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Quality

Services in Teaching and Learning

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Editorial Board

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Everyone is invited to contribute articles, reviews, events and news on teaching-learning issues.

All contributions must be submitted to the Centre for Applied Learning and Multimedia (CALM), UNIMAS.

You can also reach this bulletin online at:
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introductory notes

In 2003, the former VC, Prof. Datuk Dr. Yusof Hadi and DVC (Academic), Prof. Datuk Dr. Abdul Rashid Abdullah and I met and discussed among other things, strategic management initiatives for academic development in UNIMAS. One of the initiatives we talked about was the revival of the Centre for Applied Learning and Multimedia (CALM) which I was supposed to head, and for CALM to take on the mission of promoting quality teaching and learning at the university. As such, CALM was to oversee teaching and learning resources to make sure that they were readily available and committed to the lecturers to support them in their teaching and learning delivery.

However, we knew that investing a great deal on physical resources will be futile if the lecturers do not know how (or will not want) to use them. Thus, CALM's first activity was to provide training in the form of Post-graduate Diploma in Teaching and Learning. The program was to be designed to upgrade the knowledge and skills of the lecturers in the area of pedagogy and instructional technology. In addition, CALM will guide the use of ICT specifically e-learning in teaching and learning processes. To ensure quality assurance in teaching and learning, the Quality Assurance Management Division (QAMD) of the university was to be moved to CALM and to be called Academic Quality Assurance Unit (AQAU). AQAU will conduct continuous evaluation on the lecturers' delivery of their courses as well as their course contents.

In retrospect of my appointment as head of CALM, I was excited and challenged (still am) that academic quality assurance is based in the center – sending out a clear signal and echoing my belief that academic quality assurance procedures and practices can (and should) support rather than inhibit teaching and learning in UNIMAS.

At its simplest, academic quality process should be viewed as a kind of 'project management' framework used in planning, designing, implementing, monitoring, evaluating and

hopefully improving our teaching and the best possible learning experience for our students. Like any 'project management' framework, a continuous review is imperative to ensure that practices and procedures are followed, resources are provided, and information are disseminated. Hence, we need to view this academic quality framework as a collaborative effort among lecturers, between lecturers and students and between lecturers and administrative staff. What are the benefits? – A quality framework that supports lecturers, quality courses, successful programs and satisfied students (and hopefully a successful Academic Quality Assurance audits).

In this issue of INSIGHT, we are delighted to present you some articles which reflect on the theme – "Quality Services in Teaching and Learning". Assoc. Prof. Dr. Gabriel Tonga reviews the basics of Academic Quality Assurance (AQA) and reveals UNIMAS's progress in its AQA efforts. In his second article, he discusses a few of the important aspects of the AQA practices in course management delivery. He hopes that lecturers make use of the AQA practices available to them to achieve good outcome.

Siti Haslina Hussin and Khadijah Mohd Tuah in their study on the effectiveness of the mentor-mentee system in the Faculty of Social Sciences (FSS) in relation to the academic advising system found that the functions of these two systems were not clear, thus, hindering lecturers to provide quality support service to their students.

We welcome a new contributor to INSIGHT, Syarul Nizam Junaidi for his piece on the use of PowerPoint in assisting students' learning. His article was extracted from his book Panduan Presentation untuk Eksekutif (2006) published by PTS Publications. He plans to share his expertise and experience in using PowerPoint in the forthcoming issues of INSIGHT.

"Pushing the Envelope on Pedagogically Sound Online Teaching and Learning" by Elaine Khoo Guat Lien highlights the benefits gained and challenges faced by both lecturers and students in participating in online discussions. Her study demonstrates that a careful integration of sound pedagogical and technological tools can bring about important and meaningful learning among the students.

Assoc. Prof. Dr. Hew Cheng Sim enthusiastically shares with us her experience as a visiting scholar at the University of South Florida (USF), her impressions of the way courses are conducted at USF and the benefits gained from her stint there.

To those of you, who find it difficult to have a more active, interesting and participatory class, please check out Jonathan Sidi lists twenty tips to make lectures more participatory which he extracted from Participatory Lectures (1992), Derek Bok Centre for Teaching and Learning.

I would like to take this opportunity to thank the top management of UNIMAS for their continued support of our endeavors in CALM. I am happy to note the commendable efforts of the CALM staff in discharging their duties, the lecturers who have lent their assistance to our programs, and all those who have committed to the quality assurance efforts.

When the VC, Prof. Datuk Dr. Abdul Rashid was interviewed for the inaugural issue of INSIGHT, he specifically emphasized his commitment to raise the profile of UNIMAS in terms of quality teaching and learning - "when the core businesses (i.e. teaching/ teaching staff, courses and research) are of good quality or when it is of high standards only then we can start calling ourselves world class providers". Therefore, let us come together to lend our full support to make this vision becomes a reality.

Academic Quality Assurance - The Basics, Revisited

Faculties in UNIMAS are well aware of the needs to uphold a high standard of quality practices. In the general sense, quality assurance in academics refers to the management of standards of delivery of all academic functions to ensure the best outcomes are achieved. Educational learning outcomes are not only measured in students' grades or academic performance but include other intangible qualities and attributes of graduates as desired for society's well being. In Malaysia, universities are given the options to decide on the form of Academic Quality Management System to adopt and use. Many of the public institutions prefer the additional ISO 9000:2000 certification while some adhere to their existing quality management systems they already have in place.

Academic Quality Assurance in Public Institutions of Higher Education

The Ministry of Higher Education (MoHE) established its "Quality Assurance Division" (QAD) in the year 2000, specifically to administer Academic Quality Assurance (AQA) in Public Institutions of Higher Learning. Since then, the Code of Practice for Quality Assurance in Public Universities of Malaysia (Practice Code Book), Guidelines on Standard of Specific Disciplines (standards and assessment criteria), as well as the Malaysian Qualification Framework (MQF) documents were prepared and published. These documents form the set of instruments for the management of academic quality practices in all public institutions of higher learning.

For management of quality, all faculties or other degree awarding entities are required to set up their quality assurance unit or taskforce committee to manage quality practices in their academic and key related functions. Systematic documentation of practices for all the nine key quality areas is required. The nine key quality aspects (areas), as follows:

- Vision, Mission, Goals and Learning Outcomes
- Programme / Curriculum Design and Delivery
- Students and Student Affairs
- Assessment of Students
- Students Selection and Support Services
- Academic Staffs / Faculty
- Educational Resources
- Program Monitoring, Evaluation and Improvement
- Leadership, Governance and Administration
- Total Continual Quality Improvements

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With the system having put in place, faculties are then required to perform a self-evaluation exercise to assess their own compliances to a range of the agreed national standard for the specific academic program they offer. A self-evaluation report is to be prepared, and later submitted to the QAD of the MoHE. The self-evaluation report, along with the faculty's program database (documentation), are to be the basis for on-site assessment or auditing by independent external auditors set up by the MoHE. The output of the assessment will consist of an oral exit report to the faculty and a written External Auditor's Report which is submitted to the MoHE. The external assessor's report is an objective statement of the program (faculty) compliance status to the national standard requirements. This report is also an instrument useful for several purposes, such as:

1. Report to the institution – the report serves as the basis for continual quality improvement within the institution;

2. Report for policy-making in higher education – the report when submitted to the MOHE is an instrument to assist in policy decisions with respect to improvements to quality and standards, for granting institutions degree awarding powers as well as strengthening of the national qualification framework;

3. Report for Accreditation – the report may be used by accrediting authorities to grant "accreditation status" to a programme or institution. These authorities may include the respective professional bodies, the Public Service Department or any other concerned parties, and

4. Report for the Public – the report may also be summarized and made public to assist prospective students and employers.

