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A Pilot Study of the Outcome-Based Education (Obe) Achievement and The Implementation of Self-Regulated Learning Strategies in Islamic Studies

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Abstract

OBE approach prepares the students to face the working world and life-long challenges. Therefore, it is important to explore the impact of self-approach in study as the OBE approach focuses on student-centered learning. Self-regulated strategies are found to fit this research framework. This study aims to measure the contribution of self-regulated learning on the achievement of OBE goals in Islamic Studies. Students who have taken Islamic Studies in a polytechnic has participated in this study. A questionnaire was distributed and data were

analysed using SPSS 25.0. The findings show that students' grade were low (Mean=2.23, SD=1.77), even the application of self-regulated learning strategies is high (Mean=5.10, SD=0.89). Six out of nine strategies reach high mean score (Mean= \geq 5.00); rehearsing, parsing, organising, critical thinking, learning with friends, and asking for help from others. The regression analysis found that self-regulated learning strategies contribute 13.9% towards the grade of Islamic Studies. Every strategy contributes less than 5% towards students' grade in Islamic Studies. Repetition technique has majorly contributed to the grade because students memorised Quranic verses and recited the daily prayers as practical tests. It is the third highly used by the students (Mean=5.70, SD=1.07), after organising (Mean=5.73, SD=0.85) and study with friends (Mean=5.94, SD=3.90). In conclusion, even self-learning strategies were applied by the students to achieve the OBE aims of Islamic Studies, they have minimal contribution towards the achievement of good grades among students.

Keywords: Obe, Self-Regulated Learning Strategies, Islamic Studies, Polytechnic

Introduction

The government's efforts in transforming the Polytechnic of the Ministry of Higher Education Malaysia are clearly stated in the Agenda of the Polytechnic Transformation Plan. This effort is a necessity where it is time the Polytechnic of the Ministry of Higher Education Malaysia is strengthened so that it can be the institution of choice for students to further their studies, along with other institutions of higher learning and produce graduates who can meet job prospects (Utusan Online, 2011). YAB Tan Sri Muhyiddin mentioned in his speech when officiating the Polytechnic Transformation Launching Ceremony 2010 at the Putrajaya International Convention Center:

"I believe the Polytechnic Transformation program launched today is an important effort towards improving the quality and strengthening of vocational and technical education in our country."

(Department of Polytechnic Studies, 2010)

Among the efforts recommended in helping this transformation, work is to improve the quality of learning and teaching by developing new approaches in improving students' academic performance. Datuk Mohlis Jaafar, Deputy Director General (Operations) of the Department of Polytechnic Studies, commented on teaching staff in improving the quality of teaching and learning and strengthening the development and research sector (Mohd. Rizal Azman Rifin, Berita Harian Online, tt). Mr Hj. Md. Nor Bin Yusof delivered the New Year's Message 2011 on quality aspects to improve the quality of teaching and learning of polytechnics throughout Malaysia by emphasising the Outcome-Based Education (OBE) approach:

"Through the Outcome-Based Education (OBE) approach, in line with the requirements of the Malaysian Qualifications Agency, polytechnics need to strengthen the relevance and responsiveness of the programs offered. The OBE approach requires a shift from lecturer-centred learning to student-centred learning. about OBE needs to be fully appreciated so that effective teaching and learning can be carried out."

(Department of Polytechnic Studies, 2011)

Outcome-based Education (OBE) refers to an approach used in the teaching and learning process that emphasises the results and achievement of objectives of an academic course

(Mohd Jailani Mohd Nor et al., 2005). OBE approach was first introduced by the Ministry of Higher Education Malaysia in 2010 (Yaman et al., 2012). With this, the OBE approach has started to be practised as an approach in student-centred teaching and learning activities. Barr et al (2008) also stated that OBE is an approach that focuses on outcomes after attending an academic course, but he also added features as one of the criteria in the OBE approach. It focuses on the achievement of outcomes as opposed to focusing on the process of achieving those outcomes (Mohd Jailani Mohd Nor et al., 2005). Thus, here it can be clarified that OBE is an approach in education that emphasises what students can do after they are taught (Maki, 2004; Huba & Freed, 2010).

