

Using IT Tools in Teaching— IVLE, Webcast Lectures and PowerPoint

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Over the years, the Computer Centre, the Centre for Development of Teaching and Learning and the Centre for Instructional Technology have been promoting and facilitating the use of IT in teaching at NUS. Today, IT tools like the IVLE, webcast lectures and PowerPoint presentations are commonly used among NUS lecturers. In this article, I shall give some personal views on how to use these IT tools effectively in teaching.

Integrated Virtual Learning Environment (IVLE)

The ‘discussion forum’ is an IVLE tool commonly used by NUS lecturers. Many create a discussion forum on the IVLE for their modules because it is easy to create and good to have one. However, few lecturers actually make full use of the forum. After creating a forum, most lecturers leave students to interact by themselves and never visit it again. I think it is good practice for lecturers or tutors to be present

in the forum and interact with students. Lecturers may also use the forum to post additional problems for students to discuss. Even if a lecturer does not want to interfere with students’ discussion, he is responsible for monitoring students’ discussion as the forum’s ‘creator’. Occasionally, some students may post undesirable remarks and the lecturer should step in to remind these students about the ‘rules of engagement’ or exercise some censorship.

Conversely, there are also lecturers who respond almost instantaneously to questions students post on the forum. Such a practice may discourage other students from contributing to the discussion because the ‘authority’ has already given the answers. Such forums soon turn into a Q & A platform which defeats the very purpose of having a forum in the first place.

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**CDTL NEWS/
FROM THE FACULTIES**

‘Assessment’ and ‘survey’, are excellent IVLE tools that can be used to create assessments and surveys to supplement our teaching. However, the two tools are less frequently used because performing these tasks with the tools is time consuming.

The IVLE’s ‘assessment’ tool can be used to design simple self-assessment quizzes for students to check their progress and understanding. Lecturers can also use the tool to design graded quizzes as summative assessments. Though it is time consuming to create questions using the ‘assessment’ tool, it is easy to generate and analyse results of the assessments. Furthermore, the questions can be saved in the tool’s question bank for future online quizzes.

The ‘survey’ tool in IVLE can be used to create customised questionnaires throughout the semester to supplement the student evaluation exercise done at the end of each semester. Customised questionnaires allow the lecturer to gather feedback from students on specific areas and make necessary adjustments to either the curriculum or his/her teaching. Like the assessment tool, there is also a question bank in the ‘survey’ tool that makes the process of creating future online surveys less time-consuming as the questions can be retrieved and reused.

Webcast Lectures

Webcast lectures can enhance student learning, especially in large classes. They not only allow students who have missed a lecture the opportunity to catch up but also permits others, especially slower learners, to review difficult concepts.

However, many lecturers do not like to webcast their lectures. Some have the misconception that doing a webcast recording is a complicated and tedious process while others do not feel comfortable teaching in front of a video camera. These concerns are unfounded. In fact, the lecturer just needs to lecture as usual and let the IT staff take care of the technical part. The video camera is hardly noticeable as it is operated from a separate technical room.

Then there are lecturers who do not like what they say to be recorded. If it was something that should not be said, then the lecturer should not have said it all. Even if the lecture was not recorded for webcast, students can always use their own recording devices (e.g. hand phones, personal digital assistants [PDAs]) to capture what a lecturer says and does in the classroom. Other

than IVLE, there are many channels for recorded videos to be published on the Internet.

A more valid concern is that webcasting lectures will affect class attendance. If that were to happen as a result of the webcast, it proves that the lecturer has done a good job. He should not worry too much about low attendance as long as students are still following his lectures through a different channel. A lecturer will have reason to be concerned if class attendance dropped even though he does not webcast his lectures. To encourage students to attend lectures, the lecturer can incorporate activities into their lectures that cannot be replaced by viewing the recorded lectures.

PowerPoint Presentation

In order to do a good webcast lecture, it is necessary to use PowerPoint or similar software for classroom presentation. However, many lecturers think PowerPoint is only good for presenting information in point form, and cannot be used to deliver detailed information. These lecturers only see the ‘point’ but not the ‘power’ of the software.

To use PowerPoint effectively, one needs to make good use of the animation features. Incorporating animation into PowerPoint slides adds flair to presentation and makes students more attentive in class. Instead of delivering the content in a straight forward manner, graphics, movies, web links and other multimedia objects can be included to enhance the presentation and help students visualise difficult concepts.

However, incorporating animation into a PowerPoint presentation is time consuming. Though it is possible to get someone to help put a presentation together, it would be better if the lecturer can work on the content and animation himself. In my opinion, the content and animation are all part of a presentation

Concluding Remarks

The IVLE, webcast lectures and PowerPoint are just some IT tools amongst many that can be used to supplement our teaching. It is important to choose the right tools to do the right job. This, and the question of how we should make full use of IT tools to make our teaching more effective, require serious thinking and careful planning. ■

To Debate or Not to Debate: Facilitating Active Learning in a Postgraduate Information Systems Module

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Introduction

In the last decade, there has been a great deal of interest in active learning in higher education. In this form of learning, students are actively engaged by taking responsibility for their own learning while faculty members act as facilitators. Strategies for active learning include making presentations, brainstorming, role-playing and engaging in debates or round table discussion among others. Active learning can result in increased student participation, development of critical thinking skills and a deeper understanding of the subject. However, misconceptions and the costs of implementing active learning techniques deter faculty members from adopting these methods in their classrooms.