Where Are We In Our AQA Efforts?

One may ask as to how we are affected by the above requirements. The Faculty of Medicine and Health and the Faculty of Engineering are in the forefront in some respects in terms of familiarity with the above exercises. These faculties had been subjected to various requirements, from both the MoHE and their respective professional bodies, even before the AQA processes from the MoHE were formalized. These two academic programmes (Medicine and Engineering) were imposed relatively stringent quality control measures not only to maintain but also to further enhance academic quality, an attribute much sought by the public. As such, they were the first two faculties in UNIMAS which had gone through formal quality auditing, mainly for the purpose of accreditation at the earlier stages.

How do all these quality control requirements by the MoHE affect us in UNIMAS? The initial reactions of academics are mixed. Some academic managers fear that these requirements are difficult to administer. Others feel that they are unnecessarily cumbersome and require a lot of paper work, and will become yet another source of mental fatigue leading to it being an ineffective instrument to assure good practices. These initial reactions were not quite true. In the case of UNIMAS, the reality is that many of the requirements or instruments for academic quality management and assurance are already in place. There are some good practices which are already commonly prescribed across faculties. What is obvious and also is a form of "short-coming" for some of our faculties is that we have failed to have systematic records of all these practices readily on hand. This is one of the reasons faculties may feel that the AQA procedures and requirements are extra efforts to program management. Unfortunately, without quality management system in place we will not be able to claim we have quality practices.

Towards A Quality Support Service: The Academic Advising System:
A Lesson from the FSS Mentor-Mentee System

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Since 2001, the Faculty of Social Sciences (FSS) has adopted the so-called "mentor-mentee system" as a proactive action to guide, help, and counsel the students in the faculty. However, when the students were asked on the effectiveness of this "mentor-mentee system", a majority of them did not find it effective. Among the reasons mentioned are: their "relationship with the mentor is not close"; "it's difficult to meet each other" ; and they "don't need the mentor's help". The lecturers also think that the system is not effective because they are not comfortable dealing with the students' personal problems when consulted. One lecturer confessed that he is "not comfortable when a female mentee cried" in front of him when talking about her personal problem. The lecturers are also of the opinion that the mentees "don't have the initiative to meet them".

Here, two significant points arise from this situation. First, both mentors and mentees do not think the system works. Second, there should be a clear differentiation between a mentoring system and an academic advising system. As being practiced, a mentor should guide/monitor his/her mentees' academic performance and offer help on personal matters. In other words, lecturers act as mentor-cum-counselor to their mentees. On the other hand, students view the system as a platform for them to consult their mentors regarding personal matters instead of academic-related matters. From the survey, a majority of the students perceive the mentor-mentee system as a "communication between lecturers and students where problems and anxieties are resolved"; as "a parental adoption system"; as a "system to take care of students' welfare"; and as a "relationship between lecturers and students in solving problems and conflicts".

Therefore, the university may want to separate the functions of the Academic Advising System and the Mentor-Mentee System. Many universities throughout the world have long practiced the Academic Advising System. This system works in a way that every student has a faculty advisor who serves as the student's academic advisor throughout his or her undergraduate years. The faculty academic advisors teach students how to explore the curriculum and develop coherent academic plans that expand their intellectual, academic, and artistic perspectives. They should also help the students to select courses that emphasize capabilities that have been identified as essential for a life of learning. The student and his or her academic advisor must meet regularly to discuss and evaluate the progress of the students's course work.

Generally, the academic advisor has to advise on course registration and to monitor the students' academic progress. Thus, among the specific roles of the Faculty Academic Advisor are to:

- *Provide counsel for students' academic program ;*
- *Give advise on course registration and monitor the students' academic progress ;*
- *Meet the student at least once each semester to help plan courses for the following semester ;*
- *Follow the student's progress toward degree requirements ;*
- *Help the student think about specialized academic opportunities ;*
- *Give the student guidance if special issues or problems arise related to academics ; and*
- *Know the student well enough to serve as reference.*

Whereas, students also play their roles to:

- *Make an appointment by phone, e-mail or the sign-up sheets outside the academic adviser's office ;*
- *Be courteous, responsible and use academic adviser's time well. Be on time ;*
- *Be prepared and organized for course planning meetings. Review course requirements and course offerings prior to any appointment ;*
- *Develop a course and career-planning folder and keep it updated ;*
- *Be sure they understand all rules and requirements. It is the students' responsibility to understand the course requirements and graduation requirements ; and*
- *Keep the academic adviser informed about students' experiences. The faculty adviser will be better able to help students develop his/her academic and career plans.*

As for the Mentor-Mentee System, it could serve to supplement the Academic Advising System by providing students with practical advice on matters that relate directly to the experience of being undergraduate students – broadly speaking, "survival strategies" in campus life. In order to provide such services with quality, both parties should really understand the concept of the system. The word 'mentor' means 'a wise and trusted guide and advisor'. In this case, students seek their mentors to discuss personal matters because they believe their mentors can be trusted. Of course, any discussions or consultations remain confidential between the mentor and the mentee. However, we cannot deny that not all lecturers who are assigned to be a mentor are comfortable in counseling the student. One scholar says that, "advising does not equal mentoring. You can't legislate bonding. You can throw people together and hope they take the time to foster a relationship". " It's hard to formalize," he says. Therefore, the faculty must open this system on a voluntary basis as to avoid unwilling personnel doing the unwanted task.

In conclusion, having a clear picture of what the Academic Advising System and the Mentor-Mentee System really are, lecturers can play their roles effectively. Thus, the duty to offer a high quality support service to our students can be achieved successfully.

Improving the quality of **Teaching and Learning** through the power of **PowerPoints**

text • inspiration
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I still remember the first time I presented my tutorial using OHP slides way back in 2001, I was a tutor then. During that time it was a rare occasion for us to see PowerPoint slides being presented through LCD projector at lecture halls, seminar rooms and classes.

However, recent advancement of Information and Communication Technology (ICT) has made electronic presentations the norm in the university environment. As a result, most lecturers have excitedly embraced this technology. Some of them have developed greater amount of Microsoft PowerPoint expertise.

As a university lecturer, PowerPoint presentations have become an essential part of teaching and learning activity. On the other hand, the true 'power' of PowerPoint has not much been explored to improve the teaching process. The purpose of this article is to share some simple tips to powering up your PowerPoint presentation.

Why PowerPoint?

Generally, the results of several published studies highlight the benefits of PowerPoint on student performance. Studies have continuously point out that students in general believed that the use of PowerPoint assists their learning.

For instance, Craig and Amernic (2006) indicate that students like to be taught using PowerPoint because they think that it is entertaining, enhance clarity, and most importantly, aid recall of subject matter. According to Apperson et al. (2006) students responded more favourably toward the classes taught with the use of PowerPoint.

Furthermore, your students might be more motivated to attend your lectures when presentation graphics were used in your PowerPoint. One of my colleagues in the faculty uses not only static image, he also uses embedded related funny videos in his PowerPoint slides!

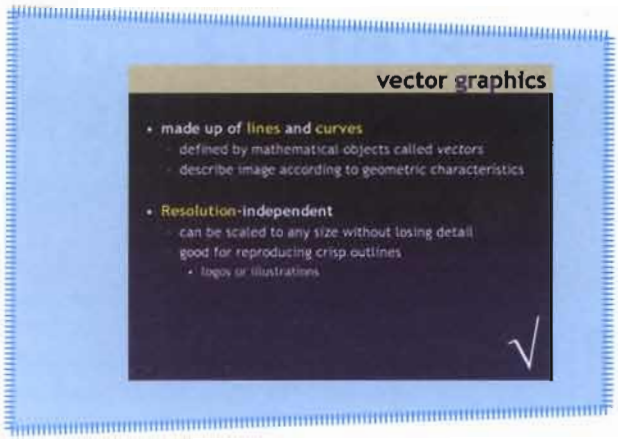
However, please bear in mind that PowerPoint is not a sacred effective instructional apparatus revealed from heaven. It works best and most valued when used as a stimulus for explanation and elaboration, as well as discussion in classrooms.

