Graphic Assessment Management (Gam) In Teaching *Tasawwur Islam* And Its Relationship With Students Achievement In Malaysia Secondary School

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ABSTRACT

The main objective of this study is to examine the usefulness of the GAM technique as one of the alternatives of teaching in secondary school in Malaysia. The purpose of GAM technique is to help students and teachers increase their interest and perception towards teaching and learning Tasawwur Islam. Data was gathered quantitatively from Form 4 students in one selected secondary school in Selangor and the data was analysed using Independent T-Test, Paired sample T-Tests, and ANOVA. The finding indicated that most of the students showed positive interest and perception on Tasawwur Islam. There was a statistically significant increase in the Tasawwur Islam score after using GAM in teaching. However, the result indicated no statistically significant difference between male and female students' perception on the effectiveness of using GAM in teaching Tasawwur Islam. Lastly, the findings showed that the difference in the mean scores between groups was statistically significant.

Keywords: Tasawwur Islam, teaching technique, achievement.

INTRODUCTION

Islamic Education is related to the building of character to be a good Muslim. A Muslim is responsible to learn and practise what they have learned. However, nowadays, most students are showing less interest in learning Islamic Education subject and it is considered unimportant in their life. Scholars agreed that the pedagogy of the teachers is one of the factors that leads to students' interest in learning Islamic Education subject (DK Hajah Nur Ashikin Pg Haji Petra, 2002; Mohamad Sahari & Hassan Langgulung, 1999; Zaiton Mustafa & Salim, 2012; Zaiton Mustafa, 2010).

When discussing the matter of Islamic Education subject, it is not limited to Islamic Education itself, but it also involves many branches such as *Tasawwur Islam, Al-Quran* and *Sunnah, Syariah Islamiah, Sirah* and many more. Therefore, the teacher should use variety of styles and techniques in teaching Islamic Education subject to attract students to learn and show positive attitude towards Islamic Education subjects. History showed that our beloved prophet Muhammad (P.B.U.H) used creative and relevant ways to preach *dakwah* to suit the audience so that they understood every single word about the way of Islam (Al-Sadan, 1999; Khaled al-Khalediy, 2011; Sa-u et al., 2011).

In the case of Malaysian education system today, teaching approach using technologies is necessary. The integration of educational technology in teaching Islamic Education should be implemented in order to achieve the objectives of Islamic Educational Philosophy and Malaysia Education Blueprint 2012–2025 (Ministry of Education, 2012). This phenomenon should be highlighted to all Islamic Education teachers. They must wake up and take this challenge to

help students to be a better youth, a better generation and leaders of the *ummah*. Eventhough Islamic Education is only a subject in school, it can stimulate the students' interest in learning about Islam and gradually increase their awareness on the importance of learning the various branches of Islamic Education. Therefore, the purpose of this paper is to evaluate the new teaching technique that can be implemented in the secondary schools in Malaysia.

LITERATURE REVIEW

Teaching Methodologies for Islamic Education Teachers

Our prophet Muhammad (P.B.U.H) introduced various pedagogy while he convey and preach Islam more than 1400 years ago. After that, in the era of Khulafa Al-Rashidin, Al-Zarnooji for example, continued practising the Prophet Muhammad's pedagogy and the teaching method is still relevant and suitable today. However, some studies indicated that only memorisation and lecture methods are frequently used by Islamic Education teachers nowadays (Maimun Aqsha et al., 2011; Ab. Halim Tamuri, 2007; Rustham & Rashid, 2011). In that sense, the students will feel bored and so they do not put much effort to get 'A' compared with other subjects such as science subjects which involve interactive learning, problem-based learning and experiment during teaching and learning process.

Creative Teaching of Islamic Education Subject

In order to see the successful students, it can be seen from their positive attitude towards learning in the classroom. The positive attitudes are related with good and positive achievement. Hence, teachers should integrate appropriate teaching methods to assist students in learning *Tasawwur Islam* effectively. Concerning that, one of the creative teaching method known as the i-THINK programme was introduced by Ministry of Education Malaysia and Malaysia Innovation Agency to develop thinking skills and lifelong learners with creative solution (http://www.ithink.org.my/Home/Page/ThinkingMaps).

