ONLINE DISCUSSIONS FOR LEARNING – BOON, BANE OR BANAL? INVESTIGATING THE EFFECTIVENESS OF KDU'S MATA PELAJARAN WAJIB (MPW) E-Forum

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ABSTRACT

Teaching and learning in Malaysia is experiencing an exciting time of transition. Education itself is a constantly adapting and ever-evolving domain. It undergoes modification over time to accommodate the latest needs of the society and to keep up with the latest development in new found knowledge and technology. Our country's educational system is gradually moving away from the conventional 'spoon-feeding' ethos to one characterised by learner-centeredness, self-regulated learning and e-learning. It may be surprising to note that as early as 1979, the government had already introduced educational reforms which sought to shift the focus of education from the teacher to the student and today the KBSR and KBSM system openly advocates learner-centered education for Malaysian schools. The traditional teacher-centered approach has lost its popularity over time in higher education industries especially. Other approaches such as reflective learning (Ramasamy 2002) and self-regulated learning (Kosnin 2007) are also found to be implemented by educators. We can, however, cautiously conclude that active learning is not as regularly practised in Malaysian educational institutions as one would like (Zakaria & Iksan, 2007; Neo & Neo, 2003). This paper evaluates KDU University-College's efforts to introduce an online forum for the delivery and assessment of its Mata Pelajaran Wajib (MPW) subjects for pre-university (i.e. compulsory subjects which comprise Malaysian Studies, Moral Studies, National Language and Islamic Studies) as part of its efforts to infuse active learning into the learning experience it delivers. The paper begins with a brief survey of active learning and e-learning, existing practices and future trends. It will then investigate the efficacy of KDU's online forum to promote active learning among the students in the MPW program¹. Interviews with lecturer will complement an analysis of the assessment results both before and after the introduction of the system in the April semester of 2009.

Field of Research:

1. Introduction

Teaching and learning in Malaysia is experiencing an exciting time of transition. Education itself is a constantly adapting and ever-evolving domain. It undergoes modification over time to

¹ These are the subjects that all Malaysian students are required to pass as a prerequisite to obtaining their diploma or degree, see Private Higher Educational Institutions Act 1996 (p.34), available at http://jpt.mohe.gov.my/IPT/Act%20555%20-%20IPTS%20-%20BI.pdf

accommodate the latest needs of the society and to keep up with the latest development in new found knowledge and technology. Our country's educational system is gradually moving away from the conventional 'spoon-feeding' ethos to one characterised by learner-centeredness, self-regulated learning and e-learning. It may be surprising to note that as early as 1979, the government had already introduced educational reforms which sought to shift the focus of education from the teacher to the student and today the KBSR and KBSM system openly advocates learner-centered education for Malaysian schools. The traditional teacher-centered approach has lost its popularity over time in higher education industries especially. Other approaches such as reflective learning (Ramasamy 2002) and self-regulated learning (Kosnin 2007) are also found to be implemented by educators. We can, however, cautiously conclude that active learning is not as regularly practised in Malaysian educational institutions as one would like (Zakaria & Iksan, 2007; Neo & Neo, 2003).

This paper evaluates KDU University-College's efforts to introduce an online forum for the delivery and assessment of its *Mata Pelajaran Wajib* (MPW) subjects for pre-university (i.e. compulsory subjects which comprise *Malaysian Studies, Moral Studies, National Language and Islamic Studies*) as part of its efforts to infuse active learning into the learning experience it delivers. The paper begins with a brief survey of active learning and e-learning, existing practices and future trends. It will then investigate the efficacy of KDU's online forum to promote active learning among the students in the MPW program². Interviews with lecturer will complement an analysis of the assessment results both before and after the introduction of the system in the April semester of 2009.

2. E-Learning for Active Learning: A (Very) Brief Survey

E-learning is a vast area. There are, however a few characteristics worth affirming as suggestive of the benefits that e-learning offers.