PowerPoint is big sins

The worst thing that should avoid with PowerPoint is to read each slide word-for-word without discussion or elaboration. You have to speak on behalf of your slide and not vice versa.

Please, never ever, put too much text on each slide. I beg you not to copy the text directly out of your textbook. Why do you need to cramp everything on a slide since it is not forbidden for you to divide the same amount of text into several slides? Actually the students indicated a slight preference for graphical elements such as pictures, charts, and graphs over text. The lesser the text you have on your screen, the easier for you to organize your material. You may find later that it is easier for the student to note the lecture's key points and learn the material (Susskind, 2005).

The example of a better text arrangement is shown in figure 1 below. Use simple phrase that does not exceed one line, if possible.



Your student will appreciate the use of graphs, charts, pictures and clips, compared to bulky chunks of paragraphs.

Adding pizzas

Your students will appreciate the use of graphs, charts, pictures and clips, compared to bulky chunks of paragraphs. Remember, the multimedia element such as graphics and background has its power as a cue for learning. Graphics also improve student recall (Bartsch and Cobern, 2003), hence use it sparingly. If you use graphics, it should be properly sized and placed. Crop your images so that they do not cover the text and properly highlight the subject.

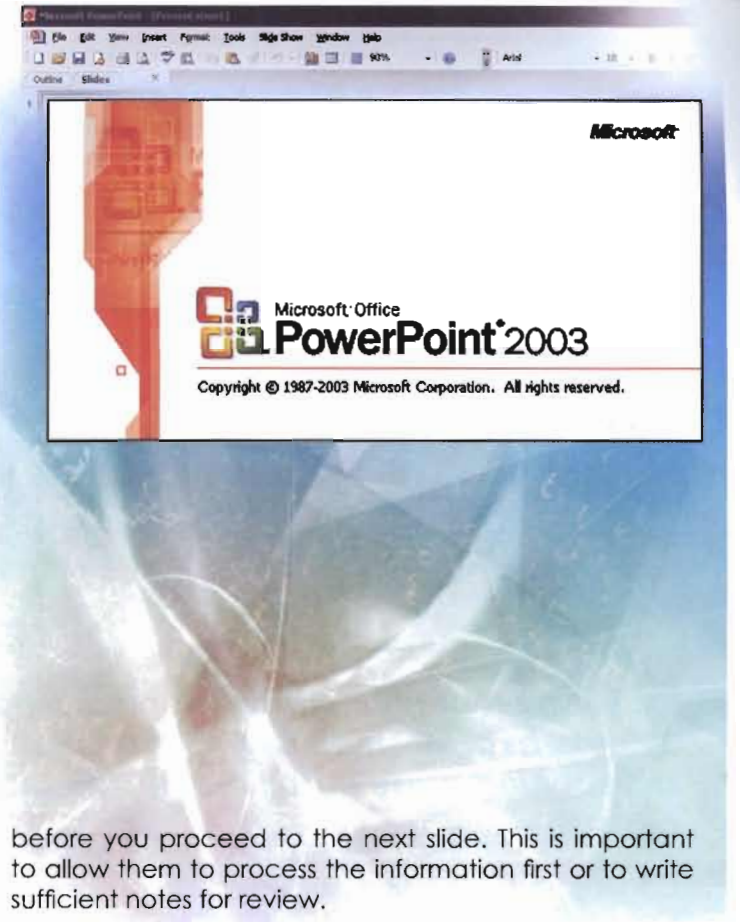
Student-centered teaching through interactive presentation

If your lecture is entirely dependent on your slide, that means that your session is teacher-centered. Now, put your student in the center of the action. Involve them in your explanation. Talk with them.

If you want your student to focus their gaze just on you during your explanation, just simply press 'B' on the keyboard or 'W' for white background. It turns the screen blank. Then they will not read the text on the screen anymore. Do you still love to draw on the white board with marker pen? PowerPoint also has the same capability. In the slide show mode, find pointer option menu and choose pen. Use this interactive tool to draw around the slide while explaining your points.

Have your slides to contain questions to serve as a review of previously learned material. Make sure that you do not provide the answer directly under the question. If you do so, you cannot check their comprehension on material in your slide presentation. To stimulate discussion animate the answer for certain matter, later. Show the question and answer separately using custom animation menu.

When you use presentation graphics as a method of presenting lecture material, you have to make sure not to rush too quickly through the material. Do not move too quickly through your slides. If possible, ask your students



before you proceed to the next slide. This is important to allow them to process the information first or to write sufficient notes for review.

Get ready for your next lecture!

The conclusion that might be drawn from this article is that, your effort to harness your PowerPoint presentation skills for your lecture hall presentation is vital. The next time you have your lecture session, ask yourself two overlapping issues. Firstly, what impact has my PowerPoint presentation had on my student? Secondly, has my PowerPoint presentation led to more effective learning?

We could also, further investigate the specific effect on our students' performance using different slide backgrounds, sounds and animations.

References

Craig, R.J. and Amernic, J.H., PowerPoint Presentation Technology and the Dynamics of Teaching, Innov High Educ (2006) 31: pp. 147–160.

Apperson, J.M., Laws, E.L. and Scepansky, J.A., The impact of presentation graphics on students' experience in the classroom, Computers & Education, Volume 47, Issue 1, , August 2006, pp. 116-126.

Susskind, J.E., PowerPoint's power in the classroom: enhancing students' self-efficacy and attitudes, Computers & Education, Volume 45, Issue 2, , September 2005, pp. 203-215.

Bartsch, R.A. and Cobern, K.M. Effectiveness of PowerPoint presentations in lectures, Computers & Education, Volume 41, Issue 1, , August 2003, pp. 77-86.

Extracted from *Panduan Presentation untuk Eksekutif.*

Essential Practices in Course Management and Delivery – *my views*

text • inspiration

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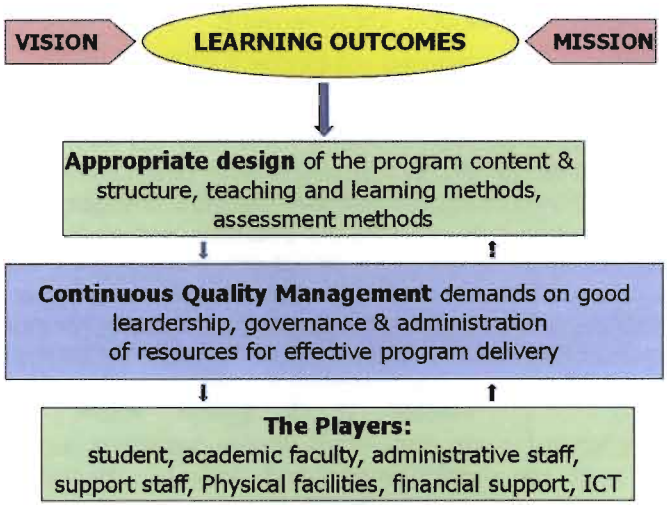
It is obvious that a lecturer cannot be involved at all the levels of the AQA structure. As such is the case, one may choose to focus his or her effort on the most common tasks which commensurate with ones level of academic and administrative duties or responsibilities. This approach, however, does not necessaries exempt an academic staff from the need to comprehend and internalize all the demands of the other quality areas at the higher levels of the AQA structure.

