

*This issue of CDTL Brief is the first of a two-part instalment featuring the teaching practices of faculty members who have won the **Excellent Teacher Award** for three consecutive academic years (2001/2002–2004/2005).*

Teaching and Learning: The Journey of an Educator

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I love teaching. In the classroom, I am able to forget all my administrative concerns for that precious hour or two, and enter into the fascinating world of knowledge and discovery with my students. The key to a rewarding teaching experience is an engaged audience—learning from my students just as much as they are learning from me. To be an effective teacher, we need our students' cooperation and commitment. I discovered from my own experience that if I can establish social relevance to what I teach, my students will stay focused on their journey with me.

As a sociologist, my primary objective is to highlight the significance, power and impact of the social environment and its agents in our everyday life. This is particularly challenging when students are new to sociology as a discipline, and when the modular topic is one with which students are familiar. This was the case with SC2205 "Sociology of the Family", a module I taught in Semester 2 (AY 2004/2005). Prior to SC2205, most of my students had little or no insight into what constitutes sociological inquiry and therefore, they struggled with the differentiation between a good General Paper at Junior College level and good sociological analysis at the university level. In addition, since the 'family' is such a familiar social icon, many students took up the module thinking they were 'experts' in the subject because they all came from families themselves.

To help my students overcome these hurdles, the first part of the module focused on deconstructing the commonly accepted perceptions of the 'family' as an objective entity. In their first discussion assignment, students had to interview respondents from three generations on what constitutes a 'normal' family. In the interviews, they had to find out how their respondents from different age-groups defined family structure and family roles. From the class discussion, students discovered that what constitutes 'family' actually varies with culture and time. Such hands-on approach engages students directly in their discovery of how society works.

Mindful of the fact that tertiary education serves to facilitate lifelong learning, I also try to impart to my students the necessary skills for self-learning using a two-pronged approach. First, I attempt to raise their awareness to the rich data present in the vast 'laboratory' they live in, and to question the social trends we observe. This helps to establish the social relevance of my module. One of the challenges I face in teaching the module is having to pull students away from their own family experiences, and helping them appreciate the fact that sociology studies trends. Therefore, while their own family lives are important, students have to be mindful that their personal experiences need not necessarily reflect the general trends in our society. In each of the discussion topics, students are required

to interview a purposive sample to obtain first-hand feedback. Second, I help my students make sociological sense of the 'data' by asking the 'why' questions, and finding answers to these questions in the social environment. The readings listed in both the course and discussion outlines are sufficient, but not exhaustive. During one lecture session, I logged on to an online database and showed the class, step-by-step, how to do a literature search. A big part of the continuous assessment (CA) was an individual project which required students to identify a research question, do a good literature search on the topic, and collect qualitative data to augment their arguments. Students were told that the bibliography is the first thing I would look at when I evaluate the project.

Novice undergraduates tend to depend on content learning as a strategy for doing well in assessments. To encourage my students to move away from this to a higher level of learning where critical thinking and application skills are valued, I decided to have open-book examinations. It was not an easy decision as many of those taking this module were first-year students. But after much deliberation, I decided that it is never too soon to encourage students to take charge of their own learning. Hence, I structured the module along several coherent themes, and students were encouraged to source for information beyond what was given in the course outline and the lectures. This methodology was used in every student-led aspect of the module—the fortnightly discussion groups, term project, IVLE forum and the final examination.

To encourage students to continue in their quest for knowledge long after they leave the university, I also try to project learning as exciting, invigorating, relevant and essential in our interactions. I remember from my undergraduate days how tedious it was to be copying lecture notes for the entire duration of a lecture and how difficult it was to digest the material while trying not to miss the listings on the screen!

So, all my lecture outlines are written in PowerPoint format and loaded onto the IVLE before lectures commence. One concern staff have about posting their lecture notes online is that students may not attend lectures. However, I strongly believe that if we do not merely regurgitate what is given on the notes, the thinking students would soon realise that they can learn a lot more during the lectures. Thus, I put mainly facts and content-based information on the outlines, and then spend most of the time discussing applications to current problems families face during the lectures. I am glad to report that students' attendance throughout the semester has been good. To encourage students to discuss issues raised in the lectures, I also created forum topics on the IVLE and encouraged all to participate.

