Improvement of Students' History Learning Competence through Quantum Learning Model at Senior High School in Karanganyar Regency, Solo, Central Java Province, Indonesia

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Abstract
The aims of this research are: (1) To analyze effectiveness of the application of *Quantum Learning Model* compared to the *Expository Model* upon the achievement of *History Learning Competence* of Class-X Students of Karanganyar Government Senior High School; (2) To analyze the difference of influence in *learning interest* to history learning competence of Class-X Students during the Semester II of Government Senior High School in Karanganyar Regency; and (3) To analyze the influence interaction between the application of *learning model* and students' *learning interest* to the achievement of history learning competence of Class-X Students of Government Senior High School during Semester II in Karanganyar Regency.
This research applies the Experiment Method. Population in this research are the whole students of Class-X of "SMA Negeri I Karanganyar" and those of "SMA Negeri Karngpandan" Government Senior High Schools. Samples are taken by using the multi stage cluster random sampling technique from 75 respondents, consisting of 40 students for experiment and 35 students for the control group. Data collecting technique applies the questionnaire on History learning interest and a test on History Competence Achievement. Validity and Reliability Testing is carried out before instrument is used. Data is analyzed by using the 2-Way Varian Analysis Technique (ANAVA), continued with Multiple Comparison Test.
Outputs of this research are as follows: (1) *Quantum Learning Model* is effective to improve the History Learning Competence compared to *Expository Model*; (2) Students with high learning interest have the History learning competence better than students with low learning interest; (3) There is an interaction influence between the *Learning Approach* and the *Learning Interest* upon the History Learning Competence. It means that there is an interaction between Influence in the Use of *Learning Approach* and *Learning Interest* upon the Achievement of History Learning Competence.
Keywords: Quantum Learning Model, Expository Learning Model, Learning Interest, History Learning Competence.

1.   Introduction

History learning is intended to make the students aware or to generate their awareness on history (**Kartodirdjo, 1988**). This is in conformity with Regulation of Minister of National Education, Number 22, the year 2006 on content standard, knowledge about the past containing the values of wisdom able to be used to train the intelligence, to build attitude, character and personality of students. In line with these goals, the values of history must be able to be reflected at the patterns of actual behaviors of students. Observing the visible patterns of behavior, we can understand the psychological condition at a total stage of comprehension on the meaning and essence of history at present and in the future.

Considering the importance of history, then by learning the life values of community in the past, students are expected to look for or to make selection on the aforesaid values, which ones are relevant or able to be developed to encounter the complex challenges of the era, either at present or in the future. The searching process or the selection process explicitly gives emphasis on the process approach and also demands the establishment of more physical-mental activities and creativities of students in learning history. This is in line with the statement of Sartono Kartodirdjo (1992) that the history learning should give deep understanding and a certain skill.

In history learning process, a teacher has an important role in conveying information, in training the skills and in guiding the learning of students so that the teachers are required to have certain qualification and competence in order to get the study and learning process able to run effectively and efficiently. The presence of high learning interest, learning approach and utilization and the use of suitable learning media will make students easy to accept and to process the subjects presented.

The *Quantum Teaching Model* started to be developed in USA around the year 1999, pioneered by Bobbi DePorter and Mark Reardon (Suyitno, 2004). Quantum Teaching started at *Super Camp*, an accelerated *Quantum Learning Program* offered by the *Learning Forum*. In a *12-Day Staying Program,* students got the strategies,

ways or means that help them in recording, memorizing, reading, writing, making creativity, communicating as well as building up a relation. The outputs achieved in Super Camp were as follows: 68%   increasing the motivation, 73% increasing the score, 81% increasing self confidence, 84%   increasing self respect and 98% continuing the use of skill (DePorter, 2004).

Porter (2000) states, *"Quantum Teaching shows you how to be a good teacher. Quantum Teaching shows new ways that make the learning process easier through the art element guiding and the directed achievements for whatever subjects you are teaching. And by applying the Quantum Teaching method, you will be able to combine the learning peculiarities leading to the form of lesson plan that will steeply increase the student achievement."*

Quantum Teaching is a learning process by providing backgrounds and strategies to improve the learning – teaching process and to make such process more enjoyable. This procedure gives a teaching style empowering the students to make more achievement than that deemed possible. It also helps teachers enlarge the skills and motivation of students, so that In the end teachers will get greater satisfaction from their works.