The following discussions are meant to highlight just a few of the important aspects of the AQA practices in a course delivery which need to be clearly understood and practiced by all lecturers in discharging their duties at their respective faculties. These quality practices are ordinary day-to-day tasks but if not properly executed they may affect efficiency and effectiveness of the course delivery.

The Learning Outcomes



Curriculum Design – the reference base

At the Curriculum Design stage, all proposed courses for an academic program are scheduled in a manner that follows the general progression of the entire program. Introductory courses are to be offered in the earlier semesters while the more advanced courses are left for the last few semesters or so. The level of academic expectation of these courses is also following the same progression, and so are the demands of the learning objectives or learning outcomes. The next concern is how these differing expectations can be effectively catered for in the overall course delivery methods or approaches. The task may not be that easy for the younger academics to effectively manage and implement. The lecturer may have to refer to faculty's authority or established faculty guidelines and procedures. To be effective these details on academic and curriculum structure should be outlined and scrutinized at the Program Management level.

The Course Outline –a contract document or just another hand-out

The course outline is the first level of communication between the course instructor and the student at the beginning of the semester. It contains the course title, student work or learning load, learning objectives or outcomes, a brief synopsis, evaluation requirements, a list of supporting materials, and a detailed schedule of all topics by learning units. This document also serves as a "learning contract" between the student and the instructor. The instructor expects his or her students understand and adhere to the coursework requirements (assignments, project papers, presentations, quizzes and examinations). The students, on the other hand, are also expecting the reciprocating commitments from the instructor. In particular, students would normally expect that all the learning outcomes stated earlier are satisfactorily achieved or accomplished at the end of the semester.

Delivering The Course – can we be more effective?

The presentation of lectures and other instructional materials is considered a very important aspect of the overall course delivery. The first concern one should have is with regards to the instructional materials: the form of materials, the academic contents, the relevance and reliability of facts, and contemporariness of techniques used. All too often lecturers teaching the same course year after year tend to be complacent with the materials already developed and readily available at hand. While some of these materials may remain relevant, in particular the basic concepts and related fundamental theories, the bulk of the materials may need to be revised or amended. Continuous revisions and amendments will ensure relevance and contemporariness of these materials and effectiveness of presentations of the subject matter. One way to revitalize ourselves and also to enhance effectiveness of delivery is to introduce new innovations. Our existing e-learning platforms, using two different software (Learnfinity and Morpheus), allow us to offer different learning environments to the students. Not only that technology can revolutionize the mode of knowledge delivery, but it can also have drastic impacts to the learning space. E-learning facilities enable academic staffs to be in communication with students on a continuous basis, both on campus and otherwise.

Students' Assessment – Understand it right?

Students' assessment, or rating of students' performance as some people prefer to call it, is for the purpose of awarding recognition to their achievement in a given course. There is a difference between a point assessment of a student and assessment of learning (or the learning process). Our understanding of these differences is important as it influence how we set out to perform the task.

Assessment of a student's performance centers on evaluation of student's ability against certain expectation set by the evaluator. This expectation may be a level of capability as set in the course goal. The assessment may occur at various stages of a course. When an assessment is carried out for a certain stage of the course, it may be referred to a point assessment or progress assessment. The range of materials covered tends to be limited, and are perhaps covering a few topics from the whole course syllabus.

The assessment of learning for the whole course, however, is a broader aspect of evaluation or assessment. It is still assessment of students learning, but covers the whole semester's learning period. It is important to stress that the assessments we make are essentially the assessment of students' learning abilities against the expected outcome termed as "learning outcome". In UNIMAS, we are practicing continuous assessment approach. Assessment is made at several stages of the course progression, and may also be of different forms. It is the assessment of how much they have learnt in a given course. Looking further as a lecturer, we may also realized that students' assessment is in a way an assessment of how much we have achieved what we stated earlier in our course learning outcomes or learning objectives. An important requirement of the AQA process is the need for continuous improvements. Appropriate form of assessment is essential.

Course Management and Evaluation

A good course management calls for more than just the complete delivery of materials as detailed in the course content. As emphasized above, effectiveness of delivery is of utmost importance. Have the students learned what were taught to them? Were there sufficient opportunity provided to them to learn? Depending on the types of course and the level of difficulty, the course management approach or mechanism may also be different. One has to be sure of the best and most appropriate way to manage the course to produce the best result. Does it call for more hands-on activities? Is group interaction important? Additional exposure to field experiences may be a necessity for courses that are more applied in nature.

How do we know if we are managing the course well? We can find that out through course evaluation. There are two important aspects of course evaluations that need to be understood and appreciated: timing and instrument used.

First, our common practice in UNIMAS is that course evaluation is done only at the end of the semester. The result of the evaluation reflects the previous semester's case, and the lesson learned will be incorporated into the subsequent class management plan. For most courses, the approach works just fine, but for others it does not. What is the problem, one may ask. We must appreciate differences - the fact that different batches of students may vary in terms of academic background, abilities, talents and level of endurance. Hence, assessments from past class may not apply to the current batch of students. So, for a more effective management of our course, it is advisable to have a mid-semester evaluation, a progressive assessment – albeit informal. What is the rational for this extra effort? Early (progressive) assessment of the course enables the teacher or instructor to manage the class and develop the most appropriate strategies to address any short-comings specific to the current class, hence improving the learning environment with the ultimate purpose of enhancing overall performance.

Second, although most faculties have developed other quantitative and qualitative elements in their evaluation instruments, the report produced are usually focused on the quantitative measurements of the various key course elements. This is fine as it is difficult to summarize qualitative reports. However, a step forward in this endeavor is for us to also seriously analyze the qualitative (open ended) comments as well. The analysis results of these comments and suggestions are indications of the course's delivery –our strengths and weaknesses. Better future planning and management of the same course can be taken by taking all these comments into account.

For a good course management, it is therefore, preferred that early evaluation be made as it is as important as the evaluation at the end of the semester. Evaluation in the early parts of the semester is largely a first gauge of students' ability to follow what the lecturer is delivering. Final evaluation at the end of the semester is an overall reflection of the overall running of the course or completion assessment. Both assessments (early part of the semester and end of the semester) are important aspects of continuous improvements.

Improvements here do not just refer to presentation of materials, but also the right mix of theoretical and practical or applied contents. One may say that efforts towards achieving this task will be an endless process. This is true. Things change with time – students' and teachers' expectation can be different overtime, society's needs may change along with political ambitions and the stark reality market demands. Developments in teaching and learning technologies are also driving forces for changes in the classrooms. Lecturers ought to cater for all these possibilities.

Highlighted in the discussions above are some aspects of a course management and delivery. In UNIMAS there are myriads of essential and good practices that academics have at their disposal. Some practices are more effective than others depending on the discipline, nature of the course and course level. It is the course's lecturer who will decide on the approach to use to deliver and manage the course. It is of utmost importance, however, that essential good practices in teaching and learning be observed. After all, the most important objective of our teaching efforts is to achieve good outcomes.

Pushing the Envelope on Pedagogically Sound Online Teaching and Learning Practices

text • inspiration
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"I just think it is the hardest thing to do. That must be the hardest thing to do in setting up an online learning course is to get it so it works for people. You can get all the mechanics right but then, how do you get people to feel comfortable and do what they do if they were sitting in a room?"

- a quote from a student interviewee

Researchers such as Oliver and Herrington (2000) have warned that if technological imperatives such as opportunity, competition and efficiency, drive the introduction of information and communication technologies in education rather than pedagogical imperatives, then new learning technologies are likely to be simply added to the existing list of available resources and used in superficial ways akin to the notion of "gift-wrapping" (Fischer, 2003) where old content is delivered in a new medium. Recent research findings by a few of our UNIMAS lecturers have also alluded to this idea (eg. Fitri Suraya Mohamad, 2003; Hong, Lai & Holton, 2003; Ling, 2003; Wee, 2003).

