Learning Model Based on Multiple Representation to Increase Memorize Ability of Short Letter of Al Qur'an

T.Nurbani Chalid#*, Myrnawati Crie Handini^ and Elindra Yetti!

#Doctoral Student of Early Childhood Education at Universitas Negeri Jakarta, Indonesia ^Professor in Early Childhood Education at Universitas Negeri Jakarta, Indonesia ¹Associate Professor In Early Childhood Education at Universitas Negeri Jakarta, Indonesia

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Abstract

The purpose of this study is to produc a learning model to memorize the Qur'an which corresponds to the stage of development and learning styles of children. The ability to memorize the Qur'an is marked marked by ability to recognize namely ability to verify and to match and the ability to remember namely the ability to corespond dan ability to retrieving orally. The method used in this research is research and development, modification of research model by Borg and Gall and Dick and Carrey. The data were collected by observation technique, questionnaire, interview, expert assessment instrument and field note. Quantitative data from the questionnaire results were analyzed using descriptive analysis technique with percentage, while the test result data (pretest and posttest) the ability to memorize Al-Qur'an was analyzed by t test (t-test) using SPSS program. The result of paired sample t test in the experimental class shows 0.000 <0,05 so there is difference before and after applied model. While the result of t test in control class showed value 0,423> 0,05 so there is no significant difference before and after applied model. The result of independent sample t test shows 0.000 so p value <0,05 and it can be concluded that there is a significant difference between the control class and the experimental class.

Keywords: Learning model, multi representation, memorizing Al Qur'an

1. Introduction

The ability to memorize al-Qur'an is an activity of recalling and reciting the recitation of verses in al-Qur'an that are done orally. Qur'an recipients try to capture and save verses of al-Qur'an by relying on the power of long-term memory devices. (Al Hafiz, Yusof, Ghazali, & Md. Sawari, 2016). Therefore, memorizing al- Qur'an that begins early will stimulate aspects of child development (Arifin, 2015).

The result study of Nawaz and Jahangir (2015) show that memorizing al-Qur'an by heart (Hifz) is able to increase academic achievement of *Huffaz* and have a positive influence on the personality of *Huffaz* and the social life of Culture. Furthermore, Muhaidi Mustaffa Al Hafiz et al (2016) Students from MTAQPC have outstanding academic records. The methods used in teaching the Subject of memorizing the Qur'an are: correct pronunciation, using special manuscripts, regulate behavior of memorization, repetition of prayer before and after the activity.

Zainal Arifin (2015) Explains that factors supporting Tahfidzul Qur'an program are young, young students who

have no life burden in their lives, comfortable dormitories and mentor attention on day to day activities of students. From results of the above research there has been no research using Multi representation.

Multi representation is a way of presenting or reabstracting aknowledge, information, or a concept into several different forms, either verbally or visual (symbolic, pictorial). Specific information can be better understood when represented by the appropriate representation (Treangust, David F & Tsui Chi-Yan, 2013) so that knowledge can be translated further towards a deeper understanding in accordance with the style or trend of information processing owned by someone. Wu-Yuin Hwang, et al., Sees multi representation as a process formulation in articulating the same problem in different forms. As (Hwang, Wu Yuin et al., 2007) says that ",,,In the formulation process, students must have multiple representation skills to articulate the same problem in different forms or views. "With a variety of more diverse serving, will be able to stimulate cognitive passion and sensitivity (memory) as the main tool in learning to memorize the Qur'an.

The implementation of learning to memorize the Qur'an is not in accordance with the principle of

memorizing children, impact on what students achieve and feel when following the lesson, such as; (1) the student is still having trouble repeating the reading of the verse that the teacher did in front of the class, (2) the students are not enthusiastic and often look drowsy when having to repeat what the teacher is reading with the same words and long duration, (3) does not last long in memorizing Qur'an verses that are only done through repetitively verbal verses of the Qur'an, and (4) low student achievement in memorizing the Qur'an; the average student can not achieve the minimum mastery criteria (MMC) that the curriculum is living in.

Based on several problems that have been mentioned before, optimization in the context of memorizing Al-Qur'an based on curriculum, a new learning model is developed in order to memorize Al-Qur'an by multi-representation method. This learning model relies on the working principle of memory that occurs in the brain as a primary tool in process of memorization al-Quran which is sustained multi-representation concepts that present knowledge which will be absorbed by the brain in a variety of different ways.