There are three things need to be understood in Quantum Teaching, namely: *Quantum, Learning Acceleration, and Facility. Quantum* means an interaction changing energy into the light. Thus, *Quantum Teaching* is the *efforts of a teacher to orchestrate various interactions available inside and around the learning moment, so that the skill and natural talents of students become radiance.* Such interactions cover elements to learn effectively influencing the success of students, at the same time changing the skill and natural talents of students to be the light useful for they themselves and for other people (DePorter, 2004).

Learning Acceleration means putting away any constraints hampering the natural learning process intentionally by using music, coloring the surrounding place, preparing suitable teaching materials, and active involvement (DePorter, 2004*). Facility* means making everything easier. Facility in this context refers to the strategic implementation by putting away any learning constraints, returning the learning process into the easy and natural condition. This facility also includes providing the learning aids that make students easy in learning (DePorter, 2004).

The Quantum Learning is a learning activity in a pleasant atmosphere. Quantum Learning is one of the teachings requiring freedom, relaxing, amazing, enjoyable, and stimulating conditions. Characteristics in quantum learning model is the arrangement of pleasant and comfortable learning environment and the use of music adjusted to the *nuance* and the use of various kinds of music becomes the key leading to the quantum learning, such as pop music, dangdut, jazz and others. According to Bobbi DePorter and Hernacki (2004:12) learning by using quantum learning will give benefits, namely: (1) *positive attitude*, (2) *improvements in motivation*,   (3) *lifelong skill*, (4) *self confidence*, and (5) *success or improved learning outputs.*

Quantum Teaching Model takes the form almost similar with a symphony, dividing the elements of symphony builder into two categories, namely: *context* and *content*. In *'context'*, there are elements of environment, atmosphere, foundation and design. Whereas in *'content'*, we can find the elements of facility, presentation, and skills. In addition, the Quantum Teaching model has the design frame of Quantum Teaching popularly known as *"TANDUR": Tumbuhkan* = plant to grow, *Alami* = experience / undergo, *Namai* = give the name, *Demonstrasi* = demonstrate, *Ulangi* = repeat and *Rayakan* = Celebrate (DePorter, 2004).

On its learning process, the quantum model takes the base on cognition conditioning at the real world context. Anitah and Noerhadi, (2003) state that its conditioning into the real world context means that: (1) The tasks are not separated, but constituting part of a bigger context in which the teachers play the roles in establishing the understanding showing the larger context, relevant to the problems being encountered. (2) The real context is mostly referred to the tasks of the learners based on the information and ambient environment. (3) Environmental context is very important (either inside or outside the classroom environment) because development of learning environment is able to stimulate and increase the active participation of students in establishing the understanding and the concept.

Active participation of students in learning among others can be materialized in the forms of discussion, team work in discussion activity for materials of the lesson. Attitude of teachers to students who try to understand the way of thinking of the said students in order to develop the ability of their way of thinking to give further strengthening is expected to be able to increase the interest, attention and motivation of the students.

This procedure states that at the glance the elements do not seem to have any correlation, such as entertainment, games, colors, positive way of thinking, physical fitness and emotional health; but all of these elements work together or cooperate to produce the effective learning experience.

Quantum Learning covers important aspects in *NLP – Neuro Linguistic Program*, namely a research on how the brain organizes information. This program analyzes the relation between language and behavior and is able to be used to create a sequence of understanding between teachers and students. By understanding the NLP, teachers will know the use of positive language to increase positive actions in order to stimulate the most effective function of the brain. These all can also indicate the best learning style for each individual (DePorter, Bobbi and

Hernacki, 2005).

In addition, in order to achieve the learning goal, interest of students is required to join learning. Sukardi (1988) states that *"Learning Interest"* is *a mental framework consisting of a combination of movements and mixture of feeling, prejudice, worry, tendencies and others usually leading the individuals to a certain option."* According to Belly (2006:4), *"Interest" is the intention driven by a will after seeing, observing and comparing and considering the intended need.*

Bob and Anik Anwar (1983), declare that *interest is an emotional condition shown to something.* From those two opinions above, it can be concluded that *"interest" means a psychological condition of a person in order to be able to accept or to perform a certain action or activity to achieve a certain goal.*

Learning interest of students is also one of the success factors in achievement of History learning competence. Great learning interest tends to produce a better learning competence, whereas the less learning interest will also produce the worse learning competence. Understanding the student's needs and serving the student's needs constitute one of the efforts to generate the interest of students. Interest can be established and developed on students by means of providing information to students concerning with the relation between one teaching material to be given and the previous teaching materials or by describing about their usage in the future for students.

