

Majlis Penutupan Sukan Antara Fakulti 2007

SAF 07

Kejohanan Sukan Antara Fakulti UiTM Pulau Pinang telah berlangsung pada 8 Ogos dan berakhir pada 27 Ogos 2007 yang lalu. Pelbagai acara telah dipertandingkan antaranya permainan Bola Jaring, Bola Sepak, Badminton dan lain-lain acara lagi...

Sehubungan dengan itu, pada 29 Ogos 2007, Jabatan Sains Gunaan, Jabatan Teknologi Maklumat & Sains Kuantitatif dan Jabatan Pengurusan Perniagaan selaku Jawatankuasa Majlis Penutup SAF 2007 telah melaksanakan majlis penutupan dengan jayanya dan telah disempurnakan oleh Yang Berbahagia Tuan Pengarah Kampus UiTM Pulau Pinang bertempat di Laman Perdana UiTM PP.

Majlis berlangsung dengan acara penyampaian hadiah, persembahan tarian pelajar UiTM, nyanyian lagu Tanggal 31 Ogos dan penyerahan bendera kejohanan SAF. Pada keseluruhannya setiap acara yang dipertandingkan, banyak dimenangi oleh pelajar-pelajar dari Fakulti Kejuruteraan Elektrik....dan seterusnya dinobatkan sebagai Johan keseluruhan bagi Kejohanan tersebut...Syabas dan Tahniah kepada semua pelajar !!!

Bagi Pasukan Program Pra Diploma (Sains) juga tidak kurang hebatnya dalam beberapa pertandingan yang telah disertai walaupun mereka tidak berjaya ke peringkat johan tetapi semangat yang jitu dan kesungguhan yang ditunjukkan ini membuktikan pelajar-pelajar tersebut pantang berundur sebelum mengalah....Syabas !!!

Pihak Jawatankuasa mengucapkan jutaan terima kasih kepada semua staf dan pelajar yang telah terlibat secara langsung atau tidak langsung di dalam majlis tersebut. Tanpa bantuan kalian semua majlis tersebut tidak akan dapat dilaksanakan dengan jayanya....
Terima kasih semua.....

Disediakan oleh NURWAHIDA/jsg

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Menarik di dalam.....

Program Pengalakan Sc &
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Assessment and evaluation – an
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End of year 222

Hadiah Pusingan Johan Keseluruhan
Kejohanan SAF '07 telah diserahkan
kepada Koordinator Program FKE, En Mohd
Affandi Shafie...Tahniah...!!!



Sesi Penyerahan Bendera
Kejohanan SAF'07 kepada
Pengelola Sukan...

Antara pelajar-pelajar yang telah
membangiri Laman Perdana...

SeLAMat MenJaLani IBaDaH PuaSA Di BuLan RAMaDHaN
AL-MuBAraK BuaT SeMuA DaRi KaMi WarGA JSG

Program Penggalakan Sains & Teknologi

Selaras dengan usaha kerajaan untuk memajukan aspek pembangunan modal insan, UiTM Pulau Pinang dan Kerajaan Negeri Pulau Pinang telah menganjurkan 'Program Penggalakan Sains dan Teknologi' yang telah berlangsung pada hari Sabtu bersamaan 8 September 2007. Program yang turut dijalankan bersempena dengan sambutan 50 tahun kemerdekaan ini telah dirasmikan oleh YB Encik Arif Shah Bin Hj Omar Shah, Adun Seberang Jaya.

Program penggalakan Sains dan Teknologi (PPST) pada kali ini terbahagi kepada dua kategori iaitu Program Pemupukan Minat Pelajar Terhadap Sains & Teknologi dan 'Mathematics outreach'. Kumpulan sasaran dua program tersebut adalah pelajar-pelajar menengah rendah dan pelajar-pelajar sekolah rendah. Sebanyak 10 buah sekolah menengah dan 5 buah sekolah rendah telah menyertai program ini. Orang ramai juga telah diemput hadir.

Program yang dianggotai oleh En Haris Ridwan bin Abdullah selaku penasihatnya, dijalankan bertujuan untuk memberi pendedahan awal mengenai peluang-peluang kerjaya dalam bidang sains dan teknologi kepada ibu bapa, guru-guru dan para pelajar. Program ini juga bertujuan untuk membangkitkan minat dalam diri pelajar untuk memilih aliran sains di sekolah melalui kesedaran dalaman; dan mengurangkan serta menghapuskan pandangan negatif para pelajar terhadap mata pelajaran sains.

