IMPLEMENTATION OF QUANTUM LEARNING BASED ON AUTHENTIC ASSESSMENT IN LEARNING PROCESS

Abdul Aziz
Muhammadiyah University Of Semarang
abdulazizrbg@gmail.com

Abstract

The courses in mathematics education courses are quite diverse. There are courses that are pure mathematics and there are courses that are pedagogic. Some causes that cause students less understanding of mathematics material is the role of students in following the learning process tend to be passive and the method of learning is still conventional so that students are not optimal in implementing the material that is understood.

Active and fun learning method will help the students in understanding the materials taught. This is quite important considering the interactive learning activities with the concept of cooperative learning will be able to encourage students to achieve learning objectives. Quantum Learning is one model of learning that is quite effective in shaping the learning conditions that can meet the needs of students. This method encourages students to be responsible and responsive and care about their friends. Relate to how to express opinions and appreciate the opinions of others.

Development Today's authentic assessment has already shown a positive thing. Some curriculum have implemented such a scoring system. Authentic judgment provides a sense of justice for the object being judged. The process of authentic assessment is comprehensive, integrated and in line with the objectives of the assessment. This assessment indicator covers the details and leads to more complex assessments

Keywords : Quantum Learning, Authentic Assessment

1.1 Back Ground

The courses in mathematics education courses are quite diverse. There are courses that are pure mathematics and there are courses that are pedagogic. All courses have an important role in the provision of students to form a professional and superior math teacher. Based on the writer's observation, especially in teaching process and learning result, some students have difficulties in understanding mathematics material.

Some causes that cause students less understanding of mathematics material is the role of students in following the learning process tend to be passive and the method of learning is still conventional so that students are not optimal in implementing the material that is understood. A lecturer in this case is the lecturer of the lecturer of Algebra Structure, should be able to facilitate the students in teaching process either using media or supporting facilities to create more

cooperative learning activities. Ni Ketut Suryani et al. (2013) states that there are significant differences in learning outcomes between students learning to use cooperative script learning models with students learning to use conventional learning models.

2.1 Quantum Learning

Quantum Learning method is one example of cooperative learning that emphasizes the learning process on group work. The purpose of cooperative learning is not only the mastery of the material, but rather the interaction between individuals involved in learning activities to get together in learning a material. Quantum Learning has the intent to change all the learning barriers that have been forced to continue to be a benefit for students themselves and others, by maximizing students' natural abilities and talents (Rusman, 2012).

There are several things that need to be done to change the barriers - learning barriers is to start getting used to using the environment as a medium of learning and make the communication system as a mediator of science from teacher to students most effectively by facilitating all the things required by students. In this model there are elements of freedom, relaxation, amazing, fun and exciting (Ali & Muhlis, 2014). Outwardly the success is the learners in the condition or class environment is fun, so that students can enjoy the learning process and more spirit and motivated one with the other to get maximum results.

According to Bobbi de Porter in Rusman (2012) there are principles that must exist in quantum learning are:

a. Everything is talking

Everything from the classroom to the body language, from the papers distributed to the lesson design, all send messages about learning

b. Everything is aiming

Everything that happens in compilation has a purpose.

c. Experience before naming

The brain grows rapidly with the stimulation of curiosity. Therefore, the best learning process occurs when students have experienced information before they get a name for what they learn.

d. Acknowledge every effort

Learning is risky. As students take this step, they deserve recognition for their skills and confidence.

e. If worthy of study, then it is worth celebrating

The celebration provides feedback on progress and improves the association of positive emotions by learning.

Quantum Learning is an effort, a guide, a strategy and an entire learning process that can strengthen understanding and memory, and make learning as a fun and rewarding process. The purpose is :

a. To create an effective learning environment

b. To create a fun learning process

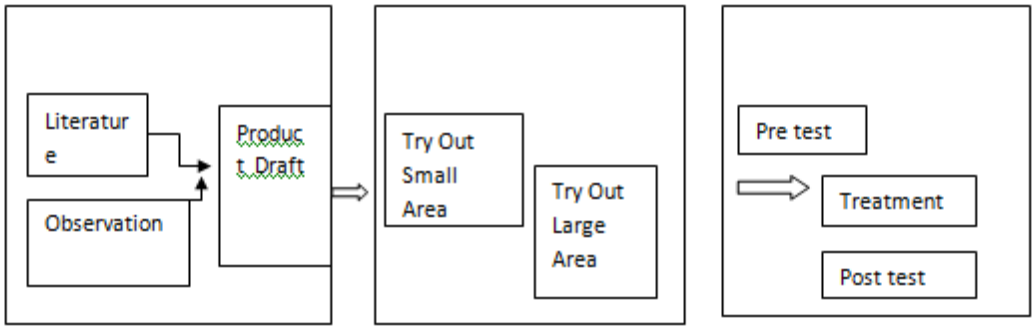
c. To adjust the ability of the brain with what is needed by the brain

d. To improve the success of life and career
e. To help accelerate learning.