The essence of learning interest is a tendency or passion of students upon the learning activities able to give stimulus in activity in progress in order to achieve the intended goal, viewed from the presence of: (1) *spirit*, (2) *perseverance*, (3) *attention*, (4) *sacrifice*, and (5) *hard efforts*. Having these five things will be able to motivate students to seriously follow the learning process, and to learn the lessons presented by teachers, so that they will be able to improve the achievement in history learning competence.

However in reality, students frequently *undergo boredom* in learning History. Besides from the view point of material, history lesson is learning the event in the past, still lots of history teachers are *trapped in old models of teaching,* tending to be *teacher centered learning*; and students are mostly in passive manner, receiving more information from teachers in the forms of lecture, question and answer, then increasing the understanding through the task assignments given by teachers. To overcome this problem, the things able to be conducted by teachers are to activate and guide students by utilizing and applying the innovative and creative learning models. Here the role of teacher is only to be a facilitator, so that the learning process gives more portion for student activities.

Based on the aforesaid description, the research problems can be formulated as follows: (1) Is the Quantum Learning Model more effective in improving the History learning competence compared to the Expository Model? (2) Is there any difference in influence between high and low learning interest to student's achievement of history learning competence? and (3) Is there any influence interaction between the application of learning model approach and student's learning interest upon the student's achievement in History learning competence?

2. Method Of Research

This research applies the *Experiment Method*, because output of this research will confirm the position of causal relation among variables being analyzed. The aims are to find the causing facts and the resulting facts on the difference in effectiveness at the application of learning model in learning History from the viewpoint of students. Population of this research are the whole students of Class-X of Government Senior High Schools in Regency of Karanganyar for the Academic Year 2010/2011. Samples are taken by using *multi stage cluster random sampling technique*. Based on proportion in numbers of the available students to be analyzed, there are 75 respondents consisting of 40 students for *experiment* and 35 students for the *control group*.

Data collecting technique applies *questionnaire* on History Learning Interest and Achievement Test on History Learning Competence. Questionnaire validity on learning interest and on achievement test for learning competence is tested by using item validity technique with *product moment formula.* Reliability of the questionnaire on student learning interest is tested by using *Alpha Formula from Cronbach* and the reliability coefficient is obtained at the sum of 0.840, whereas the reliability of achievement test on learning competence is tested by using the *Kuder Richarson 20 Formula (KR-20)* and reliability coefficient of 0.890 is obtained, and then continued with test item analysis covering the level of difficulty and different power of the test item. The *2-Way Variant Analytical* Technique (ANAVA) is applied, continued with the *Multiple Comparison Test*.

3. Results and Discussion

Hypothetical testing is performed by using *2-Way Variant Analytical Technique (ANAVA)* with the factorial design of 2 x 2, then continued with *Schefe Test* in order to know which group is significantly more superior. The aim of 2-Lane Variant Analytical Technique is to investigate the *two main effects* and *one interaction effect*. The main effect is the difference of influence between the *learning model* and the student's *learning interest* on the achievement of History learning competence. The interaction influence is the influence of learning model

and student's learning interest on the achievement of the History learning competence. Before hypothetical testing is performed, the requirement test is done, namely the test on *normality* and *homogeneity*. The statistic values compiled from outputs of History competence tests are shown on the following Table.

Table-1: The Required Statistic Values.

