonomy:
An Equivalencies of Local Wisdom with Bloom's Taxonomy

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Abstract: The purpose of this paper is to describe of equivalence between local wisdom learning concept, 3N's taxonomy, *Niteni* (N1), *Nirokake* (N2) and Nambahi (N3) with cognitive level on Bloom's Taxonomy. Observations, interviews and documentary studies were conducted on primary school students in one of the primary schools in Malang, Indonesia on dance learning activities. This research observe forty students in both low grade and high grade. 3N's Taxonomy on learning dance in low class appears in core activities. In high class, one of 3N's concepts that is N2 does not appear. In low grade, N1 appears when students observe the dance performed by the teacher. While in high class, N1 appears when students pay attention to videos about dance. Ability of students to identification of dance has equivalence with knowledge. N2 in low class appears when students are following the teacher's movement. Ability of students to comprehension the dance has equivalence with understanding. N3 also visible in low and high class. N3 shown by students perform dancing based on the example. Students are able to show their dancing, make an equivalence between applying. The results show that there are equivalencies between 3N's Taxonomy and Bloom's Taxonomy. The equivalencies are Niteni with knowledge, Niroake with understanding and Nambahi with applying.

1 INTRODUCTION

Ki Hajar Dewantara (KHD) is one of Indonesian philosophy figure. A lot of KHD's philosophy are used in education especially in teaching and learning. Learning activities must be guided by teacher with their confidence, because teacher and students should have mutual trust (Wahyu, 2012). 3N taxonomy is one of KHD's characteristics in learning, especially in dancing learning. 3N taxonomy stand for Niteni (observing), Niroake (mimicking), and Nambahi (adding).

Another taxonomy was used in learning is using Bloom's Taxonomy. Bloom's taxonomy is well known in learning. Bloom's taxonomy lead us to reach the highest level for thought from knowledge, comprehension, and application (Dunegan, 2011). A similar study has been done, it was about determine students' level of learning on cognitive domain at the end of the dance unit taught by physical literacy by means of a test prepared according to the Bloom's taxonomy (Alagul et al., 2012). The differences with this study is the research focus. This study is focuses on seeking the equivalence of 3N taxonomy with the cognitive domain of the bloom taxonomy in dance lessons at primary school.

Learning dance has characteristics in their teaching process. Effective teaching of dance skills is informed by a variety of theoretical frameworks and individual teaching and learning styles (Mainwaring and Krasnow, 2010). Furthermore, an effective teaching of dance skills is informed by a variety of theoretical frameworks and individual teaching and learning styles (Bandura, 2002).

Teachers become facilitator to their students to actively construct knowledge, concepts, skills, and attitudes related to character education by using social science learning that have been programmed, by giving information meaningful and relevant. (Asrowi, 2017).

Using Blooms taxonomy in new version, in cognitive level start on remembering, understanding, applying, analyzing, evaluating and creating. Properties in remembering are retrieving, recognizing and recalling relevant knowledge from long-term memory. Then, for understanding has

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properties constructing from oral, written, graphic messages though interpreting, exemplifying, summarizing and explaining (Mainwaring and Krasnow, 2010).

2 METHODS

According to the purpose of this paper, researcher was using qualitative research design. Observing, documentation and participants was doing to collect the data from two classes with forty students in every class at one of elementary school in Malang. This research was using one class with low grade and one class with high grade. Acquisition the data was done during the dance lessons by participant, observing and documentation. Descriptive analysis is used to describe all results and research findings by performing the validation process first. Data validation using source triangulation, by comparing the results of observation, documentation and interview.

During the study, the learning was carried out as usual. Researchers observe how teachers teach from opening, core and closing activities. Observer observes whether the 3N elements are implemented in the lesson in every class.

3 RESULT AND DISCUSSION

Dance art learning was carried out in three stages of activities, there are preliminary activities, core activities and closing activities. Study was doing in two different classes, namely low and high class. The learning process uses integrated thematic learning.

In low-class learning, teachers was using puppet as media. Dance art learning was associated with concept of pet motion. Puppets are used by teachers to stimulate students about appropriate animal movements. Students do the task of the teacher in the form of group duty is how to care for pets. Then the student representatives present their group results in front of the class.

Remembering activities have three main processes, the process of seeing, repeating motor motion and the process of motivation. Furthermore, (Ika et al., 2017) mentions that the process will be seen from how the students see the object, how the students remember the steps of motion to the stage of repeating the movement of object. While motivation, given by teachers when students try to try to repeat the movement as a result of observation.

3N taxonomy in low-class appears in the core activities. When the teacher gives an example of animal motion using a puppet followed by an example of a teacher movement in front of the class. Example of this motion directed to students, and all of students was paying attention at that moments. When students are paying attention, concept of *Niteni* was happen. From student's response with paying attention is one of impact on pupil learning (Harris et al., 2012).

Four components in learning are consistent with learning theory through observation by Bandura (2002) in The first component is attention, can be seen based on the activity where the teacher gives an example by demonstrating the movement of animals in front of the class and students pay close attention to guess the movement of the teacher. The second component is that when the student looks at the motion exemplified by the teacher and identifies what motion corresponds to the animal puppet shown by the teacher. The third component is reproducing motor movement that occurs when the teacher shows the puppet one of the animals then the student progresses to demonstrate the appropriate animal motion. The fourth component of motivation that includes an external impulse, seen when the teacher gives praise and applause for the students to the front of the class so that the other students are motivated to forwards the class to demonstrate the motion of other animals.

