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The Effectiveness of Local Culture-Based Mathematical Heuristic-KR Learning towards Enhancing Student's Creative Thinking Skill

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Abstract
The problem in this research is the lack of creative thinking skills of students. One of the learning models that is expected to enhance student's creative thinking skill is the local culture-based mathematical heuristic-KR learning model (LC-BMHLM). Heuristic-KR is a learning model wich was introduced by Krulik and Rudnick 1995 that is the development of Polya's heuristic. This research aims to know the effectiveness of the LC-BMHLM model in enhancing creative thinking skills of students. The population in this research were students in a senior high school in Rantepao District with a sample size of 72 students. The sampling technique was cluster random sampling. Schools which selected as a sample assigned one class as a class experiment who got LC-BMHLM model and one more class as a control class who got regular learning. The instruments used were the prior mathematical knowledge (PMK) test, and the creative thinking skills test (CTS). The data was analyzed using t-test, Mann-Whitney test, and two-way ANOVA. The results of this research show that LC-BMHLM model was effective in enhancing student's creative thinking skills. Students who have a high value of PMK have a high CTS, students who have middle and low PMK has a middle CTS, though both are classified as middle, but the post test average of those who have middle PMK are better than students who have low PMK.
Keywords: Local culture-based heuristic-KR learning model, creative thinking skill

1. Introduction

Mathematics is one of the subjects which must be taught to students starting from elementary schools until the universities to support the development of ability in mathematical thinking. According to Johnson (2000), mathematical thinking ability consists of two major aspects, namely critical thinking ability and creative thinking ability. Assessing the students' creative thinking ability can be done by using "The Torrance Test of Creative Thinking-Figural (TTCT-F)". Guilford (Kim, 2006) suggests that the components of TTCT-F are: fluency, flexibility, elaboration, and originality.

One of the learning models that is expected to enhance student's creative thinking skills is the local culture-based heuristic-KR learning model. Heuristic-KR is a learning model wich was introduced by Krulik and Rudnick 1995 that the development of Polya's heuristic. The learning model emphasizes the importance of reflection and extending answers to other situations. The LC-BMHLM model can be designed through plan teaching program (PTP), non-routine problems. The use of appropriate learning models and culture contextual situations in mathematics is a form of creativity and innovation of teachers in teaching. It's purpose to help students to understand mathematical concepts, students closer to mathematics, and also change the students' perception of math. An example utilization of contextual the local culture in this learning begins by explaining about the reflection and symmetry then the teacher shows examples of Torajan's carved ornaments wich having the value of reflection and symmetry.

Based on the description above, this researcher was interested in conducting research about the effectiveness of the LC-BMHLM model in enhancing student's creative thinking skills.

2. Creative Thinking Skills

Diversity of views about creativity presented by the experts indicate that creativity is a complex research. Therefore, until now there is no standard definition of creativity so that to examine the creativity, we need to see the definition of theory which is the basis of reference. Concerning creativity in mathematics, Pehkonen (1997) told that creativity does not only occur in certain aspects such as art, literature, or science, but is also found in various aspects of life, including mathematics. While Guilford (Park, 2004) mentions creativity as divergent production or what was also called divergent thinking. Divergent production has four components, namely: fluency, flexibility, originality, and elaboration. In this statement the aspecs of fluency refers to ease of producing ideas or solving problems. Flexibility refers to the diversity of ideas wich developed. Originality refers to the ability to produce ideas which are unusual. Whereas elaboration refers to the ability of individuals to explain in detail and coherently a given idea. Another opinion has been put forward by Williams (Hwang et. al, 2007) that associates creativity with openness, curiosity, imagination, and courage to take the risk. He thought these characteristics the differentiate creative student'-s from students in general.

Sharp (Briggs and Davis, 2008) identified several components of creative thinking, namely: Originality, productivity, and the impact or benefits. This is consistent with the opinion of Isaksen (Sharp) that novelty-refers to problem-solving strategies that are uniquel. Novelty does not have to be associated with a totally new idea, but can be new according to the students. When a student is able to find the solution to the problem for the first time, he has discovered something new at least for himself. Productivity refers to the construction of as many ideas as possible regardless of whwther it is a new idea or not. In the learning context one of the impacts is a growing confidence after the student was able to solve the new problem. The component of impacts or the benefits is important given the fact that no matter whether a product is categorized as new, if it is not useful or even is harmful the product can not be categorized creative.