Learning Approach		Quantum Approach	Expository Approach	Total
Learning Interest		**(A1)**	**(A2)**	
High Interest (B1)	N	21	17	38
	Σx	1646.95	1200.86	2847.81
	Σx²	129237	84943.69	208660
	X	78.43	70.64	74.94
Low Interest (B2)	N	19	18	37
	Σx	1201.67	990.39	2378.57
	Σx²	77017.69	77507.06	156379
	X	63.25	65.38	64.29
Total	N	40	35	75
	Σx	2848.62	2377.76	5226.58
	Σx²	206254.6	162450.8	368705.4
	X	71.22	67.94	69.58

Based on the calculation using the help of SPSS Program 16.0 the summary of ANAVA Outputs as a whole are sown in Table-2 as follows:

Table-2: Calculation Outputs of ANAVA 2x2
Tests of Between-Subjects Effects

Dependent Variable: the History learning competence

Source	Type II Sum of Squares	Df	Mean Square	F	Sig.
Corected Model	2740.93	3	913.642	36.778	.000
Intercept	364200.64	1	364200.64	14660.657	.000
Learning Approach	153.01	1	153.01	6.159	.015
Learning Interest	2081.22	1	2081.22	83.778	.000
Learning Approach*Learning Interest	458.95	1	458.95	18.475	.000
Total	368705.35	75			
Corrected total	4504.71	74			

R. Squared = .608 (adjusted R Squared = .592)

Based on the calculation outputs of the aforesaid 2-Way ANAVA, the conclusions can be made as follows:

3.1. Hypothesis-1

The difference in influence at the application of the Quantum Approach from the Expository Approach to the Achievement of History Learning Competence of Class-X students of Government Senior High Schools in Karanganyar Regency during Semester II for the Academic Year 2010/2011.

Based on the ANAVA Table above, we can obtain the value of $F_{arithmetical\ progression} = 6.159 > F_{table} = 3.11$. It means that the first statistic hypothesis (Ho) is rejected, and H1 is accepted. In this way, it can be concluded that there is an average difference in history learning competence between the Quantum Approach from the Expository Approach. Thus, it can be concluded that the Output of History Learning Competence Test for students taught by using the Quantum Learning is better than that of using the Expository Approach.

The Quantum Learning Model is more *student centered* in its nature**.** In this model, students are actively and creatively involved in learning process, so that learning becomes more meaningful and able to increase the student achievement. One of the reasons why students are able to learn better is because they feel happy in taking part in such learning-teaching process. The quantum learning focuses the attention on excellent and meaningful interaction, so that it gives emphasis on the importance of interaction, frequency and accumulation of excellent and meaningful interaction and *therefore communication becomes very important in quantum learning*. Students as the learners become the center of attention. Self potential and the intelligence ability of the learners are believed to be able to develop maximally and optimally. In addition, under quantum learning model, the nuance of constructivism   is relatively strong by emphasizing the importance of the environmental roles in materializing the effective and optimal learning and making easy for the success in achieving the learning goals.

Some points of excellence or superiorities of the quantum learning among others are as follows: (1) Quantum

learning begins from cognitive psychology, not the quantum physics although tinny bit term and concept of quantum are used. (2) Quantum learning is more humanistic in its nature, not "empirical positivistic", "animalistic", and or "nativistic". (3) Quantum learning is more constructivist(ic), not empirical positivistic, nor behaviorist. (4) Quantum learning focuses the attention on excellent and meaningful interaction, not just merely a transaction of meaning. (5) Quantum learning gives great emphasis on learning acceleration with high level of success. (6) Quantum learning determines much on the natural characteristics and naturalness of the learning process, not on the artificial or framed-up condition. (7) Quantum learning gives big emphasis on meaningfulness and excellence of the learning process. (8) Quantum learning has a model synchronizing the context and the content of learning. (9) Quantum learning focuses the attention on establishment of academic skills, life skills, and physical ore material achievement. (10) Quantum learning puts the values and faith as the important parts in learning process. (11) Quantum learning prioritizes diversity and freedom, not uniformity and order, and (12) Quantum learning integrates totality of body and mind at the learning process.

In addition, the quantum learning gives very big emphasis on learning acceleration with high level of success. Under this circumstance, various ways and techniques can be applied and in this research it is materialized in the forms of sufficient lighting, accompaniment of the music, joyful atmosphere established by the presence of team work and the yells of the groups, comfortable environment, relaxing arrangement of the seats as one of the efforts to support the learning acceleration.