Selain itu penggalakan pembelajaran dalam persekitaran yang positif adalah persaingan yang sihat untuk meningkatkan kemahiran bersosial dan berkomunikasi juga merupakan matlamat program ini.

Untuk menjayakan program ini, setiap fakulti, jabatan dan warga UiTMKPP telah memainkan peranan penting, tidak terkecuali MISI AKADEMIK serta Unit Robotik UiTMPP. Selain itu badan-badan luar juga turut terlibat seperti Petronas, Institut Penyelidikan Teknologi Nuklear (MINT), Jabatan Meteorologi Malaysia (JMM), Astronomy & Atmospheric Science Research, UTM, KEMAS, Media Book Store, ExactMust dan Ana Muslim.

Setiap fakulti dan jabatan diberi satu ruangan pameran yang bertempat di Taman Perdana. Pelbagai bahan pameran dan risalah-risalah program pengajian UiTM telah disediakan bertujuan untuk memberi pendedahan yang lebih mendalam berkenaan program-program yang ditawarkan di UiTM. Malah JSG turut tidak ketinggalan dalam acara pameran tersebut. Bahan yang disediakan pameran adalah modul-modul gelombang, eksperimen asid dan bes serta poster-poster tentang kehebatan sistem galaksi.

Terdapat juga beberapa gerai jualan yang disertai oleh Kelab Usahawan UiTM, Kelab Usahawan Fakulti Perhotelan, Elya, Astra, CITU dan Gerai Kurma Masuf Taiyoob di 'loading bay'. Gerai Minuman Percuma juga ada.

Sekalung penghargaan dan jutaan ucapan terima kasih kepada semua warga UiTMPP yang telah bertungkus lumus menjayakan program PPST khususnya warga JSG.



Be less curious about people and more curious about ideas.

~Marie Curie~



ASSESSMENT AND EVALUATION – AN END OF SEMESTER REFLECTION

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A PERSONAL REFLECTION ON EVALUATION ASSESSMENT AND EVALUATION, ITS PURPOSES AND MISCONCEPTIONS.

INTRODUCTION

At the end of every semester, when all the papers have been marked and graded, each and every lecturer, whether they like it or not, will be presented with the number of students who will proceed with another course in their programs of study and the number of students who will retake the current course before proceeding with their programs of study. Some lecturers will be satisfied with the numbers presented to them, while some will wonder what went amiss for them to obtain the numbers.

In this article I would like to reflect on what actually goes on before a student is given a letter grade of A, B, C, D or F.

ASSESSMENTS

“Assessment is the process of documenting, usually in measurable terms, knowledge, skills, attitudes and beliefs”.-Wikipedia

Quizzes, tests and final exam are the form of assessments which are used to measure the knowledge and skill of our students while attitudes and beliefs are usually ignored in most of our academic assessments. In almost all cases our assessments are usually focused on the cognitive domain of our students

“Skills in the cognitive domain revolve around knowledge, comprehension, and “thinking through” a particular topic”.-Wikipedia

A common classification of the different objectives and skills that educators set for students is the Bloom’s Taxonomy (also called The Taxonomy of Educational Objectives) which is separated into three domains: the affective domain, the psychomotor domain and the cognitive domain. Please note that the Ministry of Education of Malaysia has added another domain which is the spiritual domain and uses the acronym JERI for Jasmani, Emosi, Rohani and Intelek.

Bloom’s Domains	Ministry of Education Domains
Psychomotor	Jasmani
Affective	Emosi
-	Rohani
Cognitive	Intelek

The six levels in the cognitive domain according to Bloom, moving from the lowest through the highest level are Knowledge, Comprehension, Application, Analysis, Synthesis and Evaluation.

Bloom’s Taxonomy – Cognitive Domain	Level	
Knowledge	1	Low order thinking skills (LOTS)
Comprehension	2	
Application	3	
Analysis	4	High order thinking skills (HOTS)
Synthesis	5	
Evaluation	6	

An assessment therefore is constructed so that it will measure the various levels attained by the students according to Bloom’s Taxonomy.

Assessment can be categorized as (1) summative or formative, (2) objective or subjective, (3) criterion- referenced or norm-referenced and (4) informal and formal.