Haylock (1997) used two approaches to identify mathematical creative thinking. First, he observed the answers of students in solving problems which were regarded as characteristic of creative thinking. Second, he determined the criteria for a product that is indicated as a result of creative thinking, also called divergent products. Another view stated by Harris (2000) that there were three aspects of creative thinking abilities, namely: success, efficiency, and coherence. Success related to the suitability of solutions with the problems resolved. Efficiency related to practical strategies in solving problems. The aspect of coherence related to the unity or wholeness of ideas or solutions. A coherent an idea that is well organized, holistic, synergistic, and aesthetic. Aspects of coherence has similar meaning to that of the aspect of elaboration, which gives an explanation that is detailed, synergistic, and holistic. While Krutetski (Park, 2004) define the ability of mathematical creative thinking ability as the ability to find a solution to mathematical problems easily and flexibly.

2.1 Measuring Mathematical Creative Thinking Skills

Some experts have been developing instruments to measure mathematical creative thinking ability such as Jensen (Park, 2004) to measure mathematical creative thinking ability by giving the task to create a number of questions or statements based on information on the problems given. The other measurement was developed by Balka and Torrance (in Silver, 1997). Balka develop the instrument Mathematical Creative Ability Test (CAMT) and Torrance develop the instrument Torrance Tests of Creative Thinking (TTCT). Both of these test instruments judge the main components in creativity through fluency, flexibility and originality.Fluency refers to how many ideas were made to respond to the question. Flexibility is seen in the changes in approach when responding to the question. Novelty is the originality of idea created to respond to the question. In these three components, if the response to the question followed required standards and fitted with the desired question, then the indicator of appropriateness or having valuable creative thinking can be said to be fulfilled.

Haylock (1997) said that in the context of mathematics, the relevance of fluency seems less useful than flexibility. For example: Suppose the students were asked to create a question whose answer is 5, the students might start with 6-1, 7-2, 8-3, and so on. The student scores high but does not indicate creativity. Flexibility emphasizes a lot of different ideas being used. Thus in mathematics to evaluate divergence we can use the creteria of flexibility and novelty. Another criteria is feasibility. A mathematical response might indicate high novelty but be useless if it does not follow general mathematical criteria. For example: to answer 8 a student answered 4. Although this indicates novelty, the answer is wrong. Thus, the measurement of mathematical creative thinking ability that was used by Balka, Torrance, and Park above is often called the task of problem posing or problem finding or divergent production. This test measures three aspects, of the ability to think creatively mathematically, namely fluency, flexibility, and novelty. The aspect of fluency concerns the number of relevant questions arranged. The aspect of flexibility relate to the variety of questions prepared. Whereas the novelty aspect related to uniqueness or how rarely a type of questions was prepared.

Besides the way above, Getzles and Jackson (Silver, 1997) argued that the mathematical creative thinking skills can be measured by giving open-ended problems. According to Becker and Shimada (Livne, 2008), open-ended problems are questions that have a variety of answers. Aspects which are measured are fluency, flexibility, novelty/originality, and elaboration. Fluency relates of to the number of solutions. Flexibility relates to the variety of ideas. Novelty relates to the uniqueness of the students' answers. Whereas the elaboration aspect related to detailed answers. In this research, aspects of mathematical creative thinking abilities that were measured were fluency, flexibility, originality, and elaboration.

The fluency aspect included the ability to solve problem and provide many answers to the problem, or provide many examples that related to concepts or specific mathematical situations. The flexibility aspect included the ability to use a variety of problem solving strategies or provide a variety of examples or statements related to a specific mathematical situation.

The originality aspect included the ability to use new, unique, or unusual strategies to solve the problem or to give new, unique, or unusual examples or statements. The elaboration aspect included the ability to explain in detail, appropriately and coherently the mathematical procedures, answers, or particular mathematical situation. This explanation uses the appropriate concepts, representations, terms, or the

mathematical notations.

3. Local Culture-Based Heuristic-KR Learning Model

The term heuristic is often used in mathematical problem solving. Heuristic is a strategy which helps the problem solver to approach and understand the problem by using the ability which has been possessed to find the solution for the mathematical problem which is faced by the student (Schroendfielf, 1980).