Among these techniques, classroom debates have been used mainly in humanities courses. However, after considering the potential benefits of active learning, I decided to experiment with incorporating debates into a postgraduate information systems module that I teach, “Electronic Government”. This article describes how the experiment turned out.

“Electronic Government” is an evening module for part-time students. Most students taking the module are working adults who are tired after a full day at work. I envisaged that incorporating such an interactive element into the lectures would engage students in learning the subject matter actively and achieve better learning outcomes. Further, classroom debates seemed appropriate because the module involved some issues that were not clear-cut and hence, could potentially be clarified through debates.

Procedure

A week before a particular topic was to be discussed, students were posed a debate question dealing with an important issue related to the topic. To start them off, I gave students either a research or practice paper to read, though they were expected to explore the issue further by themselves. Four students were assigned to support the issue, while another four would speak against it. Students were assigned to the debate teams by their roll order instead of their project teams. This allowed them to interact with students other than those in their project teams.

The debate was designed to take place halfway through the class duration. For the debates, students were

encouraged to use examples from their own work experience to support their points. I served as the moderator to keep time and to make sure that we were not digressing. Finally, a scribe was designated to note down the discussion and post it on the module’s IVLE discussion forum for the rest of the class.

Findings and Conclusion

I conducted a student survey at the end of the course to evaluate the technique. Students indicated that the debates helped them in self-learning, learning from others in their groups, and thinking critically about the subject. Particularly, the debates helped students approach the subject with open minds by considering both sides of an issue. However, students did not find the debates useful in honing their communication skills because they had other means (e.g. class presentations) to develop these skills. Overall, students rated debates as a fun learning experience and did not want them to be replaced by lectures!

The only drawback was that students sometimes took the criticisms somewhat personally during debates and reacted negatively when their viewpoints were challenged. Students also suggested some changes such as having longer debates, providing a summary of both sides of the argument, and keeping to their project teams for debates. I discussed the feedback with students and came to the conclusion that it would be difficult to have longer debates as that would mean insufficient time to discuss the remaining course material. The feedback on providing a summary was incorporated into the subsequent offering of the course. Since working students found it difficult to meet up with students other than their project team members outside class hours, their suggestion to keep to the same teams was also implemented.

Overall, I felt that the extra effort I put in to design and implement the debates was worthwhile. Apart from the positive learning outcomes, I enjoyed the additional discussions stimulated by the debates, though I did have to act as a peacekeeper when the sessions became too heated! I would definitely continue to incorporate debates into my lectures and recommend the activity to other faculty members. Apart from students’ suggestions, I have thought of other refinements to the debate format with which I would like to experiment in future offerings of the module. ■

The Community Health Project— Lessons from Large Group Project Work

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The Community Health Project

The undergraduate medical curriculum in the Yong Loo Lin School of Medicine is a five-year course. In the third year, medical students are posted to the Department of Community, Occupational and Family Medicine for a four-week module—“Community Health Project” (CHP). The primary objective of CHP is to give students an opportunity to conduct a study within a defined community so that factors relevant to an important health problem can be described and assessed.

Dividing the Work

A faculty member divides students into six groups, each of about 40 students. At the end of the project, each group gives a 45-minute presentation of its findings to the class, academic staff and invited guests to showcase its work. The group also submits its findings to a scientific report that closely follows the submission format required of a scientific journal.

When a large group is involved in a multifaceted task, it is inevitable that work will not be distributed equally. In our experience, we have learnt some useful pointers about group work and they are:

1. Accept that the division of work will not be equal

It is not possible or practical to have everyone contributing an equal share in a large group. Often, work distribution in a big group will follow a bell-shaped distribution (see Figure 1). While the supervisor tries hard to ensure that most of the work is distributed equally among students, some will either by choice or nomination, take up leadership or administrative roles and spend more time on the project. There will be a minority who seemingly contributes less due to reasons or excuses which may be genuine or otherwise. As supervisors, we explain to the groups at the beginning that grades awarded to individual students will correspond with the distribution of work.

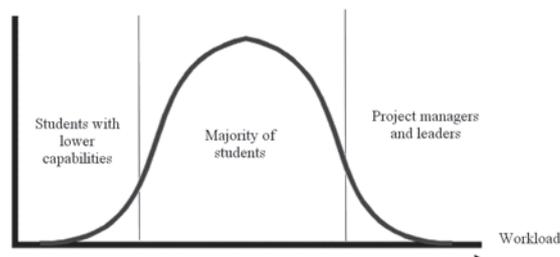


Figure 1

2. Define the essential and elective learning tasks

In a complex project involving a diverse range of tasks, the supervisor should define essential tasks that all students should do for their learning. Since the CHP's primary objective is for students to learn about an important health problem in a community, it is imperative that they go out and conduct interviews with participants in the selected community. All students are also required to perform literature reviews and contribute to group discussions on data interpretation and forming of conclusions. In addition, the supervisor should spell out a list of elective tasks (e.g. data analysis, making presentations and manuscript writing) from which students can choose. Defining the essential and elective learning tasks allows students to divide the latter among themselves and ensures that students achieve minimum learning through performing the essential tasks.