Firstly, **collaboration** in learning should be emphasized. Given the Malaysian education system with its largely individualistic bent, our students have not been exposed to concepts and practices like team-learning, online collaboration and peer-assessment, all of which are not only emerging trends in higher education but are also of paramount importance in today's globalised world. The benefits include positive inter-dependence, face-to-face interaction, individual and group accountability, inter-personal skills and group processing and reflection (Frusher et al, 2010; Zakaria and Iksan 2007). Nevertheless, teachers are usually concerned of the drawbacks that come with enabling collaborative learning e.g. loss of control, loss of syllabus coverage and the overall lack of familiarity. These reservations notwithstanding, signs are good that small-group discussions and presentations, guided discoveries, team-teaching, buzz groups, student-led discussions, dramas and role-playing and many more collaborative learning activities are being adopted by more Malaysian teachers (Nayan et al, 2010).

Closely related to the idea of collaborative (or cooperative) learning is that of **peer-assessment**. Without drawing entirely from reality TV programs, it's nevertheless instructive to note how major offerings like *Survivor*, *Apprentice*, *Hell's Kitchen* and so on rely extensively on the contestants evaluating each other. If nothing else, peer assessment cultivates cooperative behaviour, political skills and friendship-building. Education can no longer be merely about the learner; it must also include the learner's relationships. 'Playing well' may soon become a non-negotiable, both inside and outside the classroom.

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This is both underscored by and contributes to the growth of **Internet and social networks** as a factor for teaching and learning (Lau 2010). Beyond ubiquitous Facebook (itself part of the phenomenon known as *Personal Web* i.e. Web technologies that allow users to manipulate, reorganise and re-create – instead of merely use - data) lies technologically enabled options like mobile-learning, cloud-computing, geo-locational technologie and gamification (Cohen, 2011; Poon et al. 2004; Puteh and Hussin 2007). Even though different institutions may have different approaches in incorporating e-learning in their teaching, utilisation of electronic discussion forum, downloadable course works, online tutorials, video and/or audio materials are common (Puteh and Hussin 2007).

When all is said (and unfortunately more is said than done), e-learning is, however, not an easy affair. Puteh & Hussin (2007) reported a number of problems encountered by selected Malaysian universities hoping to implement virtual learning practices as an integral part of their institutional philosophy and vision. Chief among the obstacles (which include a lack of educational content, student-focus and interactive materials) is the difficult transition of students' mindset from a 'spoon-feeding' culture to one where independent thinking is the norm and where student reliance on the facilitator is greatly reduced. Active learning, it seems clear, required many factor – not least the desires and habits of the faculty and students – in order to work well.

3. Evaluating KDU's MPW E-Forum

Despite the problems associated with e-learning, in April 2009 it was with anticipation of its promises - together with the belief that this is the way of the future (perils notwithstanding) - that KDU sought to more substantially infuse e-learning into its MPW subjects. The MPW program, at any given semesters, have approximately 700 students reading four subjects (*Moral Studies, Malaysian Studies, National Language* and *Islamic Studies*) under the facilitation of three to four lecturers.

The co-authors of this paper were all involved in the design of the new course structures, its integration with the online forum, assessment methods and so on. Briefly, we decided to replace a few weeks of lectures (out of the normal 14-week semester³) with peer-to-peer discussion on an online forum instead. It was agreed that six to seven weeks of face-to-face interaction with students were sufficient, with the rest of the semester devoted to online interaction.

All except one of the subjects, *National Language*, was selected. The reason for the exclusion was purely administrative; it was felt that migrating three subjects would be more manageable and would already have an impact on academics. It was thus decided that *National Language*, given the relatively low student numbers, would remain in the traditional mode. For the purposes of this study, however, this was an unexpected boon as *National Language* can serve as a **control group** to facilitate the effects (if any) of the e-forum on assessment results.