In order to explicate this idea, I conducted a study in my undergraduate class in January 2006 to test the effectiveness of students' learning, specifically their ability to construct knowledge, in an online learning environment when a sound pedagogical framework is implemented. We were interested to observe the changes in students' learning process and outcomes in the study. The study we conducted utilised social constructivist learning principles in the design of the online course activities to promote the ability to construct knowledge among students. Social constructivist principles' central theme espouses that social interactions that are carefully scaffolded are important to students' learning. These principles when aptly applied in an online learning environment are effective to enhance students' learning process (Kanuka & Anderson, 1998; Murphy & Gazi, 2000; O'Reilly & Newton, 2002; Wilson & Stacey, 2004). The key idea is the careful scaffolding of the class interactions to facilitate knowledge construction in order to allow students to share, collaborate, interact, think critically, reflect, and apply their knowledge appropriately.

The Study

In order to concretise social constructivist learning principles in the online learning environment, our study adapted the use of the "starter-wrapper" technique proposed by Hara, Bonk, Angeli (1998) to scaffold and promote collaborative learning amongst students in the online discussions. This technique requires students to work in groups with two students appointed to the specific roles of a "starter" and a "wrapper" in every group. The "starter" starts the discussion as he or she will be the first to post his or her comments. He or

she is required to ask for the feedback from other group members and encourage shy members to participate. This is an important role as the starter needs to be aware of the members who are not participating actively. The group members are required to respond, comment, and give ideas or suggestions towards the "starter's" messages. On the other hand, the "wrapper" is charged to integrate, weave and summarise the key ideas and themes raised in the online discussions. He or she also needs to participate actively during the discussions (Hara, Bonk & Angeli, 1998).

This study involved 26 undergraduate students enrolled in Cognitive Psychology (KMF1023) course. The course incorporated regular face-to-face lecture sessions with online tutorial discussions. It was an introductory course on human cognition and covered theories on human perception, memory, attention, understanding, language acquisition and higher order thinking skills such as decision making and problem solving. There were four modules in the course but for the purpose of the study only one module on the topic of Basic Processes of Cognition (covering the span of two weeks) was selected. Because the students came from different faculties of Unimas, most of them had different time schedules and faced difficulties in meeting with one another for further discussions. It was essential therefore, to use asynchronous online discussions as a learning tool to allow them to discuss with one other at a time of their convenience.

We used the Yahoo Groups (http://groups.yahoo.com/) website as a platform to house our discussions (Note: Yahoo Groups was used when UNIMAS was in the interim period of moving away from using the old Quickplace system to adopting the new ASSIST system. At that time, we were searching for a platform that was stable, reliable, easy to use and free and this was the best option available. Now that we have Morpheus, and the new Learnfinity system as our official e-learning platforms, constructing such online discussion groups have become quite effortless). The site was used as the online learning tool allowing myself and my students to post our ideas and reply to one another's comments in the online discussion board. A screenshot of the main page of the online discussion website is shown in *Figure 1* below:

Figure 1. Screenshot of the online discussion board

Now that we have Morpheus, and the new Learnfinity system as our official e-learning platforms, constructing such online discussion groups have become quite effortless.

The students were first given instructions and training on using the discussion board and then divided into four online discussion groups with an assigned "starter" and a "wrapper" to each group. Very careful thought was given to pedagogically integrate the face-to-face topic and the design of the online discussion tutorials to ensure their relevancy to learning and to capture students' interest to participate. Hence an interesting thought provoking article related to the topic discussed in the face-to-face class was posted online with open-ended questions for students to discuss and answer in order to generate a substantive group conclusion. Since participating in the online discussions was essential for students to enhance their understanding and knowledge on that topic, marks were allocated to encourage their participation. Four types of data were collected from semi-structured questionnaires, semi-structured interviews, and observation of the interactions in the online discussions as well as the contents (transcripts) of the online discussions. We wanted to obtain students' perception on the effectiveness of their ability to construct knowledge and the collaboration occurring among themselves and their peers during the online discussion. Data analyses involved descriptive analyses, content analysis to analyse students' knowledge construction process, and thematic analysis to analyse the qualitative data.

Transcripts of students' online discussions were carefully studied, coded and content analysed using Kanuka and Anderson's (1998) model to examine students' ability to construct knowledge in the online collaborative discussions. This model of content analysis consisted of five progressive phases (shown in Table 1).

Phase I denotes students' sharing or comparing of their ideas with one another. Activities in this phase include observation, question asking and determination of the problem. In Phase II, the students begin to discover differences and inconsistencies between their ideas and others. Exploration of new ideas and information also takes place. Phase III is where students begin to discuss and negotiate ideas (especially conflicting ones) among themselves in order to come to an agreement. This also involves the co-construction of knowledge as the negotiations occur. In Phase IV, students test the suitability of their co-constructed knowledge and modify them if necessary. The final Phase is demonstrated when students are able to come to an agreement about their newly constructed knowledge as well as appropriately apply it when needed.

Table 1
Indicators of Learning Online: Kanuka and Anderson's (1998) Model of Knowledge Construction

Phases	Description	Illustrative Quotes
Phase I	Sharing/comparing of information	*...we need to choose what things we are going to buy. We need to have [the right] knowledge and skill...this is to keep the brain working and functioning well. When we go shopping, we are alert about the sale and rebate. We ask people about the sale. This might teach us how to communicate better* (NM)
Phase II	Discovery and exploration of dissonance	*... in my opinion shopping is good for our brains- For women, when they go to shopping they can get a lot of things but that is different for man... who loose money to pay for the items. Besides shopping the other activity that is good for our brain is reading, watching a movie and so on* (LL)
Phase III	Negotiation of meaning/co-construction of knowledge	*... We are always bargaining about certain price, dealing with people whenever we go shopping. According to Jean Piaget in Piaget's Cognitive Theory, organization is the ability to classify and arrange the experience and information known as Schemata. Schemata refer to one of reaction system and thought which is used in interaction process with the environment* (GV)
Phase IV	Testing and modification of proposed synthesis	*... why not we do some activities that good and beneficial 4 our brain such as go out 4 vacation or shopping* (AA)
Phase V	Phrasing of agreement, application of newly constructed meaning	*After I read all members' opinions, I can summarise that everyone knows how to increase their brain's functions. There are so many ways that have been given by my group members such as eating quality food, listening to music, brain teasers, doing yoga, going for vacations, playing chess and academically, a subject that is interesting to learn such as cognitive psychology (MJ)*

Findings

Table 2 shows students' participation pattern in the 2 week long online discussions. Nineteen students (76%) accessed the discussion board at least 1-2 times a day. A majority of them, 14 (56%), spend at least 1-2 hours reading and discussing their ideas online each time. Most of the students posted at least 3-4 discussions in the discussion board (16 students (64%)). Students accessed the discussion board mostly from within their faculty's computer labs (19 students (76%)).