3. Sometimes students need to be appointed

In a large group, students may feel shy about volunteering for leadership or public speaking roles though they are best suited for these tasks. When this happens, the supervisor may need to help identify suitable students in the group and gently persuade them to take up these roles.

4. Reward the hard-working students

Finally, it is important to reward the hard-working students not just with better grades. As student leaders spend more time with tutors, we often end up mentoring these students long after the CHP is over. Since learning often happens through apprenticeship in medicine, students benefit from the extra time they spent with the tutors.

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45 Years of Lecturing and It Is Time to Stop—Reflections of an Erstwhile Dean*



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My experience of university teaching began 45 years ago when I began my undergraduate degree. ‘Advanced’ technology then consisted of dustless chalk. I recollect that first year lectures were given by full professors and were supported by small group tutorials. Slide and film projectors certainly existed but were rarely used; sound recording was possible but machines were large and bulky and lectures were never recorded. Television was in its infancy and video recording was still incubating in the research lab. Overhead projectors came later. Since there were no electronic calculators, we used slide rules and log tables. There were also no personal computers or the Internet, and we searched for literature using abstracting journals or card indexes.

My time in universities has been a period of massive growth in the availability of new technologies for teaching and learning. We now have video recordings, DVDs, personal computers, the Internet, Google and email. Lectures can be recorded and rerun at home. Information on any topic can be found almost instantaneously. With such advanced technology, why are we still lecturing? Is it an effective technique for facilitating learning in comparison to what is available?

My discipline is engineering and there are challenging concepts particularly in the early years. Often, only a few students truly understand the lectures as they are presented; most students merely use the lectures to acquire content which may be better understood later through private study, collaborative learning or small group learning activities. My observation is that most lecturing in engineering faculties these days is mere content delivery. Inspiration and explanation—two good reasons for lecturing—are rare and have

become increasingly so with the advent of certain technologies.

In my view, we have gone backwards to when it was possible to photocopy typescript onto overhead transparencies. Though legibility has improved markedly, spontaneity and engagement with students declined. Things got worse with PowerPoint; there are now fewer words per frame. Thus students’ attention is drawn towards the visual and they fail to listen to what is being said. This being the case, why not deliver the content in some other ways, for example, through a personal computer (PC)? Students can then choose when they receive the content and the faculty member is not tied to a lecture schedule. The time saved could be used to address difficult concepts in small group classes. I know many lecturers will argue that they use PowerPoint to sustain interactivity (this can be done using tablet PCs as blackboards), however it rarely happens. Currently, lecturing as a system of content delivery (in undergraduate engineering and the physical sciences at least) is imperfect and inefficient.

In my own experience, I became aware of alternatives some 15 years ago when I became responsible for some distance education undergraduate programmes. In those days, remotely located students had textbooks, a collection of selected readings and most importantly, a study guide prepared by skilled instructional designers in collaboration with the faculty member. Together, these people made the text and readings come alive by highlighting key points and prompting for student response. These days, such guided learning can be done more efficiently using the Internet or, preferably, a platform such as the Integrated Virtual Learning Environment (IVLE) at NUS. A highlight of the distance education

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Helping ‘Slower’ Learners

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Slower learners have been described as “students with below average cognitive abilities and who struggle to cope with the traditional academic demands of the regular classroom” (Carroll, 2004). In this article however, I am not referring to students who lack cognitive abilities, have lower IQs and suffer from physical disabilities or attention deficit disorders. Rather, I am referring to those who experience or display difficulties in keeping up with the pace of teaching and learning compared to the majority of students taking *my* modules (i.e. such slower learners may not be slow learners in *other* modules).

This article discusses the difficulties slower learners face in two law modules that I have been teaching at the Department of Real Estate, School of Design and Environment in Semesters 1 and 2 of Academic Year 2006/2007.

About the Modules

RE2180 “Fundamentals of Real Estate Law” is an essential module for second year real estate students while SSD1203 “Real Estate Development and Investment Law in Singapore”, a Singapore Studies (SS) module, is an elective open to students across faculties.

Students in RE2180 would already have taken a level 1 law module and possess some background knowledge of the law, but SSD1203 students may or may not have already completed a law module. Thus, RE2180 students are a relatively homogenous group with similar academic backgrounds, while SSD1203 comprises students from different levels, backgrounds and disciplines.

Detecting Students with Learning Difficulties

I observed that there was a segment of students who:

- i) Rarely volunteered or participated in tutorial discussions
- ii) Had difficulties expressing themselves and articulating arguments
- iii) Made no contributions to the discussion forum on IVLE despite this being assessed
- iv) Made frequent postings on discussion forum to seek clarification
- v) Sent me frequent personal emails mostly to clarify fundamental concepts, or
- vi) Sought clarifications on issues or topics which I had considered simple, or issues which I had already clarified and discussed at length during lecture or tutorial.