The platform selected for the online forum was developed by vBulletin which is available for free at http://www.vbulletin.org. The forum included a repository for subject files and power-point slides but, most importantly, enable continuous threaded discussions among the students on topics and questions posted by the lecturer. The students' responses would be graded according a rubric which covered not merely accuracy and quality of content but language and research skills as well. Instructors are also told to keep track of students who are able to not only write academically but also converse well with other users. As mentioned, the digital age is one where the ability to work with others is a non-negotiable, which makes it critical for individual prima donnas who, whilst top-scorers in their own right, nevertheless have to unlearn their hermit or high-horse tendencies. The online forum, in other words, aimed to infuse writing and reading proficiency as well as promote the

³ A normal 14-week semester includes is usually 13 weeks of classes and 1 exam week.

use of the university-college's library e-databases in addition to nurturing independent and collaborative learning via the online element (see Appendix A for the Rubrics and Appendix B for screen-shots of the forum).

At first blush, it may appear that academic offering to students have been substantially reduced given the fall in number of face-to-face classes. Thus, immediate first impressions associated with this project may include a drop in quality, less value-for-money, 'lazier' lecturers and so on. This is, however, far from the truth as lecturers are still required to facilitate the online discussion which involves responding to questions, joining in the discussion, eliciting responses, correcting student mistakes, assessing essays, promoting interaction, etc. These instructor activities relate to each and every question posted up for discussion and there are, on average, one or two questions per week. In other words, there is much work expected to be done 'behind' the forum and thus the reduced face-time is more than adequately compensated.

Well, if it all sounds good on paper, what follows are our efforts to investigate if everything worked out as well in practice. The research is three-tiered. First, there is an evaluation of the passing rates, average scores and grade 'A' achieved both before and after the e-forum was implemented in the April 2009 semester. This study will look at the yearly and semester averages, including those related to each of the three subjects for which the e-forum was employed. Importantly, there will be a comparison between these subjects and the one which 'got away' i.e. *National Language*.

Secondly, personal interviews with selected lecturers involved should also shed light on the experience of using the e-forum. And, finally, interviews will be conducted with students to elicit their perception of the effectiveness of the e-forum for their learning.

This paper will close with some recommendations for future implementation. Overall, its significance lies in the fact that KDU University-College is the first (and likely only) educational institution in Malaysia to infuse online discussions into the MPW modules. Also, as a final shameless attempt at significance, it must be noted that this paper is one of very few studies on this series of Malaysia's nationally mandatory papers for tertiary education.

Tier 1 - Assessment Results

The e-forum was launched in April of 2009, covering three out of four compulsory subjects: Moral Education, Malaysian Studies and Islamic Studies. Unfortunately, the results do not show *substantial* improvement. A comparison of the semester and yearly pass rates and average scores (see Appendix C1 and C2) show relatively steady scores obtained, with the exception of a sharp drop in August 2010. But overall the graph remains slightly elevated.

On the other hand, it should be noted that in *Malaysian Studies*, a clear rise in Grade-As' achieved can be demonstrated after April 2009, especially in June 2009 and June 2011 (see Appendix C3). Also, the passing rates from August 2010 demonstrate a steady upwards movement.

Likewise, in *Moral Education* the percentage of students scoring top marks has risen after the implementation of the e-forum, albeit in less pronounced form than in Malaysian Studies (see Appendix C4). The passing rate and average scores, too, remain substantially unchanged throughout the half-decade, with or without the e-forum.

In *Islamic Studies*, though, the patterns are more rocky and unpredictable, no doubt a result of the huge variation in number of students per semester (see Appendix C5). Whilst a downward trend in pass rates and the average score can be barely detected, it should be remarked that there are also a few strong highs during the period after April 2009.

Overall, the pattern of the variables after April 2009 appears certainly more volatile, especially the percentage of Grade A achieved. Could it be that the e-forum has introduced elements of openness and undecidability, double-edged elements which both consolidate the strengths of some previously excellent students yet also undermine the performance of some?

