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Research Article

Evaluation the Use of the Components of the Constructivist Teaching Method in Elementary Schools from Teacher's Perspective in the Department of Education of Bandar Lengeh City in Academic Year 2014-2015

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ABSTRACT

The purpose of this study was to evaluate the use of the components of the constructivist teaching method in elementary schools from teacher's perspective in the department of education of Bandar Lengeh city in academic year 2014-2015. This study purpose is applied and in term of data collection is descriptive survey. The study population included 825 people that 454 male and 371 female of elementary school teachers in Bandar Lengeh city in the academic is 2014-2015. Using Morgan table and stratified random sampling method 401 subjects were enrolled. Which ultimately 395 consisted of 207 male and 188 female were respondents of this study. Instruments included a questionnaire and receipt of registration information. Content validity of the questionnaire was confirmed by experts as well as using factor analysis was confirmed 0.92 and questionnaire reliability by using Cronbach's alpha 0.87 was calculated. The results of the research and study of the sub-components of the study showed that the use of components of constructivist teaching method in elementary schools in decent and desired form conducted. However, according to the T test between the views of teachers on the use of components of constructivist teaching method showed tangible and significant differences. These results suggest that the constructivist teaching method between male and female teachers in the same way and with the desired results cannot be used.

Keywords Constructivist; Stimulating Knowledge; Acquire Knowledge; Use of Knowledge; Dissemination of Information; Empiricism.

INTRODUCTION

Learning is always an active process. Learner makes its learning from the various inputs that it receives. It points out that learner to learning effectively, needs to be enabled. Learning, helping learners make sense, not finding the right answer, so that learners can understand without the concept, get the right answer. Children with cognitive conflict resolution and mediation experience, thinking and metacognition learn better (Bayer, 1985, quoted Hashemi, 2012, p. 76). The learning for constructivist means research. Learners are actively trying to construct meaning. So teachers should try to build learning activities based on great ideas and studies let students make sense, to build knowledge is not just a personal goal. In social learning, through interaction with peers, teachers, parents, etc. is made. Therefore, to encourage group work and discussion to build learning social conditions is effective.

Structuralism is essentially is a theory that its foundation observed and scientific research about how people learn, formed. This theory believes that people have their own understanding and their knowledge about the world through the experience of the objects

and thinking about their experiences. Constructivism takes an active role for the student, the student rather than just hears or read and to solve repetitive and regular exercises, should be able to discuss, make hypotheses, study and designed and receive the views of others. Knowledge and concepts to a large extent are social and they cannot be individually constructed. In fact, students achieve through dialogue with others. Creating or re-creating concepts and knowledge, must be done by the students; in this way, the teacher led them to re-discover science theories (Azim Aoughli, 2010, p. 42).

Structuralism is a teaching philosophy in recent decades has created conflict between teachers and coaches. Structuralism is based on the assumption that learners actively construct knowledge, rather than receive it from the teacher. Learning is searching for meaning, teachers should encourage students to make meaning through make learning activities based on big ideas and studies, give them enough time to explore concepts and new knowledge to what they already have on their learning (Hashemi, 2012, p. 85). The structuralism using modeling methods, classification

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framework, preparation, explanation, reflection, collaboration and problem-solving activities, students evaluate empower, encourage them to get answers to multiple choice and flexibility and compliance instead of staying in constant lesson plans are concerned. The teachers should be adaptive (Hashemi, 2008). This paper examines the use of the components of the constructivist teaching method with regard to components (stimulating knowledge, acquire knowledge, understanding knowledge, rethinking knowledge, use of knowledge, dissemination of information, analysis orientation) from the perspective of Zahorik (1995), in the development of components of the constructivist teaching method to provide practical suggestions.

Other research has been done on this issue, which is referred to a number of these studies. The results Kazemi and Varnamkhasti (2009), entitled the study of the use of professors of Esfahan university of the main component two instructional design approach (behaviorism and structuralism) in the process of teaching and learning shown the use of professors of Esfahan university of the main component two instructional design approach is moderate.

Moghadam Zadeh (2012), in a study to evaluate the effectiveness of the system educational design patterns and structuralism together and with methods of learning, retention of second high school students in science class concluded that the impact of instructional design based on student learning is more than conventional methods as well as the impact of the training constructivist in retention of students is more than conventional methods.

Gales (2001), with another study the same information from third international study of science and mathematics has re-analyzed, international research in mathematics and science achievement and received teaching, learners by teachers with direct teaching methods, trained by behaviorism than those who trained teachers with structuralism beliefs are significantly better.