Reasons for Students’ Learning Difficulties

Informal student feedback confirmed that there was indeed a segment of slower learners in my modules. It is interesting to note that although the two modules comprised different cohort types (one relatively homogeneous and the other widely heterogeneous) some common issues emerged from feedback:

- **Limited English proficiency.** About 25% of each cohort comprised foreign students and English is the second language for the majority (90%). The other 75% is a mix of students for whom English language may not have been their best subject. My law modules are completely English language-based and they require students to have a sound command of English to articulate their thoughts and opinions on legal, ethical and social issues and concerns. In addition, the modules’ assessments require students to make legal argumentation and articulate their thoughts either orally or in writing. This compounded students’ learning difficulties.
- **Mixed abilities and multiple intelligences.** In accordance with the theory of multiple intelligences (Gardner, 2000), I found that students with a better aptitude for modules requiring numeracy skills (rather than linguistic skills) found the intricacies of legal argumentation confusing; they also found it difficult to accept that there are generally no ‘correct’ answers for legal case studies.
- **Poor motivation.** Some students taking RE2180 were unmotivated because it was an essential module and they did not have a choice. Others chose to do SSD1203 as it was the only Singapore Studies module that could fit into

their timetables. Another reason was that the modules' content was not really what students were expecting.

What Did I Do to Address the Above?

When teaching the modules (particularly the SS module), I often made references to specific buildings or places in Singapore which are the subject matter of legal disputes. Since many foreign students gave feedback that they were unfamiliar with local landmarks, I provided students with photographs and maps of the exact locations of the buildings, and encouraged students to visit these places. Such visual cues excited students to go and look at the physical building or area involved in a legal dispute and rendered the subject more real and closer to them.

Case-study questions in law modules usually ask students to discuss legal issues and advise clients on their legal rights and liabilities. Many students, particularly those in the SS module had no clue of how or where to begin answering such questions though they had understood the subject matter. Thus, I broke down complex questions into several parts, beginning from simpler questions to more conceptual ones to guide slower learners. This ensured that slower students would not feel overwhelmed or defeated even before attempting the questions.

At tutorials, I organised small group discussions to alternate between groups of students of similar abilities, and students of mixed abilities. In these groups, students were encouraged to take turns to speak, listen and refute assertions made by their peers. I also held one-to-one discussions with the slower learners to clarify their misconceptions and help build up their confidence.

Students were constantly encouraged to write their answers to tutorial as well as past examination questions as a form of practice and then email the answers to me. I offered students clear and concrete suggestions for improving their work and praised them for their efforts when they showed improvement.

So Did the Strategies Work?

A review of final examination results and formal end-of-semester anonymous qualitative feedback

revealed that students whom I had identified as slower learners, and who responded to my efforts to help them improve, did feel encouraged to face and overcome their difficulties.

Students who made consistent efforts to improve by consulting with me, showed a marked improvement in their understanding of the subject, confidence and performance. While students who had previously done law modules had an initial advantage during tutorials, students with no prior knowledge managed to level up as the module progressed. There appeared to be no correlation between the less vocal students and their overall examination grades due to the variety of assessment methods. However, students who were more proficient in English did achieve better grades.

Conclusion

Any cohort is likely to include students who can comprehend well and readily apply concepts to complex situations, students with difficulties decoding words and meaning or applying basic information, as well as students who fall somewhere between these two extremes (Tomlinson, 1995). In such a factual matrix, a one-size-fits-all instruction model makes little sense. This article has focused on why some students are slower, dealt with how they can be identified, and the strategies a teacher can put in place to help them. While it is unrealistic to expect all students to perform well, students *can* be motivated and encouraged to reach higher.

References

- Carroll, S.A. (2004) "'Slow Learners' in the Regular Classroom: A Handout for Teachers". In A.S. Canter & S.A. Carroll (Eds.), *Helping Children at Home and School: Handouts from Your School Psychologist*. <http://www.kupsplace.org/teach/slowlearner.html> (Last accessed: 15 November 2007).
- Gardner, H. (2000). *Intelligence Reframed: Multiple Intelligences for the 21st Century*. New York: Basic Books.
- Tomlinson, C.A. (1995). *How to Differentiate Instruction in Mixed-Ability Classrooms*. Alexandria, VA: Association for Supervision and Curriculum Development. ■

Announcement and Call for Papers

Frontiers

in Higher Education

CDTL will be organising its International Conference on Teaching and Learning in Higher Education on **3-5 December 2008**.

At this conference, new developments and improvements in various key areas in teaching and learning in higher education will be discussed.

We invite papers from students, administrators, teachers, alumni as well as stakeholders in the industries and government on the following topics:

- Integrative Learning
- Scholarship of Teaching
- Teaching Methodologies
- Assessment of Student Learning
- Theories of Learning
- Educational Management
- Technology for Learning

Summary papers (not exceeding 1,000 words) should be sent to the Conference Secretariat by email, fax, or post. Summary papers should clearly indicate the author's mailing address, email address, telephone and facsimile numbers. Please attach an abstract (not exceeding 300 words) and a brief CV (not exceeding 200 words) along with the summary paper.

We will especially be looking out for summaries that:

- Put forward claims, conclusions and/or research findings that are novel, interesting and/or significant; and
- Are supported by substantial justification.

The deadline for submission of abstract and summary papers is **1 March 2008**.