How are the results of the 3 subjects as compared to *National Language* which, to reiterate, did not undergo e-forum assessment? One thing which seems clear over ten semesters is the relative *uniformity* of the National Language results vis-a-vis the rest. When seen against the volatility of the other subjects variables after April 2009, the *National Language* graphs, especially the Average and Grade-A graphs, look almost serene. A tentative conclusion, therefore, is that the e-forum has contributed to fluctuations in the average scores and to the performance of top-scorers. It seems to have little impact, however, on the passing rate.

The above is obviously done with the assumption that subject difficulty relative to student aptitude remains constant as does lecturer proficiency.

Tier 2 - Lecturer Experiences

At the time of this study, four lecturers, three full-time and one part-time, were teaching the MPW courses. Personal interviews were conducted with the full-time lecturers and questions included what they particularly liked about the e-forum and what can be done to improve the system. Only one of the three, however, was teaching *National Language* so to that extent extrapolations based on differences between this subject and other ones will be limited.

All of them remarked that they welcomed the reduced classroom hours which also helps alleviate much of the displeasure associated with the MPW subjects. One of them did, however, exercise the lecturer prerogative regarding the actual number of weeks of classroom hours is reduced, citing huge class sizes as a cause for *not* reducing too many hours. In this sense, the e-forum is less a replacement of classroom hours and more of a supplement. We should here bear in the mind the drawbacks of collaborative e-learning mentioned above i.e. decreased face time with students can be an issue.

The lecturers in general also liked how the e-forum encouraged many otherwise quiet and reticent students to speak up. One lecturer was grateful for the flexibility provided to students in responding to discussion questions (i.e. they can answer anytime from home or elsewhere). He also said that the public nature of the e-forum also encouraged responsible writing and efforts at research, aspects the assessment rubrics also target (see Appendix A).

Another lecturer was impressed by the e-forum's ability to provoke more 'liberal' and open comments which, according to her, are almost never made in the classroom. For example, during a discussion on sexuality in Malaysia, a student brought in her loss of virginity as an element.

An interesting comment, especially in line with the growing use of sites like Facebook for educational discussions, is how the e-forum provided an 'institutionalised' ambience in which anonymity was disallowed and overly trivial comments are discouraged. This, so claims this lecturer, was a benefit over and above the use of a public site like Facebook which some students participate in using a nickname and which may lack the requisite 'academic seriousness' which an official e-forum provides.

Finally, the e-forum was extolled for being a one-stop location to obtain notes, articles, slides, view announcements, etc.

On the downside, one lecturer mentioned that she frequently gets complaints from students about the difficulty of accessing the system. At this point, she lauded the use of Facebook (temporarily replacing the system in Jan 2012), especially its ease of access i.e. just two or three clicks and the user is in a system he or she is *already* familiar with, as compared to the e-forum which requires obtaining a username and password from the Information Systems department.

This lecturer also hoped for easier search capabilities. At present, searching the system for a particular student produces every upload by said user, so the facilitator has to sift through the many results to obtain the exact assignment required. Similarly, another lecturer complained about the amount of monitoring required, given the vast number of comments. Obversely, though, another lecturer commended this very same feature because it enabled him to see everything a student has done for the semester.

That lecturer who noted the extent to which students display more courage in their comments nevertheless cautioned how the e-forum could foster apathy towards learning. She stated that the face-to-face conversations in the National Language class were richer than those at the other classes, presumably because for this subject students couldn't take the conversation online.

On the other hand, another lecturer insisted there was no significant drop in classroom interaction as a result of the e-forum. This lecturer also noted the occasional downtimes the system experienced which created anxieties all around especially as assignment deadlines drew near. Finally, the inability of the system to handle large numbers of users simultaneously and the poor aesthetics were also criticised.

All three lecturers did emphasize the importance of the e-forum being facilitator-driven without which interest and participation by students will surely wane.

Tier 3 - Feedback from Students

Based on interviews with the students, a clear advantage of the e-forum is the heightened degree of openness and willingness to share occasioned. One student noted that a majority of his classmates would not have talked about their opinions had they been required to speak in class instead. Also, the fact that students were required to write out their responses — not to mention the flexibility provided to do so — also contributed to more vigorous comments. Students also appreciated the fewer physical classes required as a result of the forum.