Table 2
Online Participation

Characteristics		N	%
How many times a day they accessed the online discussion board	1-2 times	9	6
	3-4 times	5	0
	5-6 times	1	4
Hours they spent on the online discussion board each time	<1 hr	9	6
	1-2 hours	4	6
	3-4 hours	2	8
The number of discussions they posted online in the discussion board	1-2 times	4	6
	3-4 times	6	4
	5-6 times	4	6
	>8 times	1	4
Where they accessed the online discussions	Faculty's computer lab	9	6
	Cyber cafes outside the campus	6	4

Findings from the questionnaire highlight students' perception towards the effect of participating in the online discussions, the effect of using the "starter-wrapper" technique and the effect of collaborating with their peers during the online discussions. Students mostly agreed that participating in the online discussions was effective in facilitating their learning in the class (M=1.92, s.d = 0.48). This was also true of the use of the "starter-wrapper" technique (M=2.04, s.d = 0.93), and finally true as well regarding their perception on collaborating with their peers during the online discussions in contributing to their learning (M=2.25, s.d.=0.48) (Note: these findings are based on a five-point Likert scale with responses coded as; 1 = Strongly agree, 2 = Agree, 3 = No opinion, 4 = Disagree, 5 = Strongly disagree)

The interviews with 6 volunteer students and observations confirmed these findings in that:

- Positive Experiences in the Online Discussions

All interviewees state that they enjoyed the online discussion with four of them specifically enjoyed working with their peers. At least three of them enjoyed the online discussion because it was interesting, while a further three would be keen to participate in future online discussions. An example of their quote is:

> *It's the best strategy because we have normal tutorial in the class, we just focus in the class and the time is limited for us to generate ideas. In the online discussion, whenever we have new ideas, we can go online and post the messages (NM) (Note: names used are pseudonyms).*

- Use of the "Starter-Wrapper" Technique

The students found the "starter-wrapper" technique useful for them. Two students found it has encouraged them to generate new ideas during the discussions. One student found it helped to guide his thinking, while another student felt it encouraged the group to take on more responsibility for their learning when undertaking the roles of starter, wrapper and group members during the online discussion. An example is:

> *The starter-wrapper technique is useful because there is someone to start the online discussion then those who don't know how to start the discussion will join in the discussion. I don't know how to make a first move but someone will help and guide me. The wrapper will provide the conclusion for all the discussion (FYA).*

- Knowledge Construction

Students generally felt that the online discussions were effective in improving their learning, specifically in allowing them to exchange their knowledge and improving their understanding. Five students found they obtained new ideas, while four found it useful to read others' opinions. Two students mentioned they learned how to think during the online discussions while another two students gained new knowledge by asking questions from their lecturer and peers. One student found the discussions helped her to keep up with what she had missed from the face-to-face lectures. An example of excerpt from this theme:

> *Yes, the online discussion improves my understanding. I get different knowledge about topics (exchange knowledge) and understand more about the Cognitive Psychology subject. Another one is we learn how to think when we give our explanation instead of just reading everything (AA).*

- Collaboration

Students also found the discussions effective in helping them collaborate with one another, in obtaining feedback from one another, in building relationships and in motivating them to participate and learn more. Five students mentioned that the positive relationship amongst their peers helped them to understand the topic better, while another two were grateful for feedback from others. One student felt there was teamwork among the members in order to answer the given questions:

> *I'm able to learn a lot and interact with each other...Basically; we do not know each other since we are from different program. So we have to know each other in the online discussion. I can know my group members better and have not much fear with anyone. There are better interaction and communication in the online discussion because in the class we don't really get to know and discuss with each other except for those we already know. I can get my feedback and exchange knowledge from others which make the online discussion more fun and interaction. This motivates me to join the online discussion (FYA).*

Table 3 shows the total number of online postings in the 2-week period (145 postings in total). Phase I had the most online postings with 80 postings in online discussion while Phase V had the fewest online posting with only 4 online postings. Additionally the group that posted the most number of online postings was Group 3 with a total of 47 online postings.

Table 3
Content Analyses of the Online Discussions

Group	Number of members	Phase I	II	III	IV	V	Total
1	6	21	8	8	1	2	40
2	6	17	2	4	2	1	26
3	7	28	6	10	3	0	47
4	7	14	6	10	1	1	32
Total		80	22	32	7	4	145

The contents of the online discussion indicated that the students were active in Phases I, II and III. This implies that interaction and collaboration had successfully occurred as students shared and negotiated the ideas to construct their knowledge during the online discussion. However, the lack of postings for Phases IV and V might be due to the limited time allocated for the discussions to occur. Since students were mostly from other faculties and came from different backgrounds, they still needed time to fully grasp the basic concepts in the course. However we were quite pleased to see phases I, II and III levels of knowledge construction being demonstrated so evidently in the light of the nature of the course being a introductory course on the subject.

An illustration of the knowledge construction process is taken from the transcript of discussions from Group 1. The language used in the discussions was a combination of English and Bahasa Malaysia. The sequence of question asking shows how learning could be fostered to guide students LL and CHY to gain a higher level of understanding.

> *...CHY, I can't understand question number 1, the element that is stated in article can help the brain to function better from a cognitive/biological/psychological aspect? What is that? Could you explain to me? (LL)*
>
> *Hi!! I also don't know really what is meaning of this. But as I understand our brain works differently when we are doing different activities. For example from the cognitive side its probably what we are thinking about daily. Biologically means our brain function whether we're using the right or left side more or both. Psychologically means when we move or doing sports. That what I understand. Maybe we should ask the INSTRUCTOR. I am not an expert at this. Help other members! (CHY)*
>
> *... LL & CHY - There are some benefits of going shopping that is mentioned in the article. Can you identify them? Good try CHY to answer LL's questions. Yes you are right. "Cognitive" merujuk kepada... Contohnya, dari segi biological... does this help you understand the article better? (INSTRUCTOR)*
>
> *'Staying physically active, challenging the brain and maintaining a positive self-image'. This happens during shopping time, right? And LL, and INSTRUCTOR has given an answer to our question. I hope we can understand now. Where is the rest? We have discovered new things here. I also found out that... I have read one article about travelling. I never thought that travel is a good activity besides shopping. We gain a lot of experiences and knowledge about other country... So, what other activities are you all thinking about? Come and share it... (CHY)*

The sequence of these quotes shows the learning process in this group's discussion. The first quote shows that LL did not understand question 1 of the online discussion. Therefore, she asked CHY to explain to her. CHY replied and tried to answer LL's question. However, CHY herself also wanted to know more about the answer. Therefore, she asked the lecturer for clarification. This was a Phase I posting. When the lecturer replied to CHY by pointing her to the definitions and examples, CHY was enlightened and shared this knowledge with LL. Her posting showed that she understood more about the question after receiving help from the instructor (a Phase III posting). CHY, as the starter of the group, also asked for other peers' opinions in order to motivate them to interact. She also shared her understanding from other resources to relate them to the topic discussed. The initial question posed by LL had led to the scaffolding of interactions that were important to the students' learning process and to guide them to a higher level of understanding.

- Challenges

Although students found the online discussions useful to their learning, they also experienced some challenges which hindered them from participating fully in the discussions. These include the fact that it was inconvenient to find enough computers to use, inadequate knowledge of using the online system, and, problems with the server on campus. At least three students had to go to nearby cybercafés to access the online system. Another student was frustrated that the computer lab in her faculty was only opened during office hours while another student mentioned that the computers in her faculty's computer lab frequently broke down. Two other students mentioned that it was difficult at the beginning to participate because they were not familiar with the online system, while another two students mentioned that the computer servers were frequently down, hence hindering any online access:

> *It's quite difficult to find a computer because my faculty lab normally got classes and there is only one [computer] lab in my faculty (AA).*

Implications

The findings from this study showed that the use of social constructivist learning principles in the activities of an online class was effective for students' learning. Specifically, participating in the online discussions developed their ability to construct knowledge, to think critically and to communicate their ideas more effectively with one another as they collaborated to discuss opinions and answer the given questions. The "starter-wrapper" technique was able to foster collaborative learning by encouraging students to be more responsible for their own and their group's learning and motivated them to want to continue learning from one another online. It also structured useful scaffolded interactions among the students to lead to knowledge construction and deeper levels of understanding of the topic discussed.