Dharmadasa (2000), examine the impact of structural beliefs of teachers and found that students in teacher's classrooms with structuralism beliefs are strong in solving mathematical problems better. Another point in introducing constructivist teaching methods that most teachers know quite hard implements these methods. In a study of teachers, constructivist approach to teaching as a challenge and a concept that is difficult to find in a short period have seen.

Shymansky et al (1999), a study in the United States, which sees science teaching improvement program to use the structural framework and the advancement of science or learning attitude is ineffective; if the research with data at the level of implementation of constructivist teaching in the same program has any effect.

The results Klieme and Clausen (1999) showed that the hard work of teachers in the constructivist methods was difficult and the main problem about its effects on discipline and teachers on the preparation of appropriate materials, increasing children's knowledge and experience and set up a structure are not sure.

Madden et al. (1999), reviewing the evaluation of Math Vincez projects, in the United States provide plans to improve mathematics teaching and learning using the methods of structuralism to teach, have shown positive results in different areas of education. Schools implement a plan for the race having been the schools that have shown positive effects in tests, are used. But in all cases the children were in middle school better than children in schools around. Various tests were focused on fundamental skills as well as higher levels of skills.

Carol and Ave study (1997), in another study showed that in constructivist education program has a positive effect on learning writing.

Mac Davit (1994), in a study on students in third grade (7-6 years old) will compare, learners were trained using the methods of structural experiment with learners who were trained through the traditional explanation, found that the experimental group significantly better than the posttest in the control group.

THE MAJOR RESEARCH QUESTIONS

1. How is the Bandar Lengeh elementary teachers 'views on the stimulate students' knowledge by using the constructivist teaching method?

2. How is the Bandar Lengeh elementary teachers 'views on acquire knowledge in students by using the constructivist teaching method?

3. How is the Bandar Lengeh elementary teachers 'views on understanding knowledge in students by using the constructivist teaching method?

4. How is the Bandar Lengeh elementary teachers 'views on rethinking knowledge in students by using the constructivist teaching method?

5. How is the Bandar Lengeh elementary teachers 'views on use of knowledge in students by using the constructivist teaching method?

6. Is there any significant difference between Bandar Lengeh male and female elementary teachers' views on the use of the components of the constructivist teaching method?

RESEARCH METHODOLOGY

This study purpose is applied and in term of data collection is descriptive survey. The study population included 825 people that 454 male and 371 female of elementary school teachers in Bandar Lengeh city in the academic is 2014-2015. Using Morgan table and stratified random sampling method 401 subjects were enrolled. Which ultimately 395 consisted of 207 male and 188 female were respondents of this study. In-

struments included a questionnaire and receipt of registration information. Content validity of the questionnaire was confirmed by experts as well as using factor analysis was confirmed 0.92 and questionnaire reliability by using Cronbach's alpha 0.87 was calculated.

THE FINDINGS

The first research question: How is the Bandar Lengeh elementary teachers 'views on the stimulate students' knowledge by using the constructivist teaching method?

Table 1: Descriptive results of stimulate students' knowledge by using the constructivist teaching method

Component	Percent – Frequency						Statistic descriptive indicators					Overall
	Percent	Very low	Low	Average	High	Very high	Middle	Middle	Mode	Skewness	Standard deviation	Desired
Stimulate knowledge	-	4.4	8.21	33.41	40.8	13.15	3.49	4	4	-0.58	0.96	

The results also show that students using discussion and argument as well as opportunities in the learning process with the mental effort move from the known to the unknown in order to solve various issues and used good problem solving strategies and in the manufacturing know-how to properly participate in the class learning process. The results of this study is consistent with the results of Kazemi (2009), Moghadam Zadeh (2012), Yan and Gales (2001), Dharmadasa (2000), Klieme and Clausen (1999), Ave and Carol (1997), and is countercurrent with results of Shymansky (1999) , Walker (1999).

The second question Study: How is the Bandar Lengeh elementary teachers 'views on acquire knowledge in students by using the constructivist teaching method?

Table 2: Describes results of acquire knowledge in students by using the constructivist teaching method

Component	Percent – Frequency						Statistic descriptive indicators					Overall
	Percent	Very low	Low	Average	High	Very high	Middle	Middle	Mode	Skewness	Standard deviation	Desired
Acquire knowledge	-	4.85	10.8	32.26	39.27	12.82	3.43	4	4	0.49	1.01	

The test results also show that students with regular questions and use of thought and reflection to answers the question lead to deep learning of and knowledge as well as acquire and in the production and acquisition of knowledge as well as participated. The results of this study is consistent with the results of Kazemi (2009), Moghadam Zadeh (2012), Dharmadasa (2000), Chlm and Clausen (1999), Carol and Ave (1997), and is countercurrent with results of Shymansky (1999), Walker (1999).