One problem identified from students is the repetitiveness of student responses resulting from a rule that at least 30 comments must be posted per issue. Given this rule, many students — especially after the initial submission and the first few comments - were, so it appears, commenting for the sake of doing so. This resulted in standard one- or two-liners (e.g. "I agree", "Your opinion sounds reasonable", etc.) which not only demonstrated a lack of thinking but also contributed to an air of boredom.

4. Recommendations & Conclusion

A sober (albeit tentative) conclusion would be that the impact of the e-forum on assessment results appears at best ambivalent. One cannot conclude that student use of the e-forum definitively produces better results, although significantly it should be noted that results did not decline substantially as a result, too. As this is the first time the students have participated academically in

such a forum, the unfamiliarity factor *may* have had a depressing effect on results given how participation itself is assessed.

Is the e-forum – or even e-learning - then irrelevant to the MPW? This would be an unnecessarily hasty deduction given the limited nature of this study and the pioneering aspect of this entire exercise in e-learning infusion. Surely more data is needed from other institutions implementing something similar.

We can, though, be less ambivalent about our recommendations to move forward. Based on our interviews with the lecturers and students, it appears that a successful implementation of ediscussions should at the very least require the following elements:

- 1. Lecturers need to be trained and monitored on their participation in the e-forum; they should also learn how to elicit more participation from students. This would be a critical requirement whether or not e-learning was used but perhaps is even more important since classroom face time will fall.
- 2. Classroom contact time should be flexible; the presence of an e-forum should not uncritically entail a substantial fall in face-to-face facilitation.
- Lecturers need to enforce the requirements outlined in the rubric and take the lead to combat repetitious answers, plagiarism, non-participation and the atmosphere of monotony. In other words, the lecturer is often a critical figure in creating and sustaining interest inside the forum.

In January 2012, due to complications with the university-college's information systems, the e-forum was taken down and temporarily replaced by Facebook. Thus far, the experience of the lecturers using this popular social-media site appears to be far more commendable than the e-forum. According to them, the students' presence is more pronounced and regular (given the ease of access), their conversations more engaged and there's a strong sense of enjoyment. At the same time, classroom hours remain lowered so it appears that Facebook has all the benefits of the e-forum systems without its problems.

How much of such positives will be translated into good learning experiences and results remains to be seen.

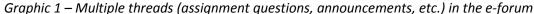
In the meantime, the path taken with the e-forum would seem at best an ambivalent one. Yet despite the many questions yet unanswered, the value of at least *taking* these e-steps is not in doubt, as there are few better ways to learn about learning from the Web.

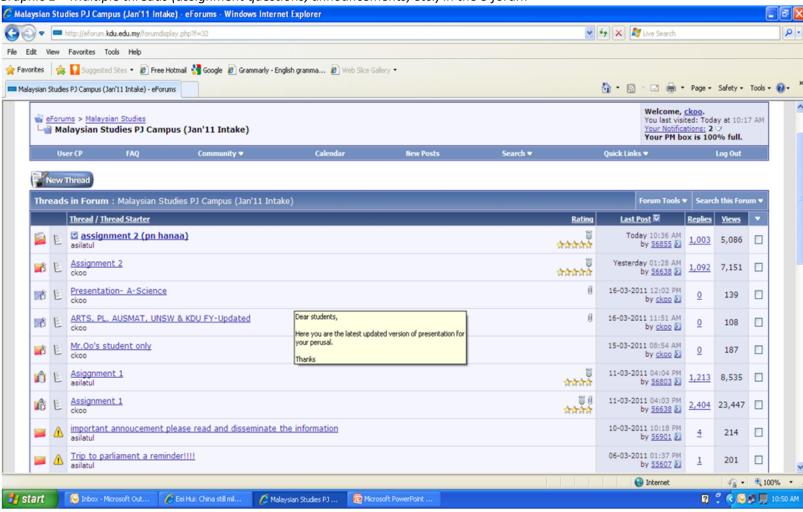
Appendix A: Assessment Rubrics for E-Forum Discussions

The following rubrics will be used in evaluating all students' performance throughout the e-forum for the MPW subjects. The total percentage of marks allocated for the e-forum will be 30%.