Finally, the hallmark of an intellectual includes the ability to critically assess information and the thirst for new ideas. In the process of encouraging my students to think 'out of the box', I also remind them of the importance of constructive criticism (i.e. when you reject one perspective, you should be able to offer an alternative) otherwise, it will be easy for others to dismiss your empty criticisms. In SC2205, many students started out arguing that family is a private entity and therefore, notions of marriage, parenthood, divorce and singlehood are private decisions. Throughout the semester, I encouraged students to envision a scenario where the state does not intervene at all, but allows family trends (e.g. marriage, fertility, divorce) to develop naturally. I posed this as part of the compulsory question in the final exam, and was very pleased to note some very balanced arguments.

At the end of the day, I do not expect my students to remember all I have taught them in the module. But what I want them to always hold close to their hearts is the journey we took together, and that they will remember me as someone who helped instill in them the joy of learning. ■

“I teach to watch the lights come on”: Reflections on Best Practices

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Introduction

Teaching is as much about production as it is about reception. No matter how much effort we as teachers put into preparation and presentation, in the end, it is how our module and ourselves have been received by the target audience—our students—that clue us into how we have done, or more accurately, how students think we have done. For this reason, when the student feedback is released each year, I scrutinise the qualitative feedback to determine how my teaching has been received. This attention to feedback is among the many ways in which I reflect on my ‘best practices’—what worked and what bombed; and more importantly, why. This paper is the result of such a process of self-reflection. I have identified the following four key elements that guide my teaching:

Knowledge and Skills

Knowledge is, of course, a basic element that all teachers need to possess. I believe that every practitioner sees it as his/her primary responsibility to keep up with recent developments in his/her own field. And, students are certainly appreciative when they encounter a teacher who displays a strong and deep understanding of the subject taught. Student feedback that says “she really knows her stuff” never fails to take me by surprise. I find myself asking, “Did students *not* expect us to know our stuff?” I have, however, come to realise that perhaps what is at play here is not the implied message that there are lecturers who “don’t know their stuff”, but that there are lecturers who are not well-versed in transmitting the knowledge they have. In other words, their *skill* in presenting knowledge may be the underlying issue here. This is why I emphasise not just sound subject/content knowledge but also good teaching skills.

In my opinion, good teaching skills encompass, to a large extent, good communication skills. A good teacher is not only able to articulate, but is also adept

at conveying ideas clearly. Clarity in classroom delivery should not be overlooked because the lack of it can undermine the best of intentions and hours of devoted class preparation. Good teachers are also usually good class managers in that they are often well-organised and able to provide a clear but flexible class structure that engages the class in lively, interactive exchange of ideas. In addition, students are also highly appreciative when teachers are able to use good illustrations and appropriate anecdotes to make the difficult seem easy to understand.

Student-centred Teaching Practices

I have found that a classroom culture which places students at the centre works best among all options. For example, instead of merely delivering lectures week after week, I relegate myself to the margins, allowing students to act as central resource persons who not only define the issues for discussion but also lead class discussions in specific weeks. At the very least, such a student-centred culture has been viewed by students to be ‘refreshing’ as they are used to being talked down to. More importantly, students say they appreciate the empowerment offered to them through such a student-centred teaching philosophy.

We often talk about university students as young adults, but I take this one step further by treating them as equals. Granted, I have had my share of encounters with immature students. Still, I believe in nurturing these young adults to take full responsibility for their own learning and development. And, the best way to do this seems to be through student-centred teaching practices such as student-led discussions, which overtly allow student voices to be heard. Student-led discussions assume that students are equipped to teach as much as they are placed in the classroom to learn. Put simply, the emphasis is on teacher-student and student-student collaboration—all of us teaching and learning from one another. The

result of this is a mutually empowering teaching/learning environment that actively narrows the power differential between me (the teacher) and the audience (students). My hope is that in promoting a less hierarchical and therefore more democratic classroom culture, I can inculcate a sense of responsibility and confidence, and nurture independence and critical reflection in the students under my care.