Furthermore, this model will enhance the cognitive process inside the brain, particularly the way how brain store and restore knowledge. This will place student in an ideal environment to memorize Al-Qur'an, stimulate a better interpretation during processing an information, and helps establish a deep understanding from the surah of Al-Qur'an that will be memorized.

2. Metodologi Penelitian

The model is developed using conceptual steps which adopted from Dick & Carey instructional design (Dick, Carey, & Carey, 2008), Borg & Gall (Gall, Gall & Carey, 2008), and Borg & Gall (Gall & Borg, 2003). The steps was modified into four stages, which are; (1) introduction, (2) planning and developing the model, (3) validation and revision the model, and (4) implementation. Mix method approach then used to analyze the data obtained. Evaluation aspect in ability to memorize Al-Qur'an can be seen from table 1.

Table 1 Evaluation aspect in ability to memorize Al-Qur'an

No	Aspect	Indicator		
1	Recognizing	1.1 ability to verify the knowledge surah of Al- Qur'an that had already known before with the surah of Al-Qur'an that being read or listened		
2	Recalling	2.1 ability to match the surah of Al-Qur'an that had already known with the surah of Al-Qur'an that being read or listened. 2.2 ability to correspond the surah of Al-Qur'an that had already known with the surah of Al-Qur'an that being read or listened		

Table 2 Criteria of Deksriptif Analysis of Test Results

Percentage	Interpretation			
80% - 100%	Excellent model			
60% - 79,99%	Acceptable model			
50% - 59,99%	Unsatisfactory model and needs a revision			
0 – 49,99%	Unsuitable model and needs a revision			

Adopted from (Arikunto, 2005)

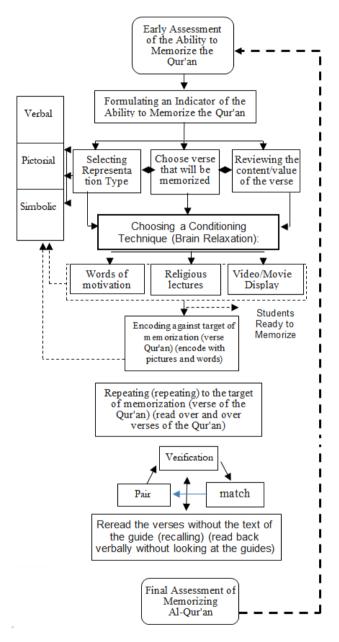


Figure 2 Learning Model Based on Multi-Representation to Increase ability of Memorizing Al Qur'an

3. Introduction study

Earlier investigation regarding model to memorize Al-Qur'an found that there are four major methods that were used to memorize Al-Qur'an. The first method involves a standard content, a syllabus and RPP according to a curriculum that has already applied. This is shown in 86.67%. The second method involves in a more limited

method and technique. This method also known with repetitive method. The second methods is shown in 46.67%. The third method involves media such as text book, juz amma, and Al-Qur'an mushaf. Using these media is uncommon in Bogor city due to a limited number of media that are available. The third method is shown in 40%. The fourth method involves mainly in the role of teacher which teach the student using text book. Media usage such as juz amma and mushaf without translation is limited. This is shown in 26.67%. the four major method to memorize Al-Qur'an that have been mentioned above shows that implementation in model to memorize Al-Qur'an have not been established.

The observation results shows that every aspect which became an indicator in implementation to memorize Al-Qur'an that were developed in this model is in accordance with implementation to memorize Al-Qur'an that have already made previously by instructor team. The detailed aspect can be written in three points. First, performing a pre-test, conditioning student's brain before memorizing Al-Qur'an, linking and connecting picture or symbol with the surah of Al-Qur'an being memorized, recalling (reciting) the surah of Al-Qur'an being memorized. The implementation assessment results in good score. This good score implies that teacher's competence to implement studying process is unsatisfactory. Afterwards, observation result shows that the overall measurement in objective condition to memorize Al-Qur'an in madrasah ibtidaiyah at Bogor city is in fundamental level. This fundamental level is a condition that students are able to start memorizing Al-Qur'an. Such condition is described by some few aspects which are verification, matching, corresponding, and retrieving that still in a fundamental level.