Quite different from the quantum learning, the Expository Learning is a *teacher centered* learning method in which the movement space and roles of students are limited and dominated by the teachers who mostly take the role as the transferor of knowledge and students become the object in learning as stated by Nana Sudjana **(2006:73)** that the expository learning model essentially emphasizes on conveying the knowledge to students, and students are viewed as the object receiving information given by the teachers. Usually such information is given in the form of explanation and oral narration and students are asked to re-express what they have got through the response

3.2. Hypothesis-2

The difference in influence between High Learning Interest and Low Learning Interest to the History Learning Competence of Class-X students of Government Senior High Schools in Karanganyar Regency during Semester II for the Academic Year 2010/2011.

Based on the the aforesaid ANAVA Table, we can obtain the value of $F_{\text{arithmetical progression}} = 83.778 > F_{\text{table}} = 3.11$. It means that the first statistic hypothesis (Ho) is rejected, and H1 is accepted. In this way, it can be concluded that there is an average difference in history learning competence between students with high learning interest and those with the low learning interest. Thus, it can be concluded that the Score of History Learning Competence for students with high learning interest is higher than that with the low learning interest.

The further finding of this research is that there is a different output in history competence test between students with high and low learning interests. Interest is the most convincing foundation for the success of a learning process. Further, Muhibin Syah (2001) states that interest is a high tendency to something. In this regard, it is performed by giving an emphasis on the high spirit. Then, the illustration by Crow and Crow declares that if someone has an interest on something, he will be longer to remember and follow the said activity, even if someone's experience on a certain activity always produces the results pursuant to his expectation, his interest will increase higher and higher. In this way, students with high learning interest tend to be more successful in their learning.

3.3. Hypothesis-3

The influence interaction between the application of Learning Model Approach and Learning Interest to the Achievement of History Learning Competence of Class-X students of Government Senior High Schools in Karanganyar Regency during Semester II for the Academic Year 2010/2011.

In order to know whether or not there is an influence interaction between the application of Learning Approach and Learning Interest to the Achievement of History Learning Competence, it is obtained the value of

$F_{\text{arithmetical progression}} = 18.475$, whereas the $F_{\text{table}} = 3.11$. Since the F progression is bigger than F table, the zero hypothesis (Ho) is rejected. This means that there is an influence interaction between the Learning Approach and Learning Interest to the Achievement of History Learning Competence. The interaction significantly tested between the Learning Approach and the Learning Interest of students to the Test Output of History Learning Competence, the next step to take is to perform a further test using the Scheffe method. The form of this interaction is as shown at the following Drawing-I :
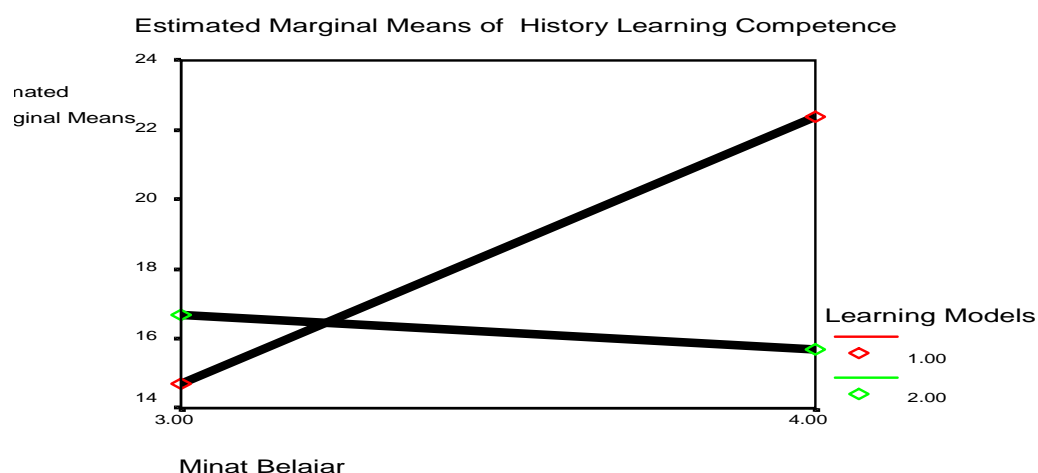
Drawing-1: Interaction between Learning approach and Learning Interest to the History Learning Competence

The above drawing indicates that there is a configuration of the score average value of the History Learning Competence for each Learning Approach with Student Learning Interest and constitutes a pair of comparison between the two averages. This pair becomes the configuration component. At interaction between Learning Approach and Learning Interest, there are two configuration components pursuant to the need of this research, namely: The first component is in the form of the average score of the Test Output of History Learning Competence having High Learning interest and taught by using the Quantum Approach and Expository. The second component is in the form of the average score of the Test Output of History Learning Competence having Low Learning interest and taught by using the Quantum Approach and Expository. Both configurations have been tested as presented at the second and the third hypotheses.