Krulik and Rudnick (1995) define heuristic as a strategy to find a solution from a problem by using five steps which in this research called heuristic-KR. Those five steps are: 1) read and think, comprising: identify facts, identify a question, visualize a situation, explain the setting, and determine the next action, 2) explore and plan, comprise: organize information, search whether there is information which is suitable/needed, search whether there is information which is not needed, draw/illustrate a model of the problem, and make a diagram, table or drawing, 3) select a strategy, comprise: find/make a pattern, work backward, try and do, simulation or experiment, simplification or expansion, make a list in series, logical deduction, and divide or categorize the problem to become a simple problem, 4) find and answer, comprise: predict or estimate, use counting ability, use algebra ability, use geometrical ability, use calculator if it is needed, and 5) reflect and extend, comprise: reexamine the answer, determine alternative solution, develop the answer in another situation, develop the answer (generalization or conceptualization), discuss the answer, and create a variety of problems from the original problem.

In this research, heuristic-KR learning model is related with local culture context to help students in understanding the material which is presented. The steps of this heuristic-KR appear in PTP, the way students answer the exercise question (SES), and student'-s'_ test problems. Thus, it is hoped that students are capable of changing their mindset that mathematics is not as difficult as they think and finally student's creative thinking skill is enhanced.

4. Definition of Local Culture

According to Kuntjaraningrat (1974: 12), culture is elements which consist of religious systems and religious ceremonies, system and community organization, knowledge systems, language, art, living systems, and technology and tool systems. The main function of culture is to spread values from one generation to next generation. Local culture which is refered to in this research is the culture owned by the native people of the Toraja tribe which is viewed as their cultural inheritance. One authentic aspect of Toraja culture which can be used related to the topic of geometry transformation is the carved object which is contained in traditional house buildings which known by term "*tongkonan."*

5. The Relation of Creative Thinking Skill with Local Culture-Based Heuristic-KR Learning

The development of creative thinking skill is based on the belief that each student has creative potency and creativity which can be developed at each age level. This statement is supported by Griffith (1999) which reveals that creative thinking ability can be developed from an early age. With the belief that each child has creative potency, this can appear in the child's curiosity toward various things she/he encounter. To support that child's curiosity, a learning process which is appropriate need to be supported. This is parallel with the opinion of Couger et al (Alexander, d2007) that through learning with appropriate strategy, teachers can help to develop student'-s' natural curiosity.

Developing creative thinking skill is a focus of mathematics education, but in developing of creative thinking skills, it is important to notice creative thinking dimensions such as: attitude dimension, ability dimension, process dimension, and creative impetus dimension. Based on those dimensions, the characteristics of the creative individual need to be identified and developed as well as creative supporting which supports the student doing a creative process to generate a creative product.

The development of creative thinking ability can also be influenced by philosophy which is referred to. According to Nakin (2003), the development of creative thinking ability is difficult to be done in traditional learning situations which are teacher-oriented. By contrast, creative thinking ability can be developed in learning situations which are student-oriented which give the opportunity to students to do various creative activities, such as conduct try outs, propose assumptions, explore various problem solving strategy alternatives, and make conclusions.

Local culture-based heuristic-KR learning model is one learning model which is student-oriented. This heuristic-KR learning model has five steps and the fifth step is the emphasis of that learning model that is doing reflection and development. In this research, heuristic-KR learning process is based on local culture with aiming to help students understand mathematical concepts easily and bring students close to mathematics and able to enhance student'-s'_ creative thinking skill.

6. Methodology

This research is experiment research. Experiment design which is used in this research is pretest-posttest of control group as suggested by McMillan and Shumacker (2001). This research involve one control variable that is the level of the student's prior mathematical knowledge (PMK). For categorization of student's PMK, three levels are used that is high level, medium level, and low level. Categorization of PMK level is based on the acquisition of prerequisite material test marks. The problems which are contained in the PMK test are the problems which are related to prerequisite material for the geometry transformation subject.

6.1 Population and Sample

The subject of population in this research are all students of a Senior High School in Rantepao Regency. Subject in this research are students of class XII with the numbers of sample being 74 students. The sampling technique used is cluster random sampling because this makes it to research the subject in a group which has been formed naturally and this technique has high accuracy in appropriate sampling technique (Furchan, 2011).