Planning and developing model

A procedural model is designed based on several earlier result involving identification of student's needs, objective condition, the will to study, and student's characteristic. This design integrate multi-representation by adopting information travelling inside the brain model by Wu Yuin Hwang (Hwang, Chen, Dung, & Yang, 2007) as a basic fundamental.

In order to succeed, this model demands a clear application of rules, flexibility, communicative, collaborative, cooperative, time, consistency, intelligent level, good environment, calm, relax, guided, and controlled. Interactive, fun, and consistent reaction management principle can stimulate students to memorize Al-Qur'an effectively.

4. Data Collection Technique

The data obtained were collected using observation, questioner, interview, evaluation instrument approved by expert, and field record.

5. Research Results and Discussion

Memorizing Al-Qur'an has been proven by several research to increase cognitive level of students. Research by Nawaz & Jahangir (Nawaz & Jahangir, 2015) shows that model to memorize Al-Qur'an require lengthy time of practice.

Learning model based on multi-representation which have been developed is an innovation which emerge from Y Wang's model of processing information as the fundamental internalization of multibasis in representation concept. This multi-representation concept also works as supportive modification to help memorizing matter such external representation (verbal and visual) or internal representation which took form as a mental model inside the brain.

Such modification will result in a new, productive, effective, and efficient learning model to improve student's ability to memorize Al-Qur'an. Conditioning students to be calm and relaxed during the process to memorize Al-Qur'an is one of the advantage that arise from this learning model. This is due to application of conditioning session which in this aspect will stabilize and appease brainwaves (alpha-theta wave) before starting to memorize Al-Qur'an. Several example in conditioning process such as introduction speech, watching video, singing, and fun quiz which implemented by the instructor have proven to prepare the student's mind for a better understanding in surah of Al-Qur'an being memorized. Furthermore, this model will help students to an even better understanding in the context of surah of the Al-Qur'an being memorized rather than just memorizing it.

The application of conditioning process and variation during learning process will reduce the chances for student to suffer from stress, frustration, and overwork during the process to memorize Al-Qur'an. There are many cases where students are suffered mainly from stress and frustration when conventional method to memorize Al-Qur'an by repetitive method was implemented. Diverse media used during learning process will also improve student's motivation in attempt to further memorize Al-Qur'an (Lawrence M Lesser, 2008), hence competency in lessons to memorize Al-Qur'an will easily achieved. Effectiveness testing result shows that there are improvement and difference in the ability to memorize Al-Qur'an between one group and the other. The result can be seen in table 3.

Aside from the advantage of this model, learning model based from multi-representation method is not a flawless model. There are flaw that need an extra attention for researchers and instructors. This model demands instructors to utilize technology because this model is based on multi-representation method which require learning materials available in diverse form.

			Prerequisit	Test		
		Nor	mality Sha	oiro-Wilk		
Group		df	sig		Kondisi	Keterangan
Experiment		24	0,528		p> 0,05	Normal
Control		23	0,076		p> 0,05	Normal
			Homoger	nity		
Control Eksperiment			0,814		p> 0,05	Homogen
			Efektivity	Test		
		Pa	ired Sampl	e t test		
Group		Mean	N	Sig.p	Kondisi	Information
Elementario en	Pretest	25,79	24	0,000	p < 0,005	Ho Rejected
Eksperiment	Postest	38,92	24	0,000	P < 0,005	(There's Improvement)
Control	Pretest	23,26	23	0,423	p > 0,005	Ho accepted (No
Control	Postest	26,96	23	0,423	P > 0,005	Upgrades)
<u> </u>		Indep	endent Sa	nples Test	i .	
Group	Mean N Sig.(2-tailed)		Information			
Eksperiment 38,92		24	0,000		Ho is rejected (there is a significant difference between control and experiment classes)	

Table 3 Prerequisite and Effectiveness Test of Multi Representation Learning Model to Increase the Ability of Memorizing Al Qur'an

Learning material in picture or video form will attract more attention and it will increase productivity if applied by technology. Failure arises when instructors do not have capability to operate technology at a minimum level. This will result in a malfunction of the learning model and thus the process of memorizing Al-Qur'an will meet a stagnancy because various learning material are not available in diverse media.