Given that OBE is a student-centred teaching and learning approach, Nor & Zaharim (2007) translate the achievement of OBE goals as preparation for the world of work and being a member of society into three forms of outcomes; (1) knowledge, (2) attitude and (3) skills that can be applied in the subject of Islamic Studies. OBE requires students to have high self-learning strategies (Singh, 2008). A study conducted showed that educators try to develop self-learning strategies among students through teaching and learning strategies that meet OBE goals (Thusi, 2004). According to Usher & Pajares (2008), self-learning strategies refer to metacognitive processes, a situation in which students review their thought processes, evaluate performance and plan other alternatives for success. Proactive students can control their learning processes, including cognitive, metacognitive, emotional and behavioural processes (Anthony, 2008; Fritz and Peklaj, 2011). High-performing students reflect the strategies they use, usually associated with high-ability strategies (Thronsdon, 2011). An outstanding achievement indicates that students can control the learning environment. This process includes planning, monitoring and learning strategies (Johnson et al., 2011). A successful student requires both motivational beliefs and self-directed learning strategies (Kesici & Erdogan, 2009). Motivation drives a person towards achieving goals because motivational beliefs allow students to learn at their own pace. Students' motivational beliefs in terms of self-efficacy values and tasks are fundamental (Anthony, 2008). Self-efficacy can be affected by learning processes and learning outcomes; for example, students' career self-efficacy beliefs will increase when one is satisfied after mastering challenging tasks.

In conclusion, achievement of OBE goals is measured to see the extent to which the OBE approach is carried out. Since this OBE involves student-centred learning, it is vital to see self-approach strategies in Islamic Studies.

Research Objective

Therefore, this study was conducted with the aim to study:

- 1) the level of achievement of OBE goals in Islamic Studies measured using the Outcome-based Assessment (OBA), which is the achievement grade of Islamic Studies I.
- 2) the level of implementation of self-learning strategies among students of Islamic Studies I.
- 3) the contribution of self-learning strategies in Islamic Studies grades.

Research Design

This study uses a pilot study to examine the achievement of OBE goals and self-learning strategies in the subject of Islamic Studies I using questionnaires distributed to students.

Study Sample

The study involved 30 Semester II students in a polytechnic in Perak, who were randomly selected by criteria where they had already taken the subject of Islamic Studies I in the last semester.

3.2 Study Instruments

Achievement of OBE goals refers to the overall grade of Islamic Studies I, where each Course Learning Outcome (CLO) and Program Learning Outcome (PLO) needs to get a good percentage (above 50%) as a benchmark that OBE goals are achieved. The following Table 3.0 is the PLO and CLO analysis statistics for the four departments involved in this study.

TABLE 3.0 STATISTICS OF PLO and CLO ANALYSIS By Each Department

No	Department	Number of Students	CLO1		CLO2		CLO3		CLO4		CLO5		PLO1		PLO6	
			No	%	No	%	No	%	No	%	No	%	No	%	No	%
1	Electrical engineering department	130	82	63%	126	97%	124	95%	97	75%	122	94%	107	82%	128	98%
2	Civil engineering department	337	293	87%	318	95%	312	93%	326	97%	325	97%	328	97%	328	97%
3	Department of Commerce	326	284	87%	315	97%	319	98%	308	94%	317	97%	315	97%	314	96%
4	Department of Information Technology and Telecommunications	265	246	93%	249	94%	257	97%	253	95%	263	99%	263	99%	254	96%

Guidance

- CLO1 Recite the verses of the Quran with tajweed and memorise the surahs given during the practical session
- CLO2 Explain clearly the concept of knowledge in Islam so that it can be practised throughout life
- CLO3 Strengthen the understanding of Tasawur Islam and Akidah to be used as a guide for life through analytical writing based on the situation described
- CLO4 Exhibiting morals towards Allah SWT, the Prophet and fellow human beings and explaining moral issues based on a given situation
- CLO5 Demonstrate how to perform worship in the life
- PLO1 Knowledge
- PLO6 Continuous Learning and Information Management Skills

According to Table 3.0, all four departments achieved a satisfactory percentage of CLO and PLO. It can be said here that the Islamic Studies I classes involved have achieved the OBE goals that have been set for the Islamic Studies I course. Attitudes and skills, the overall grade of Islamic Studies I already includes all three forms of results in terms of theory (knowledge), morals (attitudes) and memorisation and practice of prayer (skills). Therefore, this study refers to the achievement grade of Islamic Studies I, where all three aspects of OBE have been included in the overall grade of Islamic Studies I.

To obtain the findings of the study on self-learning strategies, the Motivated Strategies for Learning Questionnaire (MLSQ) developed by McKeachie, Smith, Garcia and Pintrich (Duncan & McKeachie, 2005), a way to identify the level of motivation and application of self-learning strategies, with a bit of modification so that it can be applied to students of Islamic Studies I. It consists of 81 items and is divided into two parts; motivation and self-learning strategies. Table 3.1 shows the division of the 81 items into their components.