	Excellent (A)	Good (B)	Satisfactory (C)	Minimally Acceptable (D)	Fail (E)
Quality of Contribution	 full of thought, insight, and analysis very relevant to the discussion connection to realworld problemsolving novel ideas or perspectives substantial depth and detail 	 demonstrates critical thinking relevant to the discussion connections to content new ideas or connections good depth 	 not all posting of high quality some tangential points some lack of depth and detail 	 handful of partially relevant points vague generalities although rare, some new ideas general lack 	 largely irrelevant and off topic no new ideas "I agree with" statement rehash or summarize other postings
Activeness of Participation	 high number of quality postings from start to finish constructive and timely feedback on postings of others that shapes the thinking of others active and sustained interactions with peers 	 majority of quality postings provides feedback on postings of others highly visible on discussion boards 	 a few postings not of high quality some last minute postings responds to others, but not always constructively noticeable on discussion boards 	 only a handful of quality postings many 'last minute' postings occasional presence only occasionally responds to others, but often not in a meaningful way 	 no quality postings rare or no appearance on discussion boards

Appendix B: Screen-Shots of E-Forum



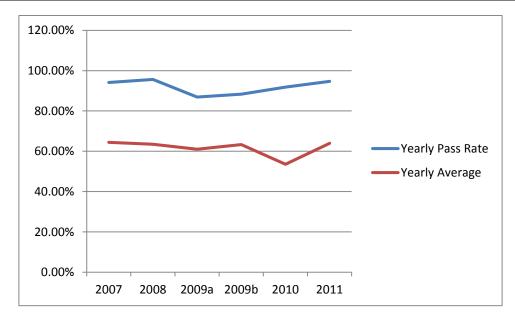


Graphic 2 – Students carrying on a discussion in the e-forum



Appendix C1: Yearly Averages⁴ (Pass Rates and Average Scores, 2007-2011)

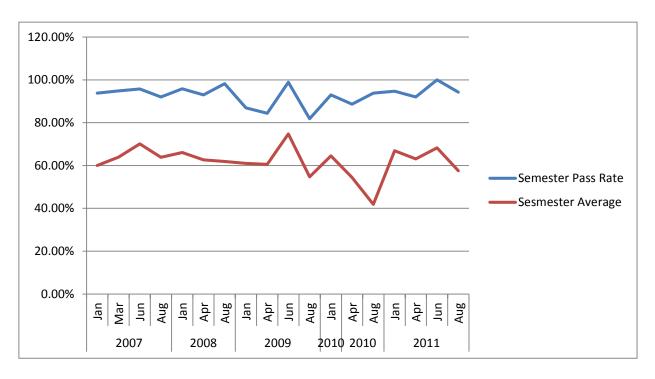
	2007	2008	2009a	2009b	2010	2011
Pass Rate	94.10%	95.65%	86.94%	88.35%	91.80%	94.70%
Average Score	64.45%	63.51%	61.00%	63.31%	53.57%	63.96%



⁴ Only for subjects which include the e-forum i.e. Malaysian Studies, Islamic Studies and Moral Education. National Language is not included.