Based on the output of the aforesaid analysis, the next step to take is the advanced test. The advanced test using the **Scheefe method** produces the results as follows:

3.3.1.   There is an average different score of 7.7874 at the *quantum learning approach* for students with *High Learning Interest* (78.43) from the *expository learning approach* for students with the *High Learning Interest* (70.64). Using the error standard of 1.626 and significance level of 0.000 (0.000<0.05), it means that between the average score at the quantum learning approach for students with high learning interest is different from the expository approach for students with high learning interest.

3.3.2.   There is an average different score of 15.1804 at *the quantum learning approach* for students with *High Learning Interest* (78.43) from the *quantum learning approach* for students with *Low Learning Interest* (62.25). Using the error standard of 1.578 and significance level of 0.000 (0.000<0.05), it means that between the average score at the quantum learning approach for students with high learning interest is different from the quantum approach for students with low learning interest.

3.3.3.   There is an average different score of 13.0429 at *the quantum learning approach* for students with *High Learning Interest* (78.43) from the average score of test output of *History Learning Competence using Expository Learning* for students with *Low Learning Interest* (65.38). Using the error standard of 1.600 and significance level of 0.000 (0.000<0.05), it means that between the average score at the quantum learning approach for students with high learning interest is different from the expository approach for students with low learning interest.

3.3.4.   There is an average different score of 7.3930 at the average score of History Learning Competence under the *Expository Learning Approach* for students with *High Learning Interest* (70.64) from the *quantum learning approach* for students with *Low Learning Interest* (63.25). Using the error standard of 1.663 and significance level of 0.001 (0.001<0.05), it means that between the average score at the expository learning approach for students with high learning interest is different from the expository approach for students with high learning interest.

3.3.5.   There is an average different score of 5.255 at the score of History Learning Competence under the *Expository Learning Approach* for students with *High Learning Interest* (70.64) from the average score of test output of History Learning Competence under Expository Learning Approach for students with *Low Learning Interest* (65.38). Using the error standard of 1.685 and significance level of 0.027 (0.027<0.05), it means that between the score of History Learning Competence under the expository learning approach for students with high learning interest is different from the average score of test output of History Learning Competence under the Expository Learning Approach for students with low learning interest.

3.3.6. There is an average different score of 5.7 at the average score of History Learning Competence under the *Quantum Learning Approach* for students with *Low Learning Interest* (63.25) from the average score of test output of History Learning Competence under *Expository Learning Approach* for students with *Low Learning Interest* (65.38). Using the error standard of 1.639 and significance level of 0.639 (0.639 > 0.05), it means that between the average score of test output of History Learning Competence under the Quantum Learning Approach for students with low learning interest *is not different* from the average score of test output of History Learning Competence under the Expository Learning Approach for students with low learning interest.

Further findings of this research indicate that there is an interaction influence between the *learning approach* and *learning interest* in influencing the History Learning Competence. The roles of teachers in generating the learning interest are as follows: selecting the teaching materials meaningful for students, establishing   the learning activities able to give motivation to find, translating / interpreting anything that has been taught. A teaching material is presented pursuant to the level of thinking ability of children and presented in the forms involving a lot of children activities in learning process.

Applying the suitable learning approach is one of the solutions that can be taken by the teachers. The application of quantum learning model will be much easier in involving the student activities, so that it is expected it can materialize the more conducive and enjoyable learning atmosphere compared to the Expository learning model which tends to be *teacher centered learning*, in which teachers have very dominant roles. The conducive and pleasant learning atmosphere is quite possible to increase the student learning interest.