The third research question: How is the Bandar Lengeh elementary teachers 'views on understanding knowledge in students by using the constructivist teaching method?

Table 3: descriptive results of understanding knowledge in students by using the constructivist teaching method

Component	Percent – Frequency						Statistic descriptive indicators					Overall
	Percent	Very low	Low	Average	High	Very high	Middle	Middle	Mode	Skewness	Standard deviation	Desired
Understanding knowledge	-	4.5	8.96	34.96	39.46	12.1	3.45	4	4	-0.53	0.97	

The results also show that students with an adequate understanding of the material presented in class as well as using creativity and good communication with the knowledge to learn and the learned material to achieve the desired understanding. The results of this study is consistent with the results of Kazemi (2009), Moghadam Zadeh (2012), Yan and Gales (2001), Klieme and Clausen (1999), Carol and Ave (1997), and is countercurrent with results of Shymansky (1999), Walker (1999).

The fourth question of research: How is the Bandar Lengeh elementary teachers 'views on rethinking knowledge in students by using the constructivist teaching method?

Table 4: descriptive results of rethinking knowledge in students by using the constructivist teaching method

Component	Percent – Frequency						Statistic descriptive indicators					Overall
	Percent	Very low	Low	Average	High	Very high	Middle	Middle	Mode	Skewness	Standard deviation	Desired
Rethinking knowledge	-	4.06	7.86	33.57	42.21	12.3	3.50	4	4	-0.62	0.92	

The results show that students have the right to think and make sense during processing to learn and solve their problems during the process of learning to walk and production joint concepts of thinking and cognitive processing. The results of this study is consistent with the results of Kazemi (2009), Moghadam Zadeh (2012), Yan and Gales (2001), Dharmadasa (2000), Klieme and Clausen (1999), Carol and Ave (1997), and is countercurrent with results of Shymansky (1999), Walker (1999).

The fifth question research: How is the Bandar Lengeh elementary teachers 'views on use of knowledge in students by using the constructivist teaching method?

Table 5: descriptive results of use of knowledge in students by using the constructivist teaching method

Component	Percent – Frequency						Statistic descriptive indicators					Overall
	Percent	Very low	Low	Average	High	Very high	Middle	Middle	Mode	Skewness	Standard deviation	Desired
Rethinking knowledge	-	4.2	9.67	33.58	39.53	13.02	3.47	4	4	-0.49	0.97	

The results also show that students acquire ability to apply concepts and knowledge and this is also due to the natural environment suitable for learning that provides the field of thought and search and study for students. The results of this study is consistent with the results of Kazemi (2009), Moghadam Zadeh (2012), Yan and Gales (2001), Klieme and Clausen (1999), and Ave and Carol (1997), and is countercurrent with results of Shymansky (1999), Walker (1999).

Research sixth question: Is there any significant difference between Bandar Lengeh male and female elementary teachers' views on the use of the components of the constructivist teaching method?

Table 6: comparing teachers' views about the use of the components of the constructivist teaching method

Component	Gender	Average	Standard deviation	value of the t test	p-value
Stimulate knowledge	Woman Man	3.63 3.27	0.54 0.67	4.61	0.004
Acquire knowledge	Woman Man	3.62 3.30	0.48 0.53	4.22	0.006
Understanding knowledge	Woman Man	3.72 3.31	0.47 0.59	3.75	0.002
Rethinking Knowledge	Woman Man	3.75 3.22	0.46 0.53	4.98	0.000
Use of knowledge	Woman Man	3.72 3.20	0.53 0.60	6.21	0.003

To compare the views of teachers on the use of the components of the constructivist teaching method with regard to gender using T-test for two independent groups that the results listed in Table 4-13. The results showed that the p-value of all components is less than 0.05. So there is significant difference between Bandar Lengeh male and female elementary teachers' views on the use of the components of the constructivist teaching method.

CONCLUSIONS

The results of the research and study of the sub components of the study showed that the use of basic skills and components of the constructivist teaching method in elementary schools as a decent place and type of content used in elementary school as well as the assessment of conformity with this way of teaching lead to development of skills of application of knowledge and experiences of the students.

SUGGESTIONS

It is recommended that the learning opportunities provided in the learning process so that students with dif-

ferent perspectives face an issue and in its answer to discuss and exchange ideas and to participate actively in the learning process of students in the class discussion is prepared it does this by explaining, patterned and providing training done for class discussion. To the growth and development of empiricism, students are asked to all the parts of a book or to read and take notes from a lecture or watch a film. Evaluation should be a tool for identifying deficiencies, improve and restore the students' learning is based on location, interests, needs and learning styles, and provide a comprehensive assessment of student learning must be continuous.

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