Summative assessment is used to assign a grade to a student. It is normally used at the end of the course in the form of final exam and can also be used throughout a course in the form of quizzes and tests. Summative tests are the assessment of learning.

Formative assessments provide feedback for the students and teachers, to identify problem areas of the students or areas which the teachers need to spend more time with the students. Formative assessments are the assessment for learning.

In a typical university setting, nearly all assessments are summative although the scopes are different. A quiz assesses a particular topic or

sub topic. A test assesses a larger amount of materials, while the final exam assesses all the topics in the whole course. However quizzes and tests can be used as a formative assessment if comments are given and discussions are held after every quizzes and tests. The feedback obtained through the quizzes and tests can be addressed during the discussions.

Objective assessment is a form of questioning where there is only one correct answer. It can be in the form of true and false questions, multiple choice questions, multiple response and matching questions.

Subjective assessment is a form of questioning where there is more than one answer. It can be in the form of extended response questions and essays.

Objective assessment is much easier to grade than subjective assessment. It is the most common form of assessment used, especially to assess the lower levels of Bloom's taxonomy – knowledge, comprehension and application.

A common misconception for teachers is that objective assessment is represented by multiple choice / response questions only and structured questions and essays represent subjective assessment. While this may hold true in general, in many cases the answer to a structured questions can be easily predicted as the scope is limited to what has been taught by the teacher. Similarly essays usually answer questions which are often repeated throughout the course and often rehearsed before the assessment.

Thus in most cases, extended response questions and essays require the students to regurgitate what has been taught by the teacher and as such are not subjective assessments.

Criterion-referenced assessment or normally called criterion-referenced test measures the students against defined and objective criteria. It is often used to measure competency – the ability to do something.

Norm-referenced assessment or norm-referenced test measure how the students stand compared to the present group of students. Using simple statistical mean, median and standard deviation, student's performance can be compared with rest of the students in the course. In normal usage the norm-referenced test has no predetermined cut-off for each letter grade that is given to the student. Thus an A obtained in one semester might not be of the same performance level as an A obtained in another semester.

A formal assessment is where a written document, i.e. quiz or test is given to the students and a numerical score is given. A non formal assessment is in the form of observation, group discussion, participation, peer evaluation and may also include attendance and students general attitudes. Non formal assessment is seldom assigned a numerical score or grade as the activities are difficult to assess objectively.

ASSESSMENT IN UiTM

Now let us reflect on how assessment is carried out in UiTM. We assess our students formally in the form of quizzes, tests and final exam as formal assessments are more objective, easily graded and given a numerical score.

The final grade that we gave our students is not norm-referenced, as we have a predetermined scale for the letter grades. It is a predetermined scale evaluation of our student's competency but is our assessments really criterion-referenced?

The final exam can be considered a summative and criterion-referenced assessment as it is constructed to cover all topics through the semester and is built along a well defined guideline. A common guide is the ratio of easy: intermediate: difficult questions according to Bloom's Taxonomy is set at 5: 3: 2. We could expect an average score of 65% using this ratio.

However as each final exam is constructed from scratch and not from a questions bank, the perceived difficultness of each final exam is dependent of the parties which construct it. Furthermore each question might have an easy, intermediate and difficult part it, thus the difficulty in identifying the level of difficulty for each question. The level of difficulty might not fit Bloom's Taxonomy exactly as questions of higher levels, synthesis and evaluation are more difficult to construct and if those questions have been presented and discussed previously revert to the lower level of comprehension and application. Any question which demands an act of regurgitation of the answer is of the lower level of the Cognitive Domain in Bloom's Taxonomy.

Do we construct our quizzes and tests as criterion-referenced? Can we maintain the same ratio of 5: 3: 2 for the easy: intermediate: difficult questions in our test and quizzes?

We know that our quizzes and tests can be formative as the lecturer and the students can obtained feedback from the quizzes and tests especially when comments are given and discussions (not answer scheme only!) held after the tests. The tests can be criterion-referenced and set at the same difficulty ratio as the final exam. The quizzes can be formative but is too short as an assessment to fulfill the difficulty ratio. While it might be difficult to construct assessments to fit the criteria that we sent onto ourselves, it is quite easy to validate the assessments after it have been given to students.

Distribution graphs can be easily constructed for each assessment given out to students. The distribution curve of each graph should follow closely with one another. This would suggest that the assessments were constructed with the same difficulty ratio. Any deviation would suggest an assessment which is set too easy or too difficult.