For more information, please visit the TLHE website at www.cdtl.nus.edu.sg/tlhe, or contact the Conference Secretariat at:

**Centre for Development of Teaching and Learning
National University of Singapore
Kent Ridge Crescent
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TLHE
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Teaching Enhancement Grant (TEG)

Teaching Enhancement Grant supports professional development activities or projects that lead to improvements in teaching. The grant aims to promote reflective and outcome-based teaching through active investigations into enhancing the quality of teaching, learning experience and learning outcomes at NUS. Entries are selected based on the benefits of the proposed projects, including how they will enhance the quality of teaching, students' learning experience and learning outcomes at NUS.

Of the nine faculty members who received the TEG in 2006, CDTL would like to congratulate the following who have completed their projects and submitted their final reports to CDTL:

Faculty Members	Projects	Faculties
Associate Professor Bilveer Singh	Enhancing Teaching and Learning Effectiveness in a Big Class	Faculty of Arts and Social Sciences
Associate Professor S K Panda	Mechatronics Mini Project	Faculty of Engineering
Associate Professor Victor Tan	Virtual Labs for First Year Calculus Modules	Faculty of Science
Dr Peter Alan, Todd	Using a Classroom Response System to Facilitate Quizzes, Activities and Games (QAG) in a Large Class Scenario	Faculty of Science
Professor Gopalakrishnakone, P	An Interactive Multimedia Module to Enhance Independent Learning in Dental and Medical Students	Yong Loo Lin School of Medicine
Dr Gerald Koh	Improving Ambulatory Teaching of Medical Students: Identifying Barriers to Acceptance of Student Presence During Medical Consultations from all Stakeholders	Yong Loo Lin School of Medicine

Calling All Writers

CDTL invites articles on any teaching and learning topic for the following two publications:

- *CDTLink* (700 words maximum per article; photos & illustrations in hard/digital copy are welcomed)
- *CDTL Brief* (text-only publication; 1,000 words maximum per article)

To submit articles for consideration or to obtain more information, please contact:

Teo Siok Tuan

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Teaching & Learning HIGHLIGHTS

School of Design and Environment

Teaching Seminar at Departments of Building and Real Estate on 6 November 2007

The speaker for this semester's teaching seminar was Professor John Glascock, Consulting Director of the Institute of Real Estate Studies at the Department of Real Estate, NUS and Grosvenor Professor of Real Estate Finance at the University of Cambridge. Professor Glascock, who has 32 years of experience in teaching in universities, gave a presentation on "Ten Keys to Successful Teaching".

One of the first things Professor Glascock mentioned was that students deserve respect from their teachers. Teachers could respect students by being fair to students and by teaching in a way that the material 'sticks'. To ensure the latter, Professor Glascock

recommended that teachers keep their teaching simple and straightforward and not over teach. Over teaching could hinder teachers from teaching properly and result in confused students. Another consequence of over teaching is that it leaves teachers with little time for research. Professor Glascock peppered his talk with various examples connected to the real world and visual aids (e.g. photographs, figures and other data) which he used to help students understand his material and 'make it stick'.

He also stressed that it was important for teachers to update their materials often say by reading a book in their areas of specialty at least three times a year, and visiting industry conferences to get 'the language' as well as cases and data. Professor Glascock reminded the participants that although teachers are familiar with the subject matter, it may take a while for students who are new to the subject to assimilate the material. Professor Glascock's presentation was followed by a Q & A session during which staff raised issues about approaches to adopt in teaching undergraduate and postgraduate students, and in supervising students' research. ■



Professor John Glascock delivering his presentation

The Community Health Project—Lessons from Large Group Project Work

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Conflict Management

In today's complex world, it takes more than professional knowledge and technical skills for medical graduates to succeed in their career. Thus, medical education needs to equip future doctors with communication and social skills that will enable them to work well with others in a wide range of social situations. The CHP encourages teamwork and collaborative learning. However, conflict may arise between individual students, student groups or with the tutor/supervisor. When this happens, tutors can utilise the resolution process as a positive experience that teaches students to solve the problem in steps, brainstorm for ideas and through effective communication and negotiation, create a final resolution that establishes mutual respect.

Managing Difficult Students

In a group of mature students, the majority often positively influences and checks difficult students. However, we do occasionally encounter difficult students and the following are some tips on how to manage them:

- The monopoliser (or the 'know-it-all' or 'dominator')

The first step in managing such a student is to determine whether he is the 'truly-know-it-all' or the 'thinks-he-knows-it-all'. Then, we will get the former to participate but not dominate the session and the latter to realise that he has gaps in his knowledge.

- The distracter (or the 'heckler')

If a student was hindering group learning, the tutor could try steering the group's discussion back to the material at hand. However, if he persisted, we suggest talking to the student privately to understand his motives and rebuke him tactfully if necessary.

- The cynic (or the 'challenger' or 'disrespector')

As tutors, we welcome criticism and comments. However, we have occasionally encountered students who are disrespectful to their colleagues and/or us and disregard constructive discussion. In such cases, we suggest reiterating the ground rules of mutual respect and courtesy or talk with the student on how his behaviour class impedes progress during the break or after the class.