Continue in core activity, teacher gives an example of a rabbit motion in front of the class, then the students are simultaneously guided to mimic the rabbits movement exhibited by the teacher in front of the class. The second concept Niroake or mimicking looks here. Based on (Alpert et al., 2009) the fact mentioned above, it is necessary learning strategies that are better suited to the characteristics of the appreciation of the dance, which provide many opportunities for students to intensively interact with dance either passive in the sense of enjoying the dance work and actively participate in the activities of art. In other words, imitating or mimicking is a continuation process from the observing stage, has been seen in the learning process of dance art in low-class.

Next, teacher assigning students to do task, there is making dance movements of animal motion. Students are instructed to the front of the class to display their dances alternately in the order specified by the teacher. When students doing the task, learning enter to *Nambahi* stage. Before students present in front of their class, they must discuss about the motion. Dancing with a group may also be considered a social event that will decrease the risk of depression and subsequently decrease cognitive decline Baker (in Alpert et al., 2009).

Learning activities of dance art using 3N concept in low-class are shown in table 1.

Table 1: Learning dance art in low-class with 3N.

Activity	3N taxonomy	Description
Preliminary	Not shown	
Core	*Niteni*	Paying attention, Creating, Reproducing motion, Motivation
	Nirokake	Imitating
	Nambahi	Stimulus, Exploration, Planning
Closing	Not shown	

Learning dance in high-class start with giving question from teacher to students. Teacher was trying making connection between concepts in a few meeting. Learning purpose was not delivered well.

Upon entering the core stage, learning begins to apply the 3N concept, which begins with the teacher presenting a video about dance and the students are asked to observe. The teacher guides the students to identify the type of dance starting from the tools used, dance movements and dance types that are aired through question and answer. In addition, the teacher attributes the dance movements that exist in the video show with simple movements in everyday life. This indicates that there was found application of N1 Niteni or observed according to one of the four components delivered.

Next, teacher asked to students to present the dance creations in front of the class. Based on the results of interviews with teachers and students, the task of making dance creations has been given teachers at previous meetings, the task of making this dance creation without any special provisions. Students are given the freedom to make dance movements. Teachers tend to apply N3/Nambahi or adding. Activity and review stage has not been found in this activity. The teacher closed learning by greeting the students, there is no reflection or evaluation of learning activities. Learning activities of dance art using 3N concept in low-class are shown in table 2.

Table 2: Learning dance art in high-class with 3N.

Activity	3N taxonomy	Description
Preliminary	Not shown	
Core	*Niteni*	Paying attention, Creating, Reproducing motion, Motivation
	Nirokake	
	Nambahi	Stimulus, Exploration, Planning
Closing	Not shown	

In the study of dance art in high class it was found that 3N concept has been applied by the teacher. However, the application of the 3N concept to learning has not been in accordance with the established 3N structure, N1, N2, N3. The teacher does not apply one N that is N2/Niroake or mimicking. So that achieved in the learning process focused on N1 and N3. Based on his experience, teachers who can apply 3N sequentially will make the class become more creative, but if not it will affect the achievement of learning objectives (Ika et al., 2017).

Based on the exposure and discussion of teacher and student activities on the learning of dance in the lower classes, all 3N concepts appear in the core activities of learning. Learning beginning when the teacher seemed to apply N1 concept, students perform the process of identification of animal motion through examples of movements displayed by the teacher is an activity to build the concept of knowledge about the movement of dance in cognitive students.

Teacher activities are activities aimed at knowing how to process or do something, ie students know the criteria used to identify facts and examples Activities build this knowledge in accordance with the cognitive domain of Bloom's taxonomy at the level of remembering.

When applying N2/Niroake, the teacher gives students the opportunity to mimicking the motion. That has been exemplified by the teacher in front of the class. Teacher directs the students to follow the movements that have been exemplified is the activity of the teacher to develop the concept of understanding of the movement of dance. Students who do not understand the motion of dance cannot repeat the movement properly. Activity in Niroake builds on this understanding, so it must an equivalent with understanding in Bloom's taxonomy.

The last activity in core activity in learning this dance art is the teacher asks students to make simple dance moves in groups and each group will display the movement in front of the class. Teacher-directed cognitive processes refer to the application level. If the students already understand the dance movement, the next cognitive stage is the student is able to apply to other dance movements. Students can be said to be able to apply the concept if he can apply the concept of dance movement that has been obtained with a new dance movement. This activity is in accordance with the cognitive domain of the C3 level of Bloom taxonomy. This suggests that the learning of dance by applying the 3N concept to the lower classes has an equivalence to the level of Bloom's taxonomic cognitive domain at the levels of remember, understanding and applying.

Next, learning the art of dance in high class. Based on previous exposure, 3N concept in high class only apply N1 (Niteni) and N3 (Nambahake). In accordance with the equivalence of the lower classes, in the high class the concept of learning applied in the high class has equivalence to the cognitive domain of Bloom's taxonomy only at the level of remember and applying. Although only two cognitive levels are applied, it does not diminish the essence of learning the art of dance. However, it is not yet clear whether there will be a change of targets for achieving the goal of dance learning in high class.

4 CONCLUSIONS

Learning dance art in elementary school using the 3N taxonomy are N1 (Niteni), N2 (Niroake) and N3 (Nambahi). The cognitive domain based on Bloom's taxonomy that has been applied to learning dance by using 3N taxonomy is remembering, understanding, and applying. The 3N concept equivalence to Bloom's cognitive domain is N1 with remember, N2 with understanding and N3 with applying.

Application of 3N taxonomy is expected not only in dance lessons, but more interesting if there is cross-field research that is implementing 3N taxonomy.

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