However, some challenges which affected students' participation in the online discussions were a lack of computers, technical problems when trying to access the online system and an inadequate knowledge of using the online discussion system despite the initial training provided. These factors can frustrate and hinder students' attempts to interact online and potentially lead to a failure of learning and knowledge construction among them.

Using pedagogically sound asynchronous online discussions allow students to participate more responsibly in the learning process at a place and time of their convenience. A sound pedagogical framework guiding one's teaching is not only necessary in face-to-face lectures but even more imperative in the technologically-oriented environment of online teaching and learning. The study also demonstrates that we can bring about important and meaningful changes in our students' learning when we consider very carefully the integration of pedagogy and technological tools. Although the current staff promotion exercise in UNIMAS to recognise online teaching efforts as a step forward, more still needs to be done to acknowledge and encourage busy lecturers who not only have to attend to a myriad of teaching but research, supervision, consultancy and administrative duties to engage effectively and productively in good online teaching and learning practices. This is to ensure we walk the talk when it comes to providing quality teaching and learning services to our students. In the context of online learning, the student's quote at the beginning of the article clearly illustrates that such services and practices go beyond the introduction of technical bells and whistles.

References

Atherton, J. S. (2005). Learning and teaching: Constructivism in learning. Learning and Teaching. Retrieved September 12, 2005, from http://www.learningandteaching.info/learning/constructivism.htm

Fitri Suraya Mohamad (2003). High tech in higher ed: How e-learning works in Unimas. InSite: Teaching & Learning Bulletin Volume 1. Retrieved September 6, 2005, from http://www.unimas.my/centres/calm/insite1/pagehow.html

Fischer, G. (2003). Learning Paradigms of the 21st Century: New mindsets, new cultures, and new media for learning. Paper presented at a talk at University of Waikato, May 2003.

Hara, N., Bonk, C.J., & Angeli, C. (1998). Content analysis of online discussion in an applied educational psychology. Center for Research on Learning and Technology. Retrieved October 21, 2005, from http://www.crlt.indiana.edu/publications/techreport.pdf

Hong, K.S., Lai, K.W., & Holton, D. (2003). Students' satisfaction and perceived learning with a web-based course. Educational Technology & Society, 6(1), 2003. Retrieved September 11, 2005, from http://www.ifets.info/journals/6_1/hong.pdf

Kanuka, H., & Anderson, T. (1998). Online social interchange, discord, and knowledge construction. Journal of Distance Education, 13(1), 57-74. Retrieved July 30, 2005, from http://cade.athabascau.ca/vol13.1/kanuka.html

Ling, T.Y. (2003). E-learning under the microscope: The experience of FRST. InSite: Teaching & Learning Bulletin Volume 1. Retrieved September 6, 2005, from http://www.unimas.my/centres/calm/insite1/pagefsts.html

Murphy, K.L., & Gazi, Y. (2000, June). Role plays, panel discussions, and simulations: Project-based learning in a web-based course. Paper presented at the 12th Educational Multimedia, Hypermedia & Telecommunication (ED-MEDIA) World Conference. Montréal, Canada.

Oliver, R., & Herrington, J. (2000). Using situated learning as a design strategy for web-based learning. In B. Abbey (Ed.), Instructional and cognitive impacts of web-based education (pp. 178-191). Hershey, P.A.: Idea Publishing group.

Wee, A. Y. (2003). Stay ahead of the herd: Maximizing e-learning at FCSIT. InSite: Teaching & Learning Bulletin Volume 1. Retrieved September 6, 2005, from http://www.unimas.my/centres/calm/insite1/pagefcsit.html

Wilson, G., & Stacey, E. (2004). Online interaction impacts on learning: Teaching the teachers to teach online. Australian Journal of Educational Technology, 20(1), 33-48. Retrieved September 11, 2005, from http://www.ascilite.org.au/ajet/ajet20/wilson.html

Yates, R. (2001). Constructivism and social learning theory. Social learning theory. Retrieved September 12, 2005, from http://www.nova.edu/~russelly/slearnconstruct.html

My stint at USF UNIVERSITY OF SOUTH FLORIDA

text • inspiration
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I spent a semester at the University of South Florida (USF) in the Fall of 2006. I went under the staff exchange programme with USF and was hosted by the Department of Anthropology in the College of Arts and Sciences. I taught a graduate class and in return, I audited two graduate classes and one undergraduate class. As a visiting scholar, I was also invited to give a talk at the university-wide interdisciplinary colloquia organized by the Department of Women's Studies.

The semester at USF has been an interesting experience for me. For one thing, I was very impressed by the range of courses offered both at the graduate and undergraduate levels. The quality of graduate courses offered by the Department of Anthropology and Women's Studies were also very high. I offered a course called "Gender and Development in Southeast Asia" and had eight students (2 Ph.Ds, 3 Masters and 3 Final Year students) in my class. At first, I thought the course would not run because of such a small number but I was told that it was a credible size for a graduate class. The other graduate classes that I audited were also of a similar size. The undergraduate class that I attended had over 20 students. This is not to say that small classes are the norm. Apparently, one undergraduate class entitled "Life After Death" was so popular that it had hundreds of students!

I thoroughly enjoyed the class that I taught and the classes that I attended. We had very good discussions because of the small numbers. Students were vocal, prepared to challenge a point of view and gave creative presentations. In the main, the teaching methods that I encountered were conventional although I heard from colleagues that plans are afoot in USF to reform this. Increasingly in the United States, universities are paying attention to good teaching. In other words, it is not just about what is being taught but how it is being taught. Harvard University, for instance has made proposals to foster a more collegial teaching culture where Faculty members share course materials, greater visibility for excellent teaching methods and linking teaching achievements to salary adjustments and career advancement. In USF, there is an excellent teaching award (monetary prize) as an incentive to teach well. As in all things American, you nominate yourself. You include in the nomination, complete data on all undergraduate classes taught, student evaluations/scores and any document which demonstrates good teaching. Emphasis is given to active learning which includes discussion groups, projects outside the classroom and such like. For instance, in the undergraduate class called "Women's Spiritual Memoirs" that I audited, we went to the university's botanical garden for contemplative practice. We watched videos and had interesting book discussions. In fact, that course was the highlight of my visit at USF.

In addition, USF wants all courses to include critical thinking and inquiry-based learning elements in the next year or two. Apparently, a study of graduating students found that they could not write, could not find things out for themselves and could not make intelligent judgements. Thus, the new buzz words are critical thinking and active learning. As a visiting scholar, I was not involved in all these deliberations and only learnt of them from talking with colleagues.

I have to say that my estimation of the graduate school system in the United States has gone up after my stint at USF. The students are very well taught as half of their credit requirements come from courses which they take. The thesis committee of a doctoral candidate for instance, also provides questions which guide her/his literature review prior to field-work. The candidate is given ten weeks to complete long papers for each of the questions. The idea is that these become part of the thesis. In contrast to this, Ph.D students under the British system are basically self-taught! However, one aspect which disturbs me is the hyper-inflation of marks. 79 marks and below is a Fail for graduate students and 69 marks and below is a Fail for undergraduate students. As far as I am concerned, a poor mark there is an excellent mark here! The Department of Anthropology in USF has about 100 graduate students and about 60 per cent actually complete their studies. This is in contrast to Australia where the completion rate of doctoral students was a mere 13 per cent in the late 1990s.

Spending a semester in USF has been an interesting and fruitful experience for me and I would encourage others to do likewise. It may not be in USF but the benefits accrue would be similarly useful. Being a visiting scholar has been a shot in the arm – it has boosted my confidence to know that I am current in my field. In addition, attending interesting classes has expanded my horizon and I've learnt how things are done differently not only in another university but also in another country.