- The non-participant (or the 'passive learner' or 'non-listener')

We first ask ourselves whether the student is not participating because of genuine learning problems (e.g. not understanding the material), shyness or a negative attitude. We would talk with the student with learning problems privately and suggest ways to help him catch up. If the student was shy, we would remind him that active participation is a ground rule. For a student with negative attitude, we would talk to him about our concerns and rebuke him if necessary.

Though being an enthusiastic, nurturing mentor with good facilitation skills is helpful in preventing difficult student behaviour, the following are also useful in group-building:

- Build cohesive groups

Well-formed and cohesive learning groups are often easier to manage because students influence one another positively. In building such groups, ensure that (1) the characteristics of members (e.g. gender, ethnicity, previous experience) are evenly distributed across groups, (2) students are accountable for the quality of their individual *and* group outputs (i.e. the group gets marks for both individual and group outputs), (3) students receive immediate and frequent feedback and (4) team assignments promote both learning *and* team development.

- Keep sub-groups small

We often forget that big groups can be broken down into smaller sub-groups. Healthy and friendly competition between sub-groups can promote intra-group cohesion, reduce non-participation and encourage quality work.

- Devise reward systems that recognise both individual and group success

Create grading systems that encourage and reward both individual and group outputs to encourage individuals to do their best without being inconsiderate towards other group members.

Conclusion

Conducting the CHP module has taught us many lessons in incorporating group work into our teaching. We hope that by sharing our experience, we can help colleagues to execute, manage and use group work effectively in their teaching. ■

The Art of Effective Executive Education



Prof Dr Kai-Alexander Schlevogt (D.Phil. Oxford)

Associate Professor of Management Practice

Department of Business Policy

Many executives love to learn for a life time, but dislike to be taught by a business-agnostic professor. Such peculiar preferences place distinctive demands on an instructor embarking on executive education. It is clearly not 'business as usual'. Teaching approaches that work well with university students may prove ineffective when used with executives. In light of these challenges, the instructor has to tailor his approach to the clients' needs by making conscious choices along three important dimensions.

Clarity versus Ambiguity

Many university professors are eager to imbue students with an inquisitive spirit. As a consequence, they tend to avoid black-and-white replies. Answers usually start with 'it depends' and include qualifiers such as 'usually' and 'likely'. At leading institutions such as the London School of Economics and Political Science (LSE), an instructor often encourages students to challenge him if they do not agree with his reasoning.

In contrast, many executives, who are used to corporate hierarchies, expect authority. They want clear directions and answers to their questions. Such thought patterns are particularly prevalent in Asia and in the German-speaking world, as well as among certain professions (e.g. engineering). Executives have instructor prototypes in their mind, which are the perceived traits that distinguish a strong teacher. If the instructor appears soft and fuzzy, he will be deemed weak by many executives. Frequent use of qualifiers may be seen as a sign of insecurity, and executives will think: "He is not an expert". If participants are to learn how to become comfortable with ambiguity—a key mindset in our rapidly changing world—the teacher should negotiate with the client a clear mandate to change the culture ahead of his assignment. In this case, he also needs to set the right expectations at the beginning of his class.

Experiments have shown that students tend to use rapid cognition. Judgments derived from watching a new teacher for two seconds in a silent video clip did not differ markedly from evaluations based on one semester of teaching. Given that most executive education programmes are significantly shorter than conventional degree courses, there is less time to change a negative first impression. To ensure a good start, educators, like doctors, should use orienting comments to structure the session (e.g. "First, I will debrief the Work Interest Schedule and then discuss how motifs change during a person's life").

Lecture versus Interaction

Many executives, who face a volatile business environment, are not used to sitting passively in a classroom. As a consequence, their academic attention-span is even shorter than that of university students in the Internet era. Thus, executive educators should use monotonous lectures as sparingly as possible. They will establish better rapport with managers if they give them ample opportunities to participate in the education spectacle.

Many professors use their stack of PowerPoint slides as a memorising and protective device. It helps them avoid interaction with participants, which they fear might reveal gaps in their knowledge. It surely takes courage to lead a discussion without the help of the computer, but participants will appreciate the experience. As a first step, instructors should decrease their dependence on machines and start to freely elaborate on core themes using a limited number of overhead transparencies. Those can be used more flexibly than full-fledged computer animated presentations, which automate the lecture to a large extent.

Ideally, managers should complete a number of questionnaires before the programme. The results can then be debriefed in plenary sessions. This way, participants can apply teaching contents to their situation. To complement the plenum, facilitators may be engaged to work with participants in small breakout groups. I also use many other tools, such as cases (including mini-cases), video clips, role plays, group exercises and simulations. My favourite is a clip from a movie with the actor Al Pacino, which I use to analyse effective leadership behaviour.

The quality of questions influences the outcome of the debate. To elicit rich responses, instructors must use open-ended inquiries frequently. Thus, they should start their questions with ‘what’, ‘how’ or ‘why’ and employ verbs such as ‘tell’, ‘describe’, ‘explain’ and ‘elaborate’. For example, instructors might say: “Please describe a situation when you were led effectively. How did it feel? Why was the leadership behaviour effective?” An executive educator must also be an active listener. He plays back responses to participants to ensure that he understood them correctly.