Appendix C2: Semesterly Averages⁵ (Pass Rates and Average Scores, 2007-2011)

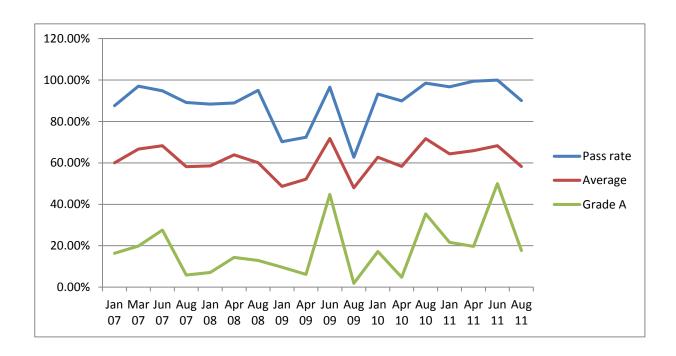
	2007			2008				20	09			2010	2013				
	Jan	Mar	Jun	Aug	Jan	Apr	Aug	Jan	Apr	Jun	Aug	Jan	Apr	Aug	Jan	Apr	J
Pass Rate	93.79%	94.84%	95.71%	92.04%	95.79%	92.98%	98.18%	86.94%	84.36%	98.85%	81.84%	92.97%	88.63%	93.81%	94.68%	91.97%	1
Average	60.02%	63.89%	70.09%	63.79%	66.04%	62.63%	61.85%	61.00%	60.54%	74.71%	54.68%	64.47%	54.38%	41.86%	66.90%	63.11%	



⁵ Only for subjects which include the e-forum i.e. Malaysian Studies, Islamic Studies and Moral Education. National Language is not included.

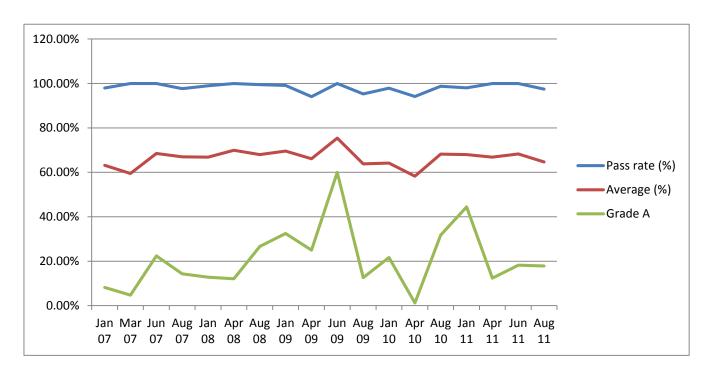
Appendix C3: Malaysian Studies (Grade A, Pass Rates and Average Scores, 2007-2011) E-Forum Implementation April 2009

	Jan 07	Mar 07	Jun 07	Aug 07	Jan 08	Apr 08	Aug 08	Jan 09	Apr 09	Jun 09	Aug 09	Jan 10	Apr 10	Aug 10	Jan 11	Apr 11
Pass rate	87.63%	97.04%	94.83%	89.17%	88.39%	88.95%	95.07%	70.19%	72.39%	96.55%	62.73%	93.28%	89.95%	98.48%	96.77%	99.44%
Average	60.06%	66.68%	68.32%	58.19%	58.59%	63.89%	60.09%	48.70%	52.11%	71.74%	47.95%	62.75%	58.36%	71.69%	64.35%	65.91%
Grade A	16.39%	19.82%	27.59%	5.83%	7.10%	14.36%	12.88%	9.62%	6.14%	44.83%	1.82%	17.23%	4.79%	35.36%	21.61%	19.66%



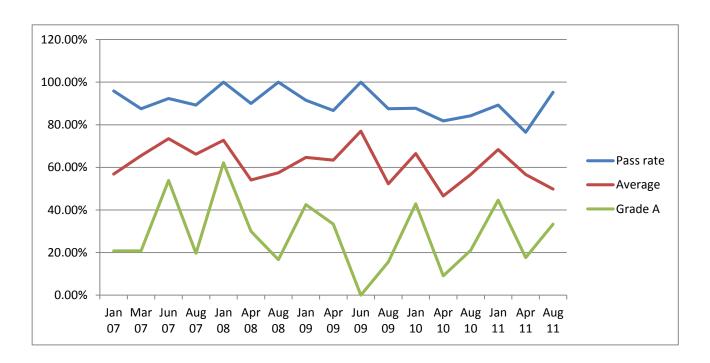
Appendix C4: Moral Education (Grade A, Pass Rates and Average Scores, 2007-2011) E-Forum Implementation April 2009