There are eight systematically organized thinking maps, i.e. circle map, bubble map, double bubble map, tree map, brace map, flow map, multi-flow map and bridge map. The details of the implementation of pedagogy werebased on the use of learning instruments such as i-THINK, as shown in Figure 1 below:

Figure 1: Thinking Maps website

Factors that affect the students' achievement

Students' achievement and teaching techniques have been widely discussed since a long time ago. Study conducted by Wambugu & Changeiywo (2008) on teaching Physics at secondary school in Kenya showed that effective teaching affects students' achievement. The result showed statistically significant difference between Mastery Learning Approach (MLA) and students' achievement. Moreover, Damavandi & Shekari Kashani (2010) in their study of students who failed in Chemistry subject in Iran concluded that individual training method given by teacher was a factor of students' achievement and the method was suitable in helping low achievers to learn difficult subjects, but they needed extra attention and guideline from the teachers.

Chiou (2008) found that learning strategies using concept map can also improve students' achievement and knowledge besides positively influence students' interest, perception and attitude towards Chemistry subject. Koc (2012)in his study on 89 pre-service teachers in university in Turkey found that they performed better in midterm examination by using concept map and it improved their learning attitude, especially when facing difficult questions. Furthermore, Miandoab, et. al. (2012) claimed that the positive result was achieved in history subject because the students could see the larger picture from concept map and they could see the interrelation between the contents such as year, situation and consequences, which are the main factors while learning history.

As discussed earlier, teaching methods have a connection with students' achievement. In order to achieve the target and success in examinations, approaches in teaching are closely related. Many researchers who conducted studies on concept map have proven that it can improve students independently and effectively. Research conducted by Cliburn (1990), Heinze-Fry and Novak (1990), Kinchin (2003), Mintzes, Wandersee, and Novak (2001), Novak (1990), Novak, Gowin and Johansen (1983), Okebukola and Jegede (1988), and Trowbridge and Wandersee (1996), as cited in Chiou (2008) proved the positive effects of concept mapon students' achievement and interests.

OBJECTIVES OF THE STUDY

This research attempted to examine the usefulness of the GAM technique as one of the alternatives of teaching in secondary schools in Malaysia. The detailed objectives are as follows:

1.   To investigate if there is a significant difference between students' achievement before and after the use of GAM in the teaching of *Tasawwur Islam.*
2.   To examine if there is a significant difference among students of different gender in their perception of GAM.
3.   To investigate if there are significant differences among students of different achievement levels (high achievers, moderate achievers and low achievers) in their perceptions of GAM.

RESEARCH QUESTIONS

The study addressed the following questions:
1.   Is there any significant difference between students' achievement before and after the use of GAM in the teaching of *Tasawwur Islam?*
2.   Is there any significant difference among students of different genders in their perceptions of GAM?
3.   Are there any significant differences among students of different achievement levels (high achievers, moderate achievers and low achievers) in their perceptions of GAM?

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SIGNIFICANCE OF THE STUDY

The result of this study might help the Islamic Education authority such as the Islamic Education Division to develop a variety of instructional materials that are valid and reliable to the current situation, such as Graphic Assessment, in order to attract students' interest in learning *Tasawwur Islam.* Second, this study is expected to provide guidelines to schools in training Islamic Education teachers to develop their instructional materials by incorporating new techniques and strategies. This is in line with Malaysia's aspiration to enhance students' abilities in critical and creative thinking.

Third, the study also gives students the opportunity to explore an alternative strategy in learning *Tasawwur Islam*, i.e. using GAM, which consists of graphic organiser and concept map. Through the application of graphic organiser, students can apply the student-centred approach either independently, with peers, or in groups. With the use of this instructional tool, they can easily construct meaning, share information, and create presentations.

It is hoped that through this study, the relevant parties are able to take appropriate steps to enhance he creativity of the Islamic Education teachers.

METHOD

Participants

This study involved 40 students from secondary school SMK Lembah Keramat, Selangor. All of the participants were candidates for *Sijil Pelajaran Malaysia* (SPM) or Malaysian Certificate of Education. They took *Tasawwur Islam* as an elective subject and all of them werethe lower achievers based on their results in *Penilaian Menengah Rendah* (PMR) or Lower SecondaryAssessment.