For executives, training means time off from work during which they expect to be entertained, too. Since they are used to word-class shows from various media, their expectations are very high. Some executive educators are veritable actors, screaming, weeping and hurling themselves on the ground. Even if such extravagance may be deemed inappropriate, instructors should still add drama and humour to their delivery.



Prof Dr Schlevogt engages senior corporate leaders

Theory versus Practice

University professors often start their lectures with definitions, then introduce theories and cite the empirical evidence. They love to recount debates among researchers, which illustrate many different angles. Executives, in contrast, do not care much about abstract theories and who said what. They are thirsty for concrete guru advice straight from the horse’s mouth, which will work for them. The content must be sufficiently practical so that they

can implement it on their next working day after the seminar.

To address this specific need, instructors should always focus on strategic issues that are of most concern to executives and make the content operational by outlining a framework with concrete action steps, summarised in a so-called killer chart. The recommendations must be simple, but not simplistic. Instructors should imagine they have to share their recommendations with clients during a 30-second elevator ride.



Prof Dr Schlevogt serving as Program Director of the Nestlé Global Leadership Program

Traditional professors should think twice before citing their own academic research, since it might not be sufficiently actionable. Referring to administrative work in the university as evidence of managerial experience will backfire. Executives will argue that their leadership challenges differ significantly from the chores of a university officer who operates in a relatively stable bureaucracy. To compensate for the shortcoming, academics may use their sabbatical and other opportunities to function as ‘professors in residence’ in corporations.

Effective guidance does not stop in the classroom. For executives, training is a rare chance to step back and discuss their challenges with an outsider in a risk-free environment. Educators should therefore devote time during breaks to listen to the problems of participants and engage in what I call ‘speed counselling’.

Educating executives is the litmus test of teaching effectiveness. The instructor must project authority and confidence, engage his audience in an entertaining fashion and offer practical advice. In many aspects, it is more an art, which relies on tacit knowledge, than a science. But fortunately, professors can improve their effectiveness by making the right instructional choices.

The rewards are worth the toil. Educating movers and shakers, especially top government leaders and CEOs, is a great opportunity to create tremendous impact. When you deliver well, you can become the agent of the change that you preach! ■

SELF@CELC:

Where Independent Learning Unfolds...

Ms Peggie Chan

Centre for English Language Communication

The Centre for English Language Communication's (CELC) self-access facility—the Self-access English Learning Facility (SELF)—is housed in its building at 10 Architecture Drive (next to SDE 2), a central location in NUS. Set up in 2000 in line with the university's mission to encourage independent and lifelong learning, SELF is a unique resource provided specially for students enrolled in CELC courses. Here, students work on improving their English language skills on their own within a comfortable and conducive learning environment.

SELF provides a wide variety of English language learning resources set in user-friendly formats. There are textbooks on language learning skills (e.g. grammar and vocabulary). Graded reading texts found in the Science Research Associates (SRA) laboratory and the Multi-cultural Reading laboratory hone students' reading skills while a variety of magazines and books of general interest provide supplementary reading. Audio-visual materials—movies, documentaries, pronunciation lessons and training tutorials—are available in various formats—VHS, VCDs and DVDs. These are accessible via many computers and audio-visual equipment in the facility. In addition, there are worksheets produced in-house specially tailored to meet students' needs which are not addressed by commercially produced books.



Collaborative work at SELF

SELF is manned during its opening hours by student-assistants who help users with equipment and resources with the supervision of lecturers, and is managed by a committee of CELC lecturers.

ITSELF—the online version of SELF—contains links to language learning websites, tailor-made exercises, tutorials and online versions of English grammar worksheets found in SELF. A prominent feature of ITSELF is the Opposing Viewpoints Resource Centre (OVRC) a database of articles (magazine) and essays on a multitude of topics, ideal for students doing research. Students can access ITSELF from inside and outside NUS via <http://courses.nus.edu.sg/courseware/ITSELF>.

SELF is used by CELC students in these ways:

- Students on an academic skills course use the reading laboratories to improve their reading skills (see section on Reading Laboratories).
- Students on a communication skills course use the communication books, training tapes, and online tutorials to do research on topics which they present and peer teach in class; they also use the books on research to aid them in their report writing assignments.
- Clients of the English Assist programme use the audio materials to practise speech and pronunciation.
- Students on graduate programmes routinely visit SELF to access the tailor-made materials (e.g. pronunciation homework on audio tapes) or to access materials recommended by lecturers who work with them in SELF.

Understanding that self-access learning is novel and does not come naturally to students, SELF incorporates the following characteristics in the planning and management of its resources:

1. Organisation of Materials

Print and audio-visual materials are organised, arranged and labelled according to language learning skills (e.g. writing, grammar, reading, listening and speaking, vocabulary, pronunciation). New categories, depending on users' needs as perceived by lecturers, are constantly added (e.g. research, study skills, thinking, teachers' resources, integrated skills [books on more than one skill], general reading, popular literature, readers).

continued next page ...

45 Years of Lecturing and It Is Time to Stop—Reflections of an Erstwhile Dean*

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programme was the once-a-semester weekend school where ‘hungry’ students descended on campus from all corners of the country to discuss some of the content and activities they found challenging and to participate in some important group learning activities. The learning outcomes from such programmes were comparable to those for on-campus students and sometimes better!