	Jan 07	Mar 07	Jun 07	Aug 07	Jan 08	Apr 08	Aug 08	Jan 09	Apr 09	Jun 09	Aug 09	Jan 10	Apr 10	Aug 10	Jan 11	Apr 11
Pass rate	97.93%	100%	100%	97.67%	98.97%	100.00%	99.46%	99.13%	94.03%	100%	95.29%	97.88%	94.12%	98.73%	98%	100.00%
Average	63.17%	59.47%	68.48%	66.98%	66.80%	69.93%	67.98%	69.60%	66.10%	75.40%	63.83%	64.18%	58.22%	68.21%	67.98%	66.81%
Grade A	8.16%	4.71%	22.41%	14.34%	12.82%	12.05%	26.63%	32.47%	25%	60%	12.56%	21.69%	1.18%	31.75%	44.41%	12.35%



Appendix C5: Islamic Studies (Grade A, Pass Rates and Average Scores, 2007-2011), E-Forum Implementation April 2009

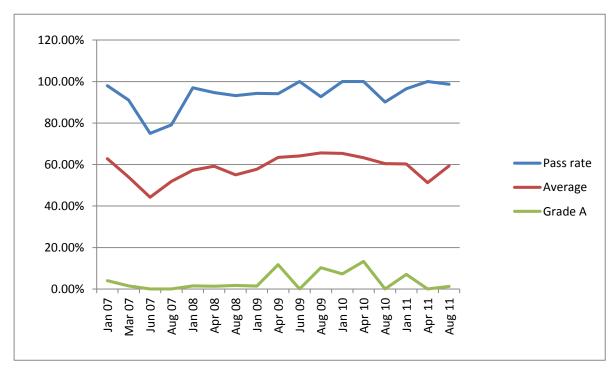
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	Jan 07	Mar 07	Jun 07	Aug 07	Jan 08	Apr 08	Aug 08	Jan 09	Apr 09	Jun 09	Aug 09	Jan 10	Apr 10	Aug 10	Jan 11	Apr 11	
Pass			1 '		1			1		'		,				'	
rate	95.83%	87.50%	92.31%	89.29%	100.00%	90.00%	100.00%	91.49%	86.67%	100%	87.50%	87.76%	81.82%	84.21%	89.29%	76.47%	9!
Average	56.84%	65.52%	73.46%	66.21%	72.72%	54.08%	57.48%	64.71%	63.40%	77%	52.27%	66.49%	46.57%	56.67%	68.39%	56.61%	49
Grade A	20.83%	20.83%	53.85%	19.64%	62.12%	30%	16.67%	42.55%	33.33%	0%	15.63%	42.86%	9.09%	21.05%	44.64%	17.65%	3



⁶ There were no students for the June 2011 semester.

Appendix C6: National Language (Grade A, Pass Rates and Average Scores, 2007-2011), No E-Forum Implementation

	Jan 07	Mar 07	Jun 07	Aug 07	Jan 08	Apr 08	Aug 08	Jan 09	Apr 09	Jun 09	Aug 09	Jan 10	Apr 10	Aug 10	Jan 11	Apr 11
Pass							1			1		1				
rate	98.00%	91.05%	75.00%	79.12%	97.02%	94.67%	93.22%	94.29%	94.12%	100.00%	92.65%	100.00%	100.00%	90.16%	96.50%	100.00%
Average	62.82%	53.99%	44.25%	51.84%	57.30%	59.19%	55.03%	57.74%	63.47%	64.10%	65.64%	65.36%	63.29%	60.46%	60.25%	51.27%
Grade A	4.00%	1.49%	0.00%	0.00%	1.49%	1.33%	1.70%	1.42%	11.76%	0.00%	10.29%	7.25%	13.33%	0.00%	7.02%	0.00%



⁷ There were no students for the June 2011 semester.

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