3. Method

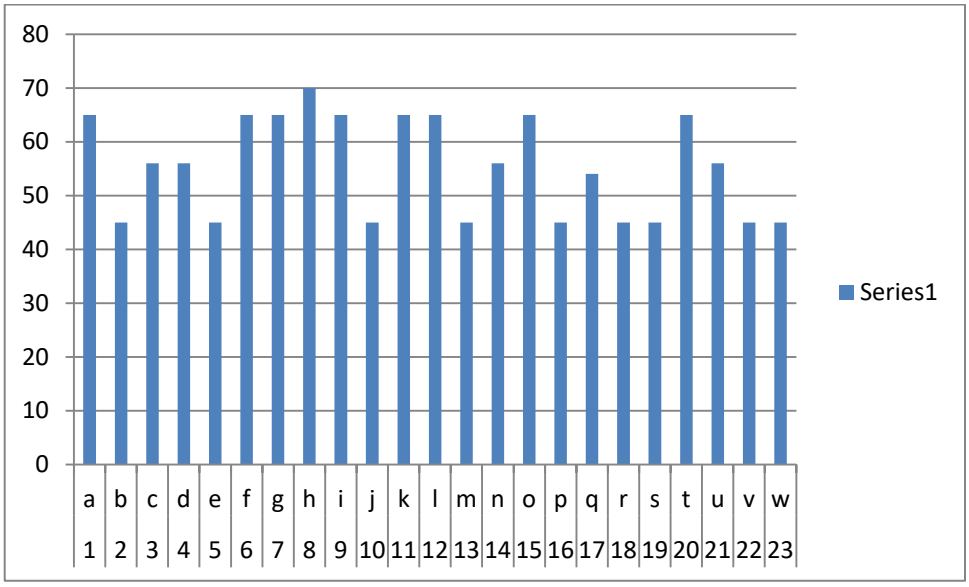
Having produced a final product that has been tested efficacy, the next step is dissemination, implementation and institutionalization. Dissemination is a step to socialize and disseminate results. Dissemination of products developed by institutions under the Ministry of National Education, is very easy (Sutama, 2012). With legalization and instruction from the Minister, Dirjen or Minimum Director, then a product in a short time can be disseminated to the Education Office or Research and Technology Research and Technology and then implemented and institutionalized.

Visually modified research and development steps can be seen in the following figure.

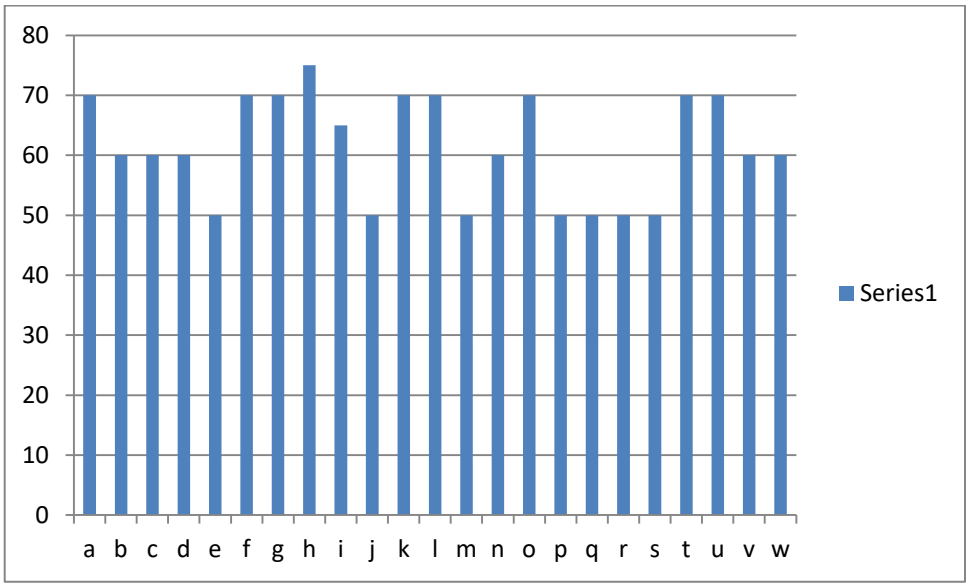


Picture. 3.1

4. Discussion



Picture 4.1 Conventional Learning



Picture 4.2 Quantum Learning

Based on both diagrams above shows the difference in value between conventional learning model and quantum learning model. The above calculation is an early stage that can be used as one reference for further research combined with authentic assessment. Although the above calculation is still the initial calculation can be used as a foothold writer in mapping the next research scheme so that the meaning of research quantum learning by using authentic assessment can be right on target.

5. References

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