

Conference Paper

The Guiding of Students Based on Higher Order Thinking Skill at Community-Based Alternative School

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Abstract

This article aims to describe the guiding concept of students conducted by a learning community at Central Java. This learning community has new concept in developing students' potency. This article is written based on the research conducted by the researchers in *komunitas belajar Qaryah Thayyibah (KBQT)*. The method used in this research is qualitative research method in the form of case study. The result of the research shows that basically the guiding of students at KBQT is conducted based on the behavior of higher order thinking by implementing these things, such as: 1) implementing target system for all students; 2) familiarizing the students to discuss with each other and utter their ideas; and 3) prioritizing the mutual agreements between teacher and student to decide the learning activity. From that activity, this learning community actually tries to develop the potency, interest, and talent of students which are different from each student.

Keywords: student development, higher order thinking, community learning

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1. Introduction

Education is an important process in developing human resources. In its practice, there are two types of education conducted by government and society, those are: formal and informal education. Formal education is defined as a structured and stiff education, which consists of elementary, middle, and high level education. Whereas non-formal education can be understood as a kind of education outside the formal education which can be implemented structurally and gradually [1]. Hence, it is concluded that non-formal education is more flexible than formal education.

The flexibility from non-formal education makes this kind of education is frequently conducted and preferred by society. The kind of non-formal education conducted by society is called as *Pusat Kegiatan Belajar Masyarakat (PKBM)* or Community Learning Activity Centre and *Lembaga Kursus dan Pelatihan (LKP)* or Course and Training Institution. Based on the data from Ministry of Education and Culture, there are 8622 PKBM

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and 8220 LKP. From the quantity, 91 PKBM are held by government and 8.571 are held by society. Whereas for LKP 9 are held by government and 8211 are held by society [2]. The data show two types of education which are frequently held by people.

As stated above, PKBM can be held by government or society. One form of PKBM conducted by society is komunitas belajar Qaryah Thayyibah (KBQT). KBQT is PKBM which conduct non-formal education for students in the age of junior and senior high school with emphasizes the development of students' potency. KBQT has two basics of education principle which becomes the foundation of education: (1) an alternative school which develops goal settings based on students' potency by giving the thinking freedom; (2) an empowering with some related principles create and affordable and qualified school [3]. Those two principles become the basic of students' guiding.

This research aims to describe the development activity of students at KBQT. It occurs because KBQT has education pillars which frees the education process and becomes a unique foundation in the management of students. By the foundation, KBQT is indirectly implement higher order thinking for students. Because of that, researcher needs to research more deeply about the guiding of students in KBQT which based on higher order thinking.

2. Literature Review

2.1. Student in alternative school

Generally, an alternative school is well known as a school for students who are not involved in formal school because of some reasons. Based on the research, there are five main factors why students leave their education: 47% of students are bored with school, 43% of students who often skip the class, 42% of students spend much time with people outside schools, 38% of students has too many freedoms and there is no tight regulation to manage them, and 35% of students are failed. Besides that, almost all dropped out students blame their self or blame their teachers who drop them out [4]. It shows that the problem of drop out is caused by internal and external factor. Even, school is one of the drop out causes.

Other researches identify students who are: come from low socio-economic backgrounds, often change schools, have poor academic performance, often skip the class, repeat one or more grades, speak main languages other than English, study in big cities, who have friends or family members who drop out of school, sick or disabled, pregnant, or those who have low self-esteem [5]. The finding of this research indicates

that most students drop out of school because of the problems they face personally. For various reasons, including various revealed studies, dropped out students continue their education in alternative schools in Indonesia usually held by PKBM

2.2. Higher order thinking

Higher order thinking is a thinking skill which includes critical thinking, logical thinking, reflective thinking, metacognitive thinking, and creative thinking. It means that the skills are needed when students face unknown problem, uncertainty, question, or dilemma. The implementation of these skills produces explanation, decision, performance, and product that are valid in the context of available knowledge and experience and also encourages sustainable growth, and other intellectual skills [6]. It shows that the higher order thinking skill can help learners' understanding of the knowledge they learn. On the other hands, the implementation of Higher Level Thinking based on Problem Based Instruction can increase student activity, and the character of students which effectively improve students' learning outcomes [7]. It shows that a high level of thinking ability is the main ability needed in the learning process in this century. Further application must be supported by adequate technological facilities. This is because technology with ICT integration is able to support high level thinking skills [8]. Specifically, with the support of ICT, students will be able to access open knowledge and being developed all the time.