Material

a) *GAM (Graphic Assessment Management)*
GAM was developed by one of the researchers since she started as a teacher in 2006. The researcher obtained inspiration and ideas from a fellow Islamic Education committee while she was teaching in SMK Seri Keramat, Selangor and adopted it in the *Tasawwur Islam* subject.

The duration of treatment given for the current research was 6 weeks to attract students attention in this subject. The treatment was conducted in August 2013 and the samples were introduced to GAM in order to help and assist them in comprehending the content and classifying notes from the textbook. The students were exposed to GAM which was equipped with Graphic Organisers such as visual maps, concept mapping, and visual organisers (Syaza et al., 2010). A compilation of GAM was distributed to the students before the teaching ended.

b) *Multiple choice questions (MCQ) for pre- and post-test.*
For teaching Tasawwur Islam subject, the past year questions' achievement test (pre-post test) was used. Multiple choice of 20 questions were designed based on two selected topics. Using pre- and post-test, the selected questions were adapted from *Lembaga Peperiksaan Malaysia* (LPM) or National Examination Board in order to ensure the content validity. Students were required to answer the MCQ within 20 minutes.

RESULT

Significant differences before and after using GAM in teaching Tasawwur Islam

The researcher used paired sample T-Test to determine if there was a significant difference between the means for the two sets of scores. Table 1 shows higher score after the implementation of GAM (mean = 10.55, SD = 2.531) compared with the score before the implementation of the GAM (mean = 7.15, SD = 3.008). The details are in Table 1 below:

Table 1: Paired Samples Statistics.

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	post	10.5500	40	2.53134	.40024
	pre	7.1500	40	3.00896	.47576

In addition, Table 2 portrays the statistically significant difference between the means (t (df = 39) = 9.146, p = 0.000).

Table 2: Paired Samples Test.

	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of The Difference		T	df	Sig.(2-tailed)
				Lower	Upper			
Pair 1 pre -post	3.40000	2.35121	.37176	2.64805	4.15195	9.146	39	.000

Significant differences between genders towards the perception of using GAM

The second purpose of this study was to examine if there were significant differences between genders towards the perception of using GAM. Thus, the researcher employed independent T-Test analysis in the SPSS to test for significant differences of the mean scores in order to highlight the differences between male and female students' perception on the usefulness of GAM in teaching Tasawwur Islam.

An independent sample T-Test was conducted to compare the perception scores between male and female students. There was no significant difference in the scores between males (M = 42.13, SD = 4.80666) and females (M = 44.2292, SD = 6.97641):t (df = 38) = −1.104, p = 0.276 (two-tailed). The magnitude of the difference in means (mean difference = −2.09167, 95% Confidence Interval: −5.9266 to 1.74332) was very small (eta squared = 0.03). The details are presented in Table 3 below:

Table 3: The mean and SD differences for perception between male and female students.

Group Statistics

	gender	N	Mean	Std. Deviation	Std. Error Mean
perception	male	20	42.1375	4.80666	1.07480
	female	20	44.2292	6.97641	1.55997

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In brief, it can be concluded that there was no statistically significant difference between male and female students' perception on the effectiveness of using GAM in teaching *Tasawwur Islam*.

Significant differences among students of different achievement levels (high, medium, and low achievers) in their perception towards GAM

The researcher had employed one-way analysis of variance (ANOVA) to address the third research question which was to investigate if there exist any significant differences among students of different achievement levels (high, medium, and low) in their perception towards GAM. 'One way' part in the title indicated that there was only one independent variable, which was GAM, and 'between groups'(high, middle and low achievers) means different subjects or cases in each group, such as their scores in Islamic Education test based on PMR results.

In this study, the researcher selected three groups that represented the following:
1. High achievers: students who scored A and B. In this study, no one scored A, and 13 respondents scored B.
2. Middle achievers: the students who passed the exam with satisfactory level, which is C. In this study, the researcher found that majority of the students in class 4 Ibnu Qayyim, or 22 students, got C.
3. Low achievers: the students who failed in the exam. Although no one in the class had failed, 5 students who obtained D might need extra attention from the teachers.