TWENTY TIPS TO MORE PARTICIPATORY

text • inspiration
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1 Beginning the lecture (or course)

Begin the course or the lecture with a question or questions which help you to understand what students are thinking, e.g. "What are some of the differences between clinical medicine and public health?" "How do we interpret medical research findings? For example, the response rate for one regimen is 23% and another treatment showed a 40% response rate. How can we interpret these numbers? What other information would we want to know?" "What would be a feminist perspective on contraceptive research?" "What are some examples of marginalized populations?" "What image do you have of people who have HIV or AIDS?"

2

Begin the course or the lecture by posing a problem and eliciting several answers or solutions from the students. The lecture can then go on to explore and build on the suggestions that emerge from the discussion. For example: "When you think about the definition of epidemiology, what possible applications of this methodology come to mind?" "What are some underlying biological factors for poor health status?" "What are some reasons people may not have health insurance?"

3

An interesting way to introduce topics you will cover in a course and to find out students' assumptions is to ask students to jot down answers to some questions on their own and then combine answers in a small group. Examples from a pre-course survey: "--List up to 10 major environmental disasters. --Name up to 10 health disorders in which environmental agents are causative; list the 10 etiologic agents. --Identify up to 10 national (U.S. or other) environmental laws and the problems they address. --Identify the kinds of data needed to characterize an environmental health hazard. --List the steps in quantitative risk assessment. Which steps require both epidemiology and biostatistics."

4 Inviting participation

Create an atmosphere that encourages student participation by using a conversational tone and not criticizing students' questions or comments in front of the class. Students take a risk when they talk; you need to deal tactfully with their contributions. Your body language -- whether you hold yourself in a stiff or relaxed manner -- also influences student participation. Consider moving closer to the students rather than speaking from behind the podium. Explain your reasons for varying the traditional lecture style. Students more willingly participate in class if they understand the rationale behind an approach that may be unfamiliar.

5

If you want students to talk, look at them. Some teachers call on students. (Some teachers never call on students -- this is a matter of strong personal preference.) Asking students to speak in class is easier to do if they use name cards or if you have learned their names. This will encourage them to use each others' names as well; people are more likely to talk when they know each other. Some students will be too shy to speak in a large group, at least at first. If speaking in class is the norm and everyone is expected to do it, you can call on everyone in good faith (perhaps calling on better prepared --and bolder--students first, and asking easier questions later of the quieter students).

6

Invite challenges to your ideas. This can lead to lively debates and shows that students are thinking and engaging with the material. Also, invite questions. You may have to help students new to a field know how to challenge or question. One way to do this is to present different points of view on any given topic, and then state why you believe a certain view best accounts for the evidence. Decide whether you are comfortable with interruptions or whether you want to have a question time at the end.

7

When a student asks a question, instead of answering yourself, ask for an answer from other members of the class. In a large group, always repeat a question or paraphrase a response before going on, so that all students can hear and understand.

8 Punctuating the lecture with questions

Ask questions throughout the lecture, so that the lecture becomes more of a conversation. Asking students to raise their hands (for example, "What is the direction of the data: increasing? decreasing?") is easier than asking them to speak. Questions with surprising answers can engage students' interest (for example, "What is the probability that two people in this room have the same birthday?") Generally, questions are more evocative if you are not looking for one right answer. The most fruitful questions are thought-provoking and, often, counterintuitive. For example, when comparing health indicators of different countries, ask students to guess where the U.S. or their country of origin ranks. Discuss the link between socioeconomic status and health; ask students to predict changes over time. For example, "Do you think it has gotten better or worse in your country over the last twenty years?"

9

Pause in the lecture after making a major point. Show students a multiple-choice question based on the material you have been talking about. (Example: "If the incidence rate of tuberculosis (TB) increased

TIPS

due to an increase in immunocompromised AIDS patients, but the duration of tuberculosis infections remained the same, the prevalence of TB would a) increase, b) decrease, or c) not change.") Ask students to vote on the right answer, and then turn to their neighbors to persuade them of the answer within the space of two minutes (talking to a few people is easier than speaking up in a large group). When time is up, ask them to vote a second time. Usually far more students arrive at the correct answer when voting the second time.

10 If readings have been assigned for a class, refer to them so their purpose is clear. You may ask questions about the readings from time to time; individuals or groups might be asked ahead of time to prepare short presentations of their interpretations of the readings.

O MAKE LECTURES ICIPATORY

11 When using slides, maps, or handouts, ask students what they see before you tell them what you see. Use these devices to help students think about a problem as you introduce it. For example, show a map of where cases occurred during an epidemic. Ask the students, "As an investigator of the outbreak, what questions might you want to ask?" Show a table of data about a country (birth rate, death rate, population, per cent of population with heart disease, number of nurses per capita, money spent on health per capita, G.N.P., etc.) Ask, "What do these data tell us? Where would you begin to explore? What kinds of questions could we answer and how?"

12 **Varying the format**

To vary the traditional lecture format, ask students, by section, to make presentations, do role plays, illustrate a position dramatically, debate a point. Or, ask TAs to give short presentations on areas of their expertise. Then invite the whole class to discuss the points illustrated.

13 For debates in a large group, divide the room into two or four groups, assigning one role or position to each group. Have the groups caucus separately to develop their positions before the debate begins. For example, in discussing the positive and negative aspects of a policy approach or community health intervention, divide the room in half for split brainstorming sessions; one group focusing on the positive and the other focusing on the negative. If there is time, have the groups switch positions. Or use the format of public hearings, with one group representing those who have called the hearings, and other groups representing the different protagonists.

14 Use cases to exemplify the issues you want to convey, and conduct the class as a case discussion rather than as a lecture. Cases are particularly useful for practical, how-to teaching situations; for problem-solving or showing how experts solve problems; for situations in which there are a number of right answers; for integrating and applying complex information. In public health, cases can demonstrate policy and management problems, stimulate discussion of various ethical issues in health care, or provide realistic examples of the application of theory and particular methodologies of health care practice.

15 Stop the lecture and ask students to write for one or two minutes in response to a particular question. Then ask them to discuss the question. The writing will give everyone a chance to think about and articulate a response, and may enable broader participation.

16 Let students go to the board to write the results of work in a small group. For example, in the first part of class ask for the strengths and weaknesses of an intervention study. Then divide the room into groups, each with the task of designing a better study with the same exposure and outcome. Groups can go to the board (preferable to asking one student at a time to be at the front of the room) and a spokesperson can present the group's ideas.

17 **Closing the lecture**

Allow time for questions at the end of lecture. Ask if there are any questions or if students would like to have a point clarified. If your schedule permits, come early to lecture or stay late to answer questions and engage in discussion with students. If you are available five or ten minutes before and after class, some students will talk with you more readily, and you will get to know them and their thoughts. If beginning early and ending late creates a conflict for other colleagues assigned to lecture in the same room, talk with students in the halls before and after class.

18 Use lectures to set up problems or propose study questions for discussion that students are expected to prepare for lab or section. End the lecture with a provocative question. Ask the TAs to begin lab with a discussion of that problem or issue.

19 At the end of your lecture, or at any other appropriate stopping point, give students a one-question "quiz," based on the material just covered in the class. Ask them to answer the question collectively. Leave the room so that they can discuss the question for ten or fifteen minutes. Then return and have them report their answer; discuss with them the reasons for their choice.

20 Do a one-minute paper at the end of class. In this exercise, students write down what they consider (a) the main point of the class and (b) the main question they still have as they leave. You can use some of these questions to begin the next lecture, or students can be asked to bring them to section or lab. One advantage of this technique is that students may listen more carefully and review their notes thoughtfully.

All the best !

Adapted from Participatory Lectures, Derek Bok Center for Teaching and Learning, 1992.

PGDTL's Convocation . 1 December 2006

//HAPPENINGS

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