The use of Quantum Learning Model under a principle of placing students in comfortable condition, with musical background and interlude of short films, as well as   utilizing everything available either inside or outside the learning, will be able to stimulate the learning interest of the students. High learning interest will be able to convey students to be the personality successful in their learning activities. The expository model frequently tends to place students as the objects of being the message receivers. They are not much actively involved in a process of finding the concept and problem solving. This makes students less capable in developing their skills and become indifferent.

In line with the aforesaid subject, the quantum approach and the tracing of student's interest at Karanganyar Senior High School constitute an alternative to meet the needs of students, so that it can optimize their abilities, logical reasoning, and skills to improve the student output in learning the history. The similar opinion is given by Berdie as quoted by Bloom declaring that the interest is shown by the expression to like the activity, object and specific nature (Bloom, 1981). Interest constitutes a stimuli being studied and followed due to its connection with the object of goal being evaluated. Interest in the end can be extinguished if the responses, relations as well as the motivations involved inside are destroyed.

The implementation of learning model which is conducive, enjoyable and challenging and enable students to have activities to develop themselves based on the learning experience they have got and the creativity they have done, will be able to stimulate the learning interest of students in which in the end will be able to increase the achievement of their learning competence, because the interest has the functions to: (1) *Motivate someone to perform an activity*. (2) *Motivate someone to enjoy and continue the activity*. (3) *Motivate the growth of attention* to a *certain object*, and (4) *Motivate someone to tend to perform an activity and try to finish it*.

Students having high interest will be more perseverant, more attentive and more serious in completing the activities as the best possible. In other words it can be stated that there is an influence interaction between the learning model and the learning interest to the achievement of history learning competence.

4.   Conclusion And Suggestions

Output of data analysis indicates that as a whole there is a difference in history learning competence of students between those being taught by using the Quantum Approach and by the Expository Approach. In this case, the history learning competence under Quantum Approach has better result compared to that under the Expository Approach. In addition, there is an influence interaction Learning Approach and Learning Interest to the History Learning Competence. Based on the aforesaid analysis, the conclusion can be taken as follows:

4.1. Based on data analysis, it is found out that there is a difference in History Learning Competence of students studying under Quantum Approach and those under Expository Approach. The Quantum Approach produces better competence in learning history compared to the Expository Approach.

4.2. There is a difference in History Learning Competence between students having high and low learning interests. Students with high learning interest have better competence in their history learning compared to those with low learning interest.

4.3. There is an influence of interaction between Learning Approach and Learning interest to the History Learning Competence. This means that there is an interaction between the Influence in the Application of Learning Approach and Learning Interest to the Achievement of History Learning Competence.

Based on the output of this research, some suggestions can be given as follows

4.4. The learning method applying the **Quantum Learning Model** can be taken as the alternative learning model for the subject of history so far deemed as being less important, since it is not included at the subjects tested at the National Examination, and so far its learning applies the learning model considered less interesting and challenging, since it does provide opportunity for students to explore their self potentials. Under Quantum Learning Model, the relation between teachers and students become close and the convenient and enjoyable learning atmosphere will be established, so that it is expected that it will be able to improve the achievement of their learning competence.

4.5. In addition, in order to get students having high interest in participating the History Lesson, teachers should be able to use other learning models which are active, creative, and pleasant.

4.6. In some researches, quite frequently that the learning interest is only used as the moderator variable, but in reality in this research it is known that the learning interest gives significant influence to the achievement of learning competence. Therefore, it is suggested to make a research on the class action intended to look for the dominant factors able to influence the student learning interest.

4.7. It is proven that the learning interest has big influence to the achievement of student learning competence, in which students with high learning interest being taught by using either quantum or expository model are proven to remain having high achievement in their learning competence. Thus, the Autonomous Agency for Education and Culture should also be able to consider about the students' interest during recruitment for new students by including or inserting the student interest as one of the requirements in recruiting the new students.

4.8. Many research variables have not yet been deeply revealed in this research, for example in measuring the competence achievement, it only measures the cognitive aspect of the students, in which in reality in evaluating the competence achievement of subject of History, it should not be that way only. Therefore, it is suggested to hold a further research intended to improve the affective aspects, so that it will be more complete in evaluating the achievement of student competence in the subject of history.

References

Bloom, Benjamin S., Madaus, George F and Hastings, J. Thomas (1981). *Evaluation to Improve Learning*. New York: McGraw-Hill.