Based on the descriptive analysis in Table 4, there were differences observed between the means. Table 4 shows that the high achievers achieved the highest mean score (mean = 46.1923, SD = 6.24466), followed by low achievers (mean = 46.1833, SD = 3.97143), and lastly the middle achievers (mean = 40.7235, SD = 5.25811). The mean, standard deviation for frequency, and the result of ANOVAare shown in the Table 4 below:

Table 4: Mean scores based on students' achievement levels.

	N	Mean	SD	Std Error	95% Confidence Interval for Mean		Min	Max
					Lower Bound	Upper Bound		
D (low)	5	46.1833	3.97143	1.77608	41.2522	51.1145	39.25	49.42
C (middle)	22	40.7235	5.25811	1.12103	38.3922	43.0548	29.17	50.42
B (high)	13	46.1923	6.24466	1.73196	42.4187	49.9659	33.25	55.42
Total	40	43.1833	6.00739	.94985	41.2621	45.1046	29.17	55.42

DISCUSSION

Significant difference before and after the use of GAM in teaching Tasawwur Islam

In the discussion of the matter of significant difference before and after the use of GAM in teaching *Tasawwur Islam*, the present study highlights that there was significant difference between the pre- and post-tests. The result indicated that the use of GAM could assist students

not only to pass in the exam, but also to practise the knowledge as instructed by our beloved Prophet Muhammad (P.B.U.H).

A study conducted by Chiou (2008) showed that 97% of the students decided to use concept map in order to manage information and knowledge in an organised manner. It is the same with the result of GAM, whereby the teaching technique can help students in being more systematic in doing home work, memorising, and taking down notes for revision.

Significant differences between genders towards the perception of using GAM

In terms of differences among genders, the students responded similarly to the previous studies (Foong, 2012; Ganiyu Bello, 1997), in which the use of concept mapping as an instructional material had no significant differencebetween males and females. It wasbecause the researcher neglected the element of gender in the GAM design. The male and female students had the same perception towards the usefulness of GAM in classroom. The students could develop their ability and potential in creating any different graphic or visualize organizers according to the topic, for future revision. In addition, this GAM teaching technique may be incorporated in textbooks to complement the contents and the teaching technique in class.

However, a few studies, such asone conducted by Brinkerhoff and Booth (2013), have argued that there were slightly higher significant different female students compared to male students in order to help non-major biology class to score in the examination. This is in contrast with the results obtained by Cheema and Mirza (2013), who addressed that male students performed better than the females after they had been taught with the concept of map in science subjects. However, there were differences in the findings due to different respondents, subjects taught, culture and background.

Significant differences among students with different levels of achievement (high, medium, and low) in their perception towards GAM

Finally, referring to the different levels of achievements among the students, which were low, middle, and high achievers, the researcher found that they had different perceptions on the use of GAM in teaching *Tasawwur Islam*. Even though the differences among the students in each category have been identified, it still depends on the teachers' skills and abilities to motivate and support their students to ensure the students' success in the examination.

The result was similar to a study on students' motivation towards concept mapping conducted by Shihusa and Keraro (2009), who found significant differences between groups of students with different levels of achievements. Gerstner and Bogner (2009)who studied on the different teaching approaches also found significant difference as a result of using concept mapping in teaching technique.

Thus, the discussion above supports the usefulness of GAM in helping students to demonstrate prophetic concepts and factual terms, such as definitions of *mukjizat, maunah, karamah, irhas, sihir,*and *istidraj.* These terms and concepts are tough and difficult to memorise, hence there aremisconceptions and the students always have difficulties in answering the factual and definition questions.

CONCLUSION

As a conclusion, this study has provided clear answers on the usefulness of GAM in teaching *Tasawwur Islam* in a selected secondary school in Gombak, Selangor. Several factors that affect students' achievement can be explained from different perspectives, depending on situations, environment, internal or external factors, background of the respondents, culture, country, and many more. Many empirical studies on teaching strategies among students showed improvement in their achievement. The uniqueness of this study cametogether with the majority of the students responded to the tasks or homework to make room for improvement, especially in this subject. Lastly, GAM can be used as one of the effective teaching techniques in Islamic studies. Perhaps, the implementation should be recommended, considered, and supported bythe school principals, the departments of education, especially in the Gombak District, and even in the Ministry of Education, for the betterment of the students.

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