6.2 Instrument of Research

The instrument which is used in this research is mathematical prior knowledge (PMK) test instrument which comprise prerequisite material which is related to the transformation geometry topic and creative thinking skill (CTS) test which is related to the transformation geometry topic.

6.3 Procedure of Research

In general, the procedure of the research can be explained as follow.

1. Design learning set, validate and try out instrument of research.
2. Analyze the validation result of research instrument and learning set to revise research instrument and learning set before field test.
3. Socialize learning design with heuristic-KR learning based on local culture to teacher and observer which is involved in research.
4. Give prior marthematical knowledge (PMK) test to subjects of research to group the students in to high, medium and low ability.
5. Implement learning process in accord with design of heuristic-KR learning based on local culture.
6. Implement creative thinking skill test.
7. Make discussion based on empirical data and theory research.
8. Conclude the result of research.

7. Result of Research

To reveal the analysis of student's creative thinking skills enhancement through mathematical learning outcome of students who got heuristic-KR learning based on local culture compared with students who got regular learning. That enhancement is indicated by the normal value gain (n-gain). To achieve that aim, an arrangement of learning group was done to the number of samples of the research namely the experiment group who got local culture-based heuristic-KR learning model (LC-BHLM) and the control group who got regular learning (RL). That sample was also grouped based on prior mathematical knowledge (PMK) by using categorization according to Arikunto (2012: 266). Based on that categorization, a sample distribution was obtained as in Table 1. The inferential statistic tests which were used in this research for the data of prior mathematical knowledge, creative thinking skill were the Mann-Whitney U test and the two-way ANOVA. But before doing the statistic tests, an assumption test was done using a data normality test and data homogeneity test using the Levene test.

7.1 Data Analysis of Student's Prior Mathematical Knowledge (PMK)

This PMK data is used to group students by PMK level category namely high level, middle level and low level. This data is analyzed descriptively to find out means, standard deviation, minimum and maximum value in each PMK level for those who got LC-BHLM learning as well as those who got regular learning which is presented as in Table 2.

7.2 Data Analysis of Student's Creative Thinking Skill

The explanation of creative thinking skill data is intended to describe the aim of research, that is analyze whether LC-BHLM learning is effective toward student's enhancement of creative thinking skill based on prior mathematical knowledge (PMK). Data analysis is done descriptively which comprises: minimum score, maximum score of posttest mean and standard deviation viewed from each PMK level based on group of learning which is presented as follows.

Based on student's CTS data, the pretest mean of students with high PMK level who got LC-BHLM learning is 13.63 and the pretest mean of students who got regular learning is 13.75. In the middle PMK level,

the pretest mean of students who got regular learning is 11.85. In low PMK level, pretest mean of students who got LC-BHLM learning is 7.00 and students who got regular learning is 7.50. This means that there was no difference of creative thinking skill quality between students who got LC-BHLM learning with students who got regular learning before treatment given. This can be showen by the difference in result of students pretest mean in each PMK level which is very small.

As for the quality of creative thinking skill enhancement, students who got LC-BHLM learning did better than students who got RL. This can be showed by acquisition of n-gain score mean for each PMK level in which students who got LC-BHLM learning is better compared to students who got RL learning. To test the enhancement difference of student's creative thinking skill based on each PMK level and group of learning statistically, the normality test was done in advance as in Table 3. Based on the table, it can be seen that the probability value (*sig*.) of CTS n-gain data of students with high PMK level who got LC-BHLM is 0.246 > 0.05. It means that the CTS n-gain for LC-BHLM group in high PMK level is normally distributed and for data probability value of CTS n-gain of RL learning group is 0.002 < 0.05 which means that n-gain CTS for RL learning group is not normal distributed.

Whereas the probability value *(sig*.) of CTS n-gain data of two group of learning, LC-BHLM and RL in middle PMK level are 0.567 > 0.05 and 0.175 > 0.05 respectively which means that H0 is accepted. Therefore, it can be said that CTS n-gain data for LC-BHLM group and RL group in middle PMK level is normally distributed. For the probability value (sig.) of CTS n-gain data of LC-BHLM group in low PMK level is 0.344 > 0.05 which means that H0 is accepted which means CTS n-gain data of LC-BHLM group in low PMK level is normally distributed. Because n-gain data in high PMK level is not normally distributed it is impossible to do the homogeneity test except the CTS n-gain data in middle and low PMK level enables us to do a homogeneity test by using the Levene test. Based on this test result as in Table 4. In table 4 can be seen that thee probability value (*sig*.) for each PMK level in two group of learning is 0.00 < 0.05 which means that H0 is rejected which means that there is a difference in the enhancement of creative thinking skill between students who got LC-BHLM learning and students who got RL learning in each PMK level.