Based on a research conducted by Azifa, it founds that (1) Problem Based Learning affects critical thinking, (2) Problem Based Learning affects student learning achievement in cognitive aspects, and (3) there is a significant relationship between critical thinking and student learning achievement in cognitive aspect. The higher the critical thinking, the higher the students' learning achievement, especially the cognitive aspect of students [9]. It means that to be able to make students think critically, students need to be faced with problem-based learning. By being faced with the problem, students are able to think critically as a form of higher order thinking. Furthermore, for triggering critical thinking can be done by some ways, such as: first, a higher order thinking method can be applied previously by giving open questions to students. This process can be used to motivate students to respond to each other. Second, make higher order thinking as a habit for students to think for themselves rather than adapt or imitate other people's thoughts. It can be done by not giving assignments that only seek information, but also make the assignment which have significant roles for students to get involved. Third, the assessment of themselves, in this step students are asked to assess their

own abilities and achievements [10]. These steps show the active role of students in the learning process. So that students have significant roles in their learning process.

The result from other studies shows that by applying higher order thinking based on problem solving can improve student learning outcomes by 73.84% (exceeding the target), mastery of material increased by 96.87%, and students' character and response to learning included in the good category [11]. Furthermore, it can be said that higher order thinking has a good effect for mastering students' knowledge.

3. Material & Methodology

The research method used in this research was qualitative research with a case study. Data collection was conducted through the interview and observation. Interviews were conducted with the founder, students, and teachers at KBQT. After conducting the interview, the researchers observed the teaching-learning activities of teachers and students at KBQT. Including observing the daily activities of students. Furthermore, the results of the research data were processed with interactive data analysis technique developed by Miles and Huberman which include: data collection, data reduction, data display, conclusion drawing and verification. Verification of the research result was conducted by submitting the research result to the parties related to the research.

4. Results and Discussion

KBQT has a unique composition of students. Originally, many of them were children who left school and came from poor parents. But in this learning community, they can develop their potency, interest and talent well. This is because the freedom education curriculum is applied in this learning community. Students have the freedom to learn and develop their potency. So there is no compulsion for students to learn something that is not interesting to them.

The independence of students in KBQT is a manifestation of the implementation of a liberating education pillar. Students at KBQT have an independence in learning. Independence can be seen in analyzing the activities of learning needs of each learner that are adjusted to their talents and interests [12]. The independence encourages students to be aware and responsible for learning without being encouraged by others. Furthermore, fostering higher-order thinking of students at KBQT is done through:

Implement the target system for each student. By implementing the target system, KBQT is actually trying to make students as the subject of their education, and not an

object anymore. The purposed target is the students' personal goal. By implementing the target, teachers also implement independent learning strategies. Learning activities conducted independently are shown by the freedom of students in choosing the subjects which they like. This kind of activities can be said to embrace the concept of independent learning.

Independent learning refers to the ability of students to direct themselves to learn with the experience they have. There are more things that can be achieved by interacting three dimensions: self management, self monitoring, and motivation "[13]. Furthermore, it can be said that independent learning by students can train students to direct themselves to the things which they like. They can also achieve three dimensions of interaction, those are: self-management, self-supervision, and motivation.

Through these three dimensions of interaction, students are expected to have a higher mindset. Higher order thinking (HOT) requires students to process information and ideas by synthesizing, generalizing, explaining, making hypotheses, and making conclusions or interpretations [11]. Hence, it can be said that higher order thinking is basically a concept where students can examine information and ideas in changing the understanding and implications for critical thinking, to evaluate, to have metacognitive awareness and problem solving capacity. Besides that, this kind of education system encourages students to be independent and places teacher as a facilitator. As proved by independent learning, students will optimally gather and find what they need to learn. So that their learning plans are self-made and are implemented on their own. This is certainly different from students in formal school which are generally guided by teachers in the form of learning plans.

Familiarize students to discuss with each other and express their ideas. Discussion becomes the most commonly used learning method in KBQT. Discussions are usually conducted by students independently or conducted with teachers in the forum that they call as "class". This shows that the dichotomy of teacher as a center of learning was completely abolished. Their role is only as a companion, all activities are conducted by students. This kind of dialogical learning extends the thinking space for KBQT students about sensitivity to social reality.