Djayadisastra, Yusuf (1989). *Psikologi Perkembangan (Development Psychology).* Bandung: BPGT.

DePorter, Bobb and Saran Singer Nourie (2000). *Quantum Teaching.* Bandung: Kaifa.

DePorter, Bobbi and Mike Hernachi, translated by Alwiyah Abdurrahman (2009). *Quantum Learning: Membiasakan Belajar Nyaman dan Menyenangkan. (Quantum Learning: Getting Accustomed to Learning Comfortably and Enjoyably).* Bandung: Kaifa.

DePorter, Bobbi et al.(2000). *Quantum Teaching: Mempraktekkan Quantum Learning di Ruang-ruang Klas. (Quantum Teaching: Practicing the Quantum Learning at the Classrooms).* Bandung: Kaifa.

DePorter, Reardon & Singer Nourie (2005). *Quantum Teaching,* Bandung: Kaifa.

Depdiknas (Department of National Education) (2003). *Undang-Undang Republik Indonesia No. 20 tahun 2003 tentang Sistem Pendidkan Nasional. (Law of The Republic of Indonesia No. 20, the year 2003 on National Education System)*, Jakarta, Dediknas.

Hamalik, Oemar. (1983*). Metode Belajar dan Kesulitan Belajar. (Learning Method and Difficulty in Learning),* Bandung: Tarsito.

Hamalik, Oemar. (2007). *Poses Belajar Mengajar. (The Learning-Teaching Process).* Jakarta: PT bumi Aksara.

Hamalik, Oemar. (2001). *Kurikulum dan Pembelajaran. (Curriculum and Learning).* Jakarta: PT Bumi Aksara.

Kemendiknas (Ministry of National Education). (2010). *Pembelajar-an Berbasis PAIKEM (CTL, Pembelajaran Terpadu, Pembelajaran Tematik); Materi Pelatihan Penguatan Pengawas Sekolah. Direktorat Tenaga Kependidikan, Direktorat Jenderal PMPTK Kemendiknas. (Learning Under the PAIKEM Basis (CTL, Integrated Learning, Thematic Learning); Training Materials for Strengthening the School Supervisors, Educational Manpower Directorate, Directorate General of PMPTK of Ministry of National Education)*, Jakarta.

Samosir, Marten. (1992). *Seni Berfikir Kreatif. (Arts of Creative Thinking).* Jakarta: Erlangga.

Sartono Kartodirdjo. (1988). *Fungsi Pengajaran Sejarah dalam Pembangunan Nasional. (Function of history Teaching in National Development).* Article published at Kompas Daily Newspaper, September 26, 1988.

Sartono Kartodirdjo. (1992). *Pendekatan Ilmu Social dalam Metodologi Sejarah. (Sociology Approach in History Methodology).* Jakarta: PT Gramedia Pustaka Utama).

Soedjatmoko. (1976). *Kesadaran Sejarah dan Pembangunan. (Historical Awareness and Development).* Article published at 'Prima' Magazine (Special Edition), Number 7, the Year V.

Sukardi. (1987). *Bimbingan dan Penyuluhan. (Guidance and Counseling).* Surabaya: Usaha Nasional.

Peraturan Menteri Pendidikan Nasional (Regulation of Minister of National Education, Number 22, the year

(2006), tentang Standard Isi untuk Pendidikan Dasar dan Menengah *(on the Content Standard for Primary and Intermediate Education).*

Muhibbbin Syah. (2001). *Psikologi Pendidikan dengan Pendekatan Baru. (Educational Psychology under a New Approach).* Bandung: PT Remaja Rosdakarya.

Nana Sudjana. (2006). *Dasar-Dasar Proses Belajar Mengajar. (Principles of Learning-Teaching Process).* Bandung: Sinar Baru Algesindo Offset.

Noorhadi and Sri Anitah Wiryawan. (1994). Strategi Belajar Mengajar. *(Learning-Teaching Strategy),* Jakarta: Universitas Terbuka / Open University.

Nurhadi. (2004). *Kurikulum 2004: Pertanyaan dan Jawaban. (Curriculum 2004: Questions and Answers).* Jakarta: Grasindo.

Tono, Achmad. (1978). *Metode Pengajaran. (Teaching Method).* Jakarta: Sinar Baru

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