8. Discussion

The finding result of research show that there is a significant difference of students' creative thinking skill based on PMK level. It means that the local culture-based heuristic-KR learning model gives a contribution in enhancing student's creative thinking skill. Based on this finding result it is known that the CTS enhancement mean of students who got LC-BHLM is better than students who got regular learning. Therefore, it can be said that mathematical learning by heuristic-KR learning model based on local culture is effective toward student's creative thinking skill enhancement.

It can be expected that learning which is initiated by local contextual culture can enhance student's creativity. Even though in the first meeting students experience difficulty in understanding the problem, but because the teacher gave assistance in the form of questions which enabled students to relate the problem faced with the problem which had been solved or guide students to relate the problem faced with initial knowledge which the students posses. In the second meeting, there were students who were still confused and felt uncomfortable by this heuristic-KR learning. According to one of students that he was used to learning by initiating with explanation of concept from the teacher, then an example is given by the way of problem solving from material discussed and last, a problem exercise is given to be done, and he was never habituated to solve the problem by another way, or solve the problem from another point of view. As the result of this, the student experienced the difficulty in finding alternative answers and felt a lack of time in solving mathematical problems which are given in that learning, when the student experienced difficulty, the teacher kept giving assistance, but a teacher should know when to give assistance to students in order that the student's creative thinking process can be formed and in the next meeting, the student is seen active in discussing with his/her small group and finally the student is used to this heuristic-KR learning.

Through heuristic-KR learning based on local culture, the student is guided to solve non routine problems by using heuristic-KR steps and finally student skill can be enhanced even though the student's CTS enhancement is still categorized middle. The aim in using heuristic-HR steps in solving non routine problems is that the student is capable of identifying the fact or question to determine the next step, find some alternative solution, and is capable of learning to apply the problem into another situation which is finally can make the student think creatively in solving mathematical problems.

According to Vygotsky (1978) a student cannot shift his/her zone of Proximal Development (ZPD) without help from others who are more capable (teacher or peer). Related to this research, the teacher gave a students a worksheet (SW) based on culture to guide students individually or in groups in completing mathematical problem solving by using heuristic-KR steps in this way, the student can shift his/her ZPD from its original level and make the student realize his/her ability and weakness and realize about the need of others for help. The application of cooperative learning into heuristic-KR learning based on local culture give many

advantages for students who experience difficulty in solving open ended problem, or need non routine problem solving, or can help student in solving the problem from another point of view. The problem which is difficult initially and solved by the student his/herself can be solved with the help of his/her group. Through small group discussion, discussion with classmate and teacher help, a student can solve mathematical problem solving problems which are contained in SW well. Therefore, meaningful learning is created for student. This is parallel with what was believed by Jerome Broner (1960) that the student who actively construct his/her knowledge will make the student learn meaningfully.

Another philosophy in learning which can support the growth of creativity is constructivism. Constructing activity is characteristic of creativity and constructivism. Constructivism concept said that students can actively construct his/her own knowledge. Another opinion which is revealed by Suparno (1997) is in learning there are three constructivism interpretations, that is radical constructivism, moderate constructivism, and social constructivism. These three constructivism interpretations can be utilized in heuristic-KR learning based on local culture to give freedom for students in searching information, doing simulation for exploration, give opportunity to students to construct knowledge actively through mathematical problem solving problems which is contained in SW by using heuristic-KR steps, so through the activity of constructing, students can design new ideas in solving a problem, use new approaches, new perspectives, or new ways of understanding something which result in enhancement of the student's thinking skill. Based on the explanations above, in general it can be concluded that heuristic-KR learning based on local culture can enhance students' creative thinking skills.