Table 1 Time Allocation & Contribution to Final Grade

Assessment Type	Time Allocation	Total Numerical Score	Contribution to Final Grade
Final Exam	180 minutes	100	50%
Test 1	50 minutes	28	14%
Test 2	50 minutes	26	13%
Test 3	50 minutes	26	13%
Quizzes (6)	10 minutes each	6 each	1.67% each 10% total

SUGGESTIONS

An assessment contribution to the final course grade is predetermined at the beginning of the course. In a typical course the contribution of quizzes, tests and final exam to the final grade is 10%, 40% and 50% respectively.

If a course has 6 main topics, then the number of quizzes should be at least six, one quiz for each topic. Each quiz would then contribute to (1.67) % of the final grade.

If the final exam has a maximum numerical score of 100, then each quiz should have a numerical score of 3.34 which in many case is quite small and difficult to construct. Thus a quiz should at least be the smallest complete standalone question as represented in the final exam which might carry a numerical score of 6.

The tests should have a total numerical score of 80. If three tests are given throughout the course, then the tests can be given scores of 28, 26 and 26 or other nearly equal divisions. Each test contributes 13 – 14% toward the final grade. The time allocation for each test is about 50 minutes, following the time allocation of 1.8 minutes per numerical score of the final exam. (The time allocation for each quiz translates to about 10 minutes.) **Refer Table 1.**

To construct a fair assessment, the assessment has to represent the amount of time that has been put in learning the materials. Topics which take a longer time to learn will give a larger numerical score, while topics which are shorter to learn produce a lower numerical score. A Table of Specification is build to guide the teacher in constructing the assessment. The content of the topics can also be further divided into the different cognitive levels.

An example of a table of specification for Test 1, assuming the amount of material covered is two topics, is given in **Table 2**

Note the total scores for Topic 1 is 11 out of 28 which is approximately 40% and for Topic 2 is 17 out of 28 which is approximately 60% which agrees with the amount of time on the topics. Furthermore the ratio of the scores for Knowledge & Comprehension: Application: Analysis, Synthesis & Evaluation is 14: 9: 5 which is approximately 5: 3: 2, the standard that we set earlier on.

Test 2 and 3 and the Final Exam will also be constructed along similar principles. This will ensure that the standard is maintained throughout the assessments carried out through the course.

Grading of the assessment has to be done objectively, strictly according the marking scheme and marking principles. We must not let our emotions lead us to be too lenient or too strict. Otherwise a beautifully work out and constructed assessment will have no meaning as a wide variation representing the same skill level will exist between different lecturers teaching the same course. Academic honesty and accountability apply not only to students but to the lecturers too.

CONCLUSION

Assessment and evaluation in UiTM is criterion-referenced, especially the final exam. The other assessments that we carry out throughout the course have to be criterion-referenced too. UiTM has adopted a standard-based evaluation which is essentially an element of outcome-based learning. Thus as lecturers we must play our part in understanding and maintaining the system so that the quality of teaching, learning and assessment is consistent and maintained at the highest standard.

Table 2 Table of Specification For Test 1

Topic	Time Spent	% Assessment	of Knowledge & Comprehension	Application	Analysis, Synthesis & Evaluation	Total Scores
Topic 1	4 hours	40 %				
Concept 1		20%	3	2	2	11
Concept 2		10%	1			
Concept 3		10%	1	2		
Topic 2	6 hours	60%				
Concept 1		20%	3	1	2	17
Concept 2		20%	3	2	1	
Concept 3		20%	3	2	5	28
		100 %	14	9		