TABLE 3.1 MLSQ Items

Components	Part 1: MOTIVATION			Part 2: SELF-LEARNING STRATEGIES			
	Sub-scale	Bill Item	No Item	Strategy	Sub-scale	Bill Item	No Item
Value Component	Intrinsic Goal Orientation	4	1, 16, 22, 24	Cognitive and Metacognitive Strategies	Repeating	4	39, 46, 59, 72
	Extrinsic Goal Orientation	4	7, 11, 13, 30		Parsing	6	53, 62, 64, 67, 69, 81
	Assignment Value	6	4, 10, 17, 23, 26, 27		Organising	4	32, 42, 49, 63
The Hope Component	Control of Learning Beliefs	4	2, 9, 18, 25	Resource Management Strategies	Critical thinking	5	38, 47, 51, 66, 71
	Self-confidence	8	5, 6, 12, 15, 20, 21, 29, 31		Metacognitive	12	33, 36, 41, 44, 54, 55, 56, 57, 61, 76, 78, 79
Affective Components	Anxiety Test	5	3, 8, 14, 19, 28	Resource Management Strategies	Learning Time/Environment	8	35, 43, 52, 65, 70, 73, 77, 80
					Own effort	4	37, 48, 60, 74
					Study With Friends	3	34, 45, 50
					Asking Others for Help	4	40, 58, 68, 75
Amount		31	Amount		50		

Study Analysis

Since this study is quantitative, SPSS 17.0 was used to analyse the data. For the research objectives (1) and (2), frequency tests were conducted to find the mean score and standard deviation (Rahimi, 2004).

TABLE 4.0 Mean Score Interpretation Table

Mean Score	Interpretation
5.01 - 7.00	High
3.01 – 5.00	Average
1.00 – 3.00	Low

In contrast, for the study's objective (3), the test used is the Multiple Regression Test to determine the contribution of variables. A normality test is required to test the distribution of Islamic Studies grade data I. Therefore, the Kolmogorov-Smirnova normality test is used (Piaw, 2006). According to Table 4.5, significant values exceeding 0.05 (Sig. = 0.323) indicate that the data distribution for Islamic Studies grade I is suitable to be used for multiple regression tests to test the objectives.

TABLE 4.1 Test of Normality

Variabel	Kolmogorov-Smirnov ^a		
	Statistics	Df	Sig.
Islamic Studies Grade I	.323	30	.000

a. Lilliefors Significance Correction

Findings

The findings of the study are divided into two, namely descriptive data analysis and inferential data analysis.

Descriptive Data Analysis

Frequency tests were conducted to review objectives (1) and (2).

Objective 1

Assess the level of OBE achievement through the overall grade of Islamic Studies I

TABLE 5.0 Mean Grade Score of Islamic Studies I

Variable	Mean	Standard deviation	Interpretation
Grade of Islamic Studies I	2.23	1.77	Low

According to Table 5.0, the mean score for Islamic Studies grade I is 2.23, and it is interpreted as low. It also indicates that the level of OBE achievement in Islamic Studies class is low.

Objective 2**To study the level of implementation of Islamic Studies self-learning strategies I**

TABLE 5.1 Mean Score of Islamic Studies Self-Learning Strategies I

Variable	Mean	Standard deviation	Interpretation
Repeating	5.70	1.07	High
Parsing	5.09	1.04	High
Organising	5.73	0.85	High
Critical thinking	5.23	0.88	High
Metacognitive	4.76	0.93	Average
Learning Time/ Environment	4.55	0.84	Average
Own effort	3.59	1.12	Average
Study With Friends	5.94	3.90	High
Asking Others for Help	5.35	0.97	High
SELF-LEARNING STRATEGIES	5.10	0.89	High

Table 5.1 shows the mean score for each self-learning strategy the students used. Overall, the mean score of self-learning strategy is at a high level. Six strategies get a high level, namely rehearsing (5.70), parsing (5.09), organising (5.73), critical thinking (5.23), learning with friends (5.94) and asking for help from others (5.35). In comparison, three strategies get a low mean score, namely metacognitive (4.76), time/ learning environment (4.55) and self-effort (3.59).

Contribution Analysis

Contribution analysis using multiple regression test was conducted to see the contribution of self-learning strategies to Islamic Studies grade I.