Related to the explanation above, it doesn't mean that regular learning cannot enhance students' creative thinking skills. In this research, the regular learning model in general can also enhance students' creative thinking skills even though not as well as heuristic-KR learning based on culture. In regular learning, it is marked by teacher activity in explaining the concept, at the time the teacher explains the concept, students write the teacher's explanation which will be used in solving mathematical problems. The new knowledge which is accepted by students forces the adjustment process in the cognitive structure knowledge which has been possessed by student. The disharmony of the new knowledge student obtained by the student with the cognitive structure which had been possessed before is called cognitive conflict. The cognitive conflict which has occurred can be reduced through accommodation in order that the student's cognitive structure keeps balanced, for example the teacher giving opportunity to students to ask, thus cognitive conflict can be reduced and can trigger student's thinking development and concept understanding which will be used in solving mathematical problems.

The explanation about regular learning above corroborates the result of research, that there is enhancement of creative thinking skill of those who got regular learning. Nevertheless, the enhancement of creative thinking skill of students who got heuristic-KR and who got regular learning both are categorized middle, but if it is seen from acquisition of CTS n-gain the mean of students who got heuristic-KR is higher compared to students who got regular learning. This is because in regular learning, student tend to imitate the procedure which is demonstrated by the teacher in solving the problem, thus when the student encounters a problem which is different, in general the student cannot solve that problem. This statement is in accord with Heiber and Wearne's opinion (1986) that regular learning make students learn to imitate procedures and makes student only memorize which in the end makes student find difficulty in solving new problems.

Subsequently, to reveal the most dominant aspect which contributes to achievement of creative thinking skill an analysis was conducted towards student's gain score in each creative thinking aspect based enterly on the group of learning. The result of this analysis is presented as follows:

a) Student who got heuristic-KR learning based on local culture (LC-BHLM) were more prominent in the fluency aspect, followed by the elaboration aspect, then the originality aspect, and which is least prominent is the flexibility aspect. It means that student ability in solving mathematical problems is related to the geometry transformation concept which is most prominent followed by the student's ability in explaining the concept elaborately, but with less success in solving the problem by using various ways/strategies.

b) And similiarly, students who got regular learning (RL) were more prominent in the fluency aspect and the elaboration aspect, followed by the originality aspect and less prominent in the flexibility aspect, even though not as good as in the LC-BHLM group.

9. Conclusion

There is CTS enhancement in three level of PMK between student who got LC-BHLM learning with students who got regular learning. CTS enhancement of two learning groups in high PMK level is categorized high and students who got LC-BHLM learning in middle PMK level is categorized high, while students who got regular learning is still categorized middle. That also prevails to low PMK level in both group of learning. From the four aspects of creative thinking skill, that which is most dominant in influencing student's CTS is the fluency aspect.

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Table 1. Sample Distribution Based on PMK Level, Group of Learning and School Level

PMK Level	Learning Group Experiment:	Learning Group Control:	Total
High	8	8	16
Middle	20	21	41
Low	7	8	15
Total	35	37	72

Table 2. Data Descriptive of Student's PMK Based on PMK Level and Group of Learning

PMK Level	Group of Learning	N	Score		Mean	Standard Deviation
			Min.	Max.		
High	LC-BHLM	8	40	42	40.88	0.99
	RL	8	40	42	41.13	0.99
Middle	LC-BHLM	20	28	39	33.90	3.93
	RL	21	27	39	34.57	3.25
Low	LC-BHLM	7	20	27	24.57	2.37
	RL	8	20	27	24.00	2.51

Note: maximum score = 52

Table 3. Summary of Normality Test Output of CTS n-gain Data Based on PMK Level

PMK Level	Group of Learning	N	n-gain	Sig. (2-tailed)	Decision
High	LC-BHLM	8	0,81	0,891	Ho is Accepted
	RL	8	0,63	0,002	Ho is Rejected
Middle	LC-BHLM	20	0,59	0,643	Ho is Accepted
	RL	21	0,41	0,267	Ho is Accepted
Low	LC-BHLM	7	0,49	0,813	Ho is Accepted
	RL	8	0,32	0,065	Ho is Accepted

Table 4. Summary of Difference Test Output of CTS n-gain dataBased on School Level

PMK Level	Group of Learning	*F*	*t-test*	*Mann Whitney U test*	*Sig.*	Decision
High	LC-BHLM			0,000	0,000	Ho is Rejected
	RL					
Middle	LC-BHLM	0,617	9.598		0,000	Ho is Rejected
	RL					
Low	LC-BHLM	0,386	18.900		0,000	Ho is Rejected
	RL					

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