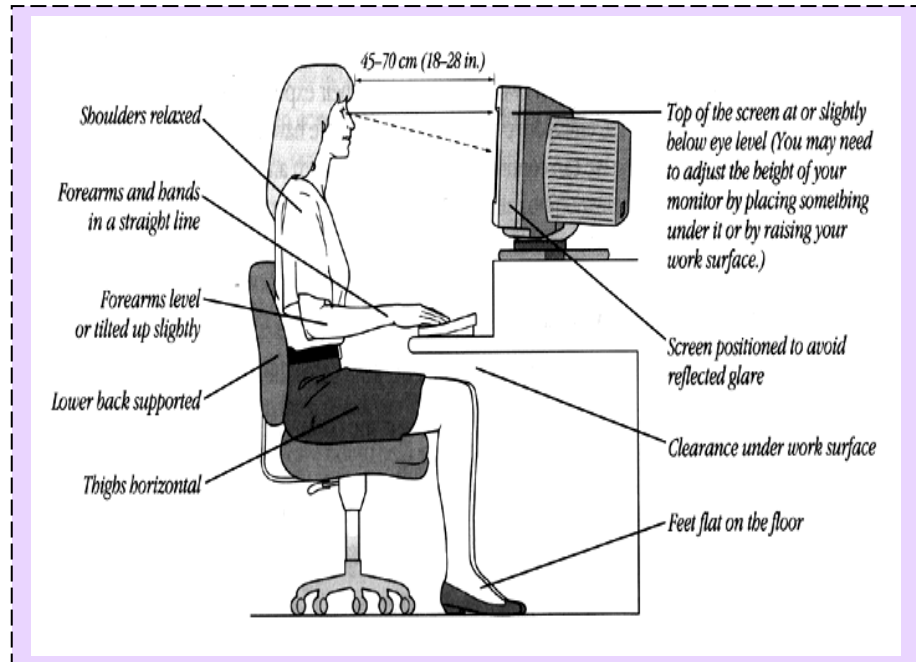
COMPUTER COMFORT

If you spent most of your day in front of a computer, Dan Odell, a Microsoft ergonomist, offers this tips for avoiding injury:

1. **Adjust your chair** so your feet are firmly on the ground.
2. **Set your keyboard** at elbow height. "If your desk is too high, you tend to hold your arms up over the desk, which result in an extra load on your shoulders."
3. **Avoid extreme reaches.** If the mouse is too far away, your shoulder is really rotated when you used it.
4. **Look for products** designed for comfort such as a padded wrist rest or a mouse that fits the relaxed posture on the hand.
5. **Don't ignore** even minor discomfort. Any misalignment can add up.

Submitted By Pn Khaironniswah/Jsg

Did you know ??



SCIENTIST

Marie Curie was born. Nov. 7, 1867, Warsaw, Pol., Russian Empire and died on July 4, 1934, near Sallanches, France - born Maria Sklodowska

marie curie



She was a Polish-born French physicist famous for her work on radioactivity and twice a winner of the Nobel Prize. With Henri Becquerel and her husband, Pierre Curie, she was awarded the 1903 Nobel Prize for Physics. She was then sole winner of the 1911 Nobel Prize for Chemistry.

She came first in the licence of physical sciences in 1893. She began to work in Lippmann's research laboratory and in 1894 was placed second in the licence of mathematical sciences. It was in the spring of this year that she met Pierre Curie. A few months after this discovery Marie Curie died as a result of leukemia caused by the action of radiation.

Her contribution to physics had been immense, not only in her own work, the importance of which had been demonstrated by the award to her of two Nobel Prizes, but because of her influence on subsequent generations of nuclear physicists and chemists.

Adapted from <http://www.crystalinks.com/curie.html>

GLOSSARY

Boyle's law

The principle that the volume of a gas times its pressure is constant at a fixed temperature.

centripetal force

The centrally-directed force exerted on a body moving in a curved direction. The root of this force is the body's impulse to travel in a straight line but that tendency being impeded by the force causing it to curve. e.g. a string exerts centripetal force on a spinning pail to keep it going in a complete circle

cathode

The negative terminal of an electric current system. In a vacuum tube, the filament serves as the cathode or source of electrons that are emitted.

conduction

The transfer of heat by molecular motion from a source of high temperature to a region of lower temperature, tending toward a result of equalized temperatures.

SeLaMAT MenYaMbUt SYaWAL Yang BakAL KunJunG
TiBa..SeMoGa KiTa seMua MeNjaDi HaMBaNYA yang
SentiaSa MenSyukURi NikMat PemBerianNYA YANG MAHA
PEMURAH.& SeMOGA SeTiaP AmALan Yang DilaKUKan Di
BuLaN RaMadHan MeNDapaT GanJaraN PAhala dARiNYA
Yang MAHA ESA..BeRsaMA-SamAlaH KiTa BErmAaf-MaFaN
andAi Ada TerSilap KaTA & BIcaRa..
SeLaMAT HaRi RaYA AiDiFItri..MAAF ZaHIR & BaTiN