Objective 3**To study the contribution of self-learning strategies to Islamic Studies I grade.**

Multiple regression tests were used to test the extent to which self-learning strategies contributed to the grade of Islamic Studies I. This inferential analysis was conducted to examine objective 3.

TABLE 5.2 Contribution of the Use of Self-Learning Strategies to the Grade of Islamic Studies

Variable	B	Beta	R	R ²	R ² Modified	t	Sig.
Repeating	-0.493	-0.300	0.090	0.057	0.057	-1.662	0.108
Parsing	-0.117	-0.068	0.068	0.008	-0.031	-0.363	0.720
Organising	-0.018	-0.009	0.009	0.000	-0.036	-0.046	0.964
Critical thinking	0.016	0.008	0.008	0.000	-0.036	0.043	0.966
Metacognitive	0.142	0.075	0.075	0.006	-0.030	0.390	0.695
Learning Time/ Environment	0.256	0.122	0.122	0.015	-0.020	0.652	0.520
Effort	0.275	0.174	0.174	0.030	-0.004	0.937	0.357
Study With Friends	0.064	0.141	0.141	0.020	-0.015	0.755	0.456
Asking Others for Help	-0.179	-0.098	0.098	0.010	-0.026	0.523	0.605

F=2.149

Sig. F=0.74

Multiple regression analysis as in Table 5.2 shows that the correlation between Islamic Studies with repeating (0.090), parsing (0.068), organising (0.009), critical thinking (0.008), metacognitive (0.075) and asking for help from others (0.098) can be ignored, while the correlation of Islamic Studies grade I with time/learning environment (0.122), effort (0.174), peer learning (0.141) was at a low level. The t-test results showed that there was no significant relationship between Islamic Studies grades I with self-learning strategies.

The study's findings showed that 7 out of 9 strategies were found to contribute significantly to Islamic Studies grade I. The value of R^2 showed that 5% (rehearsal), 0.8% (parsing), 0% (organizing and critical thinking), 0.6% (metacognitive), 1.5 % (learning time/environment), 3% (effort), 2% (learning with a friend) and 1% (asking for help from others). Overall, self-directed learning strategies contributed 13.9% to Islamic Studies grade I.

Discussion

The level of CLO and PLO achievement of this course is measured based on the overall grade of Islamic Studies I. From the study findings that have been analysed, the analysis results show that the grade of Islamic Studies I is at a low level, and this also shows that the level of OBE achievement is also at a low level. However, the overall analysis of CLO and PLO achievement statistics is at a satisfactory level. Electrical Engineering students are 63%.

The findings also show that the level of self-learning strategies in the subject of Islamic Studies I is at a high level. Only three sub-scales reach a moderate level of use, namely metacognitive, time or learning environment and self-effort. It shows that respondents use fewer skills metacognitive, less regulating the time or place for learning, and less striving to achieve constructed goals. It can be said that they make less effort to achieve the goals that have been set at the beginning of learning. They also do not plan the appropriate time and place to study. Other learning strategies are at a high level, namely rehearsing, parsing, organising, critical thinking, self-effort, learning with peers and asking for help from others. Therefore, the findings of this study show that the students of Islamic Studies I;

- i) rehearse the reading materials of Islamic Studies I
- ii) parse the materials
- iii) organise the materials such as storing them in a file
- iv) strive to achieve the best in the Islamic Studies I course,
- v) study with friends, and
- vi) ask for help from others when there are problems in learning the Islamic Studies I course.

In terms of a contribution analysis, seven strategies have minimal contributions to Islamic Studies, namely rehearsing, parsing, metacognitive skills, learning time/ environment, effort, learning with friends and asking for help from others while there are three strategies used in moderation. The strategy often used by Islamic Studies I students is to study with friends, rehearse and organise. However, rehearsal contributes the most in Islamic Studies and is followed by studying with friends. Students have to repeat the recitation of memorised verses and the recitation of prayers for practical tests. Islamic Studies Course I also involves group coursework and involves studying with friends. In conclusion, self-directed learning strategies contribute to achieving OBE goals, albeit at a low rate.

Conclusion

Based on the study's findings, it can be said that self-learning strategies contribute relatively little to the achievement of Islamic Studies grade I. Although the level of self-learning strategies and high level of motivation can only help improve Islamic Studies I grade at a low rate. Therefore that OBE achievement is also at a low level. Although this study is only a pilot study, it can tell that other factors can improve the level of achievement of OBE goals other than self-learning strategies. These strategies have minimal contribution towards the achievement of good grades among students. However, students can practice some strategies to help raise the grade of Islamic Studies, namely studying with friends and rehearsing.

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