Let us for a moment accept the proposition that lecturing is an inefficient content delivery system and ask why newer technologies are not being used in its place. Firstly, students tend to react negatively to such changes and this may be reflected in their evaluations of lecturers. Many students rate highly faculty members who spoon-feed content and give little challenge in terms of workload and assessment. Poor student evaluations are threats to one’s tenure and promotion. Secondly, one’s academic peers may

be uncomplimentary if he/she is not ‘seen’ to be lecturing. I have even heard (at NUS) that faculty members who choose not to use PowerPoint have been encouraged to do so! Finally, our learning environments are not conducive to small group collaborative learning.

In this article I have only suggested the value of replacing lecturing by a more efficient content delivery system plus small group tutorials and collaborative learning. I do believe that disciplines such as engineering can be better approached through problem-based learning (PBL). I have successfully introduced PBL some time ago in most medical schools, but I am only slowly adopting it in engineering. However, that is a topic for another day. ■

* *This article is based on a seminar conducted at CDTL on 5 September 2007.*

SELF@CELC: Where Independent Learning Unfolds...

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To help specific groups of users know where to look for resources that will meet their needs (for a course or duration of time), materials on some shelves are dedicated to particular courses for easy access.

2. Cross Referencing

Materials are cross-matched (e.g. a book that has related materials in another form carries an ‘Accompanied by’ sticker) to alert users to other forms of the material.

3. Guides for Users

Early on, it was realised that users would need help choosing suitable materials. For a start, users’ request for help in areas such as job skills and report writing, directed efforts in providing a list of resources that contained such information. This is likely to be useful for users especially since SELF has no permanent academic staff on duty to answer users’ queries, and student-assistants on duty have limited knowledge on how to recommend users to needed resources without direct and immediate supervision of lecturers.

Movie titles are categorised (e.g. young adult, popular, inspirational, historical) in a guide on ITSELF. New titles are also featured as highlights or attractions displayed on the notice board outside SELF just like how special items in a supermarket are displayed near the payment counters.

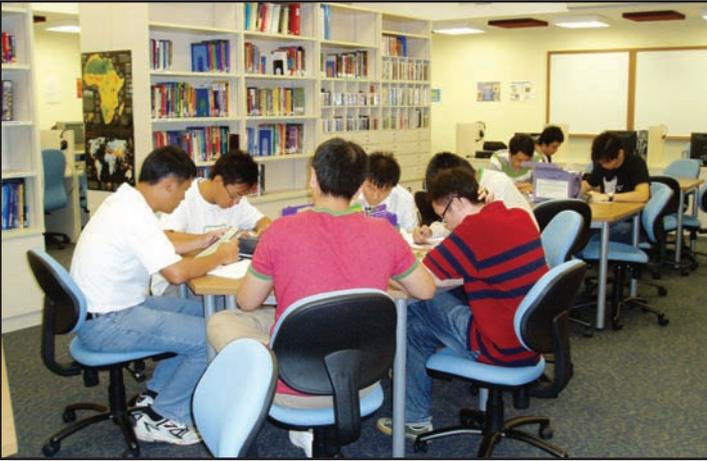
4. Familiarisation/Orientation Tours (Physical and Online)

SELF routinely organises tours to familiarise students to the concept of self-access, to teach them how to access both SELF and ITSELF materials and more importantly, to encourage students to continue to use the place for as long as they desire to improve their English language abilities. Each semester, students of courses that integrate SELF into the curriculum are brought to SELF for orientation tours, during which they are shown the SELF/ITSELF online tour, and brought around the facility to get a feel of the materials available. Attention is focused on resources on special shelves that are pertinent to work set in students’ course and that will

continued next page ...



Users at AV booths



Users at work in SELF

meet their needs. Additionally, the SELF flyer and newsletter alert users to rules and regulations, reminders and announcements of new resources.

5. Reading Laboratories

SELF is equipped with reading laboratories that help improve students' reading proficiency. The SRA reading laboratory, in particular, is completely self-access. Here, students can take a test (part of the reading laboratory) and use the results (self-marked, with answer key) to place them at a level which they must better by completing reading passages and doing exercises (also self-marked, with answer key) over a period of time. Students monitor their progress in/with a record book.

Open Mondays to Fridays: 1–5.30 pm, Tuesdays: 9 am–12 noon and selected Saturday mornings, SELF is poised to make a difference in students who recognise that classroom time is insufficient to develop language skills adequately. It is also a facility that places learning squarely in students' hands so that they learn to improve English on their own, at their own pace and in their own time. More than 500 students from various faculties visit SELF each month of the semester. It is both a drop-in and



The Centre for Development of Teaching and Learning (CDTL) provides a wide range of services and facilities to promote the teaching, learning and research programmes of the National University of Singapore. These include teaching and learning support, research on educational development issues, as well as instructional design and development.

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a valuable resource centre that complements both CELC courses and its mission to “empower our students with effective English language and communication skills for their academic and professional life through innovative teaching, promotion of independent learning and pedagogical research” (CELC’s Mission Statement). ■