Collective agreement in determining ways and forms of learning. The agreement on learning and evaluation of learning is a form of democracy in education. At KBQT evaluation of student learning is done by looking at the work of students. Meanwhile, time and operational technique become a mutual agreement between students and their teachers. This shows that the evaluation of learners' learning is not done by tests such as those conducted by educational institutions in general. This kind of situation

strengthens the concept of high-level thinking in the education process at KBQT. This is because the evaluation of learning which is appropriate with high-level thinking skills does not require students to answer questions or tasks that are asked or answered by them. It gives them the opportunity to use high-level thinking skills based on the knowledge they have [6]. By giving students the freedom to work, then it can maximize their potential.

5. Conclusion

From the description above, it can be concluded that the process of fostering higher order thinking of students in KBQT can be done by: first, implementing the target system for each student. By applying the target system means that KBQT positions students as subjects for their own education, no longer as an object. Besides that, it also allows students to learn independently according to the target they set. Second, familiarizing students to discuss with each other and express the ideas they have. By conducting discussion, it can expand the thinking space about sensitivity to social reality of students in KBQT. The three mutual agreements in determining the ways and forms of learning. It shows democratic education at KBQT. Especially, with learning evaluation conducted by looking at students' work, not with the test that gives them the chance to use higher order thinking skill based on the knowledge they have.

The limitation of this study is that researchers have not been able to deeply observe the process of how the method of guiding conducted by students at KBQT can produce a work.

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References

- [1] UU Sisdiknas No 20 tahun 2003
- [2] Kemendikbud, jumlah data satuan pendidikan (sekolah) pendidikan masyarakat (DIKMAS) per provinsi, <http://referensi.data.kemdikbud.go.id/index31.php>

- [3] Bahrudin, Ahmad. "Pendidikan Alternatif Qaryah Thayyibah." Yogyakarta, LKIS, 2007
- [4] Azam, Amy M. "Why Student Drop Out". *Journal Educational Leadership*, v64 n7 p91-93 Apr 2007.
- [5] Bergeson, Terry, et.al. "Helping Students finishing school why student dropout and how to help them graduate". *State Superintendent of Public Instruction*. Retrieved from: <http://www.k12.wa.us/research/default.aspx> (2006)
- [6] King, F.J, Goodson, L & Rohani, F. "Higher order thinking skills". *A publication of the Educational Services Program*. Retrieved from www.cala.fsu.edu.T.T
- [7] Widodo, Tri dan Sri Kadarwati. "Higher order thinking berbasis pemecahan masalah untuk meningkatkan hasil belajar berorientasi pembentukan karakter siswa". *Jurnal Cakrawala pendidikan*, Februari 2013, Th. XXXII, No. 1.(2015)
- [8] Ganapathy, M. et.al., "Promoting Higher Order Thinking Skills via Teaching Practices". *3L: The Southeast Asian Journal of English Language Studies – Vol 23(1): 75 – 85* (2017). <http://doi.org/10.17576/3L-2017-2301-06>
- [9] Anazifa, R.D. "The Effect of Problem- Based Learning on Critical Thinking Skills and Student Achievement". *Proceeding of 3 rd international conference on research, implementation and education of mathematics and science*. Retrieved from: <http://seminar.uny.ac.id/icriems/sites/seminar.uny.ac.id/icriems/files/prosiding/BE-07.pdf> (2016).
- [10] Brookhart, S.M. "Start with Higher-Order Thinking". *Powerfull Lesson Planning*. (2016)
- [11] Widodo, T & Kadarwati, S. "Higher order thinking berbasis pemecahan masalah untuk meningkatkan hasil belajar berorientasi pembentukan karakter siswa". *Cakrawala Pendidikan*. (2013).
- [12] Aulia, Falakhul dan Tri Suminar, "Strategi pembelajaran yang dapat mengembangkan kemandirian belajar di komunitas belajar qaryah thayyibah". *Journal of Nonformal Education and Community Empowerment*. <http://journal.unnes.ac.id/sju/index.php/jnfc> (2016)
- [13] Song, Liyan dan Jannete R Hill. "A Conceptual Model for Understanding Self-Direction Learning in Online Environments". *Journal of Interactive Online Learning*. Vol 6. No 1. Pg. 27-44. (2007).