Conclusion

Learning model in memorizing Al-Qur'an for early childhood require an inspection at student's characteristic and studying circumstances. This will helps student's to memorize better in a long term scale. Another alternative in the learning model which help to facilitate student to memorize Al-Qur'an is learning model based on multirepresentation method. Multi-representation method is a distinct method to serve knowledge, information, or a concept to another different form such as verbal (oral) or visual (symbolic or pictorial). Specific information can be understood when represented with а representation, hence the knowledge can be translated further into a deeper understanding according to every student's manner in processing and learning to memorize Al-Qur'an.

References

- [1]. Ahmad, K. (2014). Implementation Of Othman Method On Memorization The Quran: A Study In Sulaymaniyyah Institute, Malaysia. Katalog BPS, XXXIII(2), 81–87. https://doi.org/10.1007/s13398-014-0173-7.2
- [2]. Al Hafiz, M. M., Yusof, M. F., Ghazali, M. A., & Md. Sawari, S. S. (2016). Descriptive Qualitative Teaching Method of Memorization in The Institution of Tahfiz Al-Quran Wal Qiraat Pulai Condong and the Students' Level of Academic Excellence. Mediterranean Journal of Social Sciences, 7(1), 79–85. https://doi.org/10.5901/mjss.2016.v7n1s1p79

- [3]. Arifin, Z. (2015). Tahfidzul Qur' an Program at SDIT Fajrul Islam Wiradesa Pekalongan Centre of Java Indonesia.
- [4]. Gall, D. M., Gall, P. J., & Borg, R. W. (2003). Educational Research: An Introduction. New York: Pearson Education, Inc. Retrieved from http://books.google.co. uk/books?id=FdmLLQAACAAJ
- [5]. Hwang, Wu.-Yuindkk.(2007).Multiple Representation Skills and Creativity Effects onMathematical Problem Solving using a Multimedia Whiteboard System. JournalEducational Technology & Society.
- [6]. Kildan, A. O., Kurnaz, M. A., & Ahi, B. (2013). Mental Models of School for Preschool Children. European Journal of Educational Research, 2(2), 97–105. Diambil dari http://search.ebscohost.com/login.aspx?direct=true&db=e ric&AN=EJ1086355&site=ehost-live.
- [7]. Lawrence M Lesser, M. A. T. (2008). The Effectt of Representation and Representational Sequence on Students' Understanding. Internal Medicine Journal, 38(12), 932. https://doi.org/ 10.1111/j.1445-5994.2008.01837.x.
- [8]. Maarten W. Van Someren, Peter Reimann. (1998). Learning with Multiple Representations. Tokyo: Pergamon.
- [9]. Mardapi, Djemari.(2008).Teknik Penyusunan Instrumen Tes dan Non Tes. Yogyakarta: Mitra Cendikia Press.
- [10]. Nawaz, N., & Jahangir, P. D. S. F. (2015). Effects of Memorizing Quran by Heart (Hifz) On Later Academic Achievement. Journal of Islamic Studies and Culture, 3(1), 58–64. https://doi.org/10.15640/jisc.v3n1a8
- [11]. Rahmatian, Rouhollah & Armiun, Novid. (2013) Cognitive Strategies of Encoding, Storage, and Retrieval of Lexicon Popular Techniques. Iranian French Language Learners: Jurnal International, Education Studies.
- [12]. Reynolds, Cecil R. et.al.(2009), Measurement and Assessment. New Jersey: Pearson Education Inc.
- [13]. Rustan, E. (2016). Model Menulis Kreatif Berbasis Kerja Otak. Makassar: LIPA Publishing.
- [14]. Treangust, David F, Tsui, Chi Yan. (2013). Multiple Representations in Biological Education, London: Springer.
- [15]. Walworth, D. D. (Author). (2010). Effect of live music therapy for patients undergoing magnetic resonance imaging. Journal of Music Therapy, 47(4), 335. Retrieved fromhttp://search.ebscohost.com/login.aspx?direct=true& db=rih&AN=2010-08653&site=ehost-live.
- [16].Zhang, J., & Norman, D. (1994). Represesentations in distributed cognitive tasks. Cognitive Science, 18, 87–122. https://doi.org.