Interpersonal Skills

Teaching, as we all know, is a time- and energy-consuming activity. Though we may not often have the time to reflect about this, to risk stating the obvious, we deal with people and their feelings. If we think about teaching in these terms, it is easy to see why good interpersonal skills are so crucial. On top of imparting knowledge and inculcating good thinking habits, teachers also have to perform some amount of ‘emotional labour’. So, other than keeping a room full of young adults actively engaged, we have to also maintain the emotional barometer in our class skilfully. To do this, we have to be caring towards our students and mindful of their welfare. A student who feels he/she is a valued member in the class is more likely to be a happy learner. In a university environment often characterised as alienating (because of its sheer size) and where students run the risk of getting lost in a sea of statistics, it is perfectly understandable that students appreciate teachers who are approachable, patient, empathetic and willing to listen. In exercising these positive skills, teachers play an important part in restoring the personal touch and reintroducing the human element in an alienating campus landscape.

Passion and Enthusiasm

The university, as an intensely competitive workplace that demands all staff to pursue excellence in teaching, research and service, has exerted tremendous pressure on us. These demands sometimes leave us with little energy. But as teachers, we do need to infuse our classroom with at least a moderate, if not high, energy level in order to stimulate student interest in the field(s) we teach. Such dedication and commitment are necessary since their absence will be easy to detect. Students know, and appreciate it when a teacher has done a good job. However, if a teacher brings only half or less of him/herself to the classroom, it becomes an uphill task to make a good case for why students should care about what we seek to teach. Thus, quite simply, no matter how exhausted we may be, passion and enthusiasm are key elements that contribute to success in teaching.

Final Remarks

Very often, after years of teaching, it is easy to lapse into a kind of routine where we let the details of each day take over, and forget that one of the primary reasons brought us to the university in the first place—our love of teaching. This risk of losing our focus is exactly why my student’s gift of a Teacher’s Day card that says “I teach to watch the lights come on” serves as such a timely reminder for me. In spite of the relentless drive towards excellence, I remind myself of the intangible rewards that come with educating young minds. So, every time I see that spark, I know I have done something right. ■

Personal Touch of a Teacher in the Learning Expedition

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I joined the Department of Pharmacy as a lecturer in 1989. The department is a closely-knitted ‘pharmily’ with a relatively small student population. Though I did not have any formal training in teaching before I started, I was blessed with good

mentors who provided me with a lot of guidance and encouragement, which have certainly helped shape my teaching philosophy—to make learning meaningful and enjoyable.

Pharmacy is a professional course and it is critical to equip its students with a body of knowledge essential for professional practice. Hence, one of my goals in teaching is to impart knowledge to students. The other more challenging goals I set for myself include stimulating students' interest in the subject and equipping them with the skills for lifelong learning. I also attempt to hone their critical thinking and communication skills to ensure that students can stand on their own feet when they enter the workforce.

The teaching goals I have set for myself are logical but not exceptional. Though there are many strategies I can use to achieve these goals, what is most important to me is that my students must feel comfortable with the teaching methodology I adopt. My style of teaching can be described as student-centred and personal. In this article, I would like to share my thoughts on how I relate with my students in their learning expedition.

I make it a point to put myself in the students' shoes when I design teaching materials. I imagine myself attending lessons that are difficult to follow twice a week over a few months. In these classes, there is hardly any learning though the teacher faithfully teaches. Such lessons not only kill students' interest and guarantee frustration, they are also a sheer waste of the students' as well as the teacher's time. Hence, I pitch my teaching at the right level as I do not believe in overloading my students with too much information. It is more important to cover the fundamentals well using good examples and illustrations, than to attempt to cover a lot of information and overwhelm students. Providing a set of concise and comprehensive handouts or a list of recommended reference books is also useful for students who wish to know more.

Interest and motivation are important components of learning. An effective way of stimulating students' interest in the subject is to help them see the subject's relevance to the real world using real life examples for illustrations. If the teacher can get students interested in the subject, they are likely to be motivated learners too. Motivation is as important as interest in the learning expedition. Thus, I encourage my students to ask questions and I praise them for their contributions. At the end of most of my lectures, I like to pose challenging questions to make students think more about what they have

just learnt. Sometimes, I throw in a can of coke or a bar of chocolate as a prize for the best answer. Everyone in my class knows that no question is too silly and no suggestion will be scoffed at. One of the 'fatal' mistakes a teacher can possibly commit is to make students feel stupid and worthless.

A conducive environment for learning is essential. Though an air-conditioned lecture theatre with comfortable seats and state-of-the-art audiovisual facilities will impress students, these will not be adequate to hold their attention after some time. Studies have shown that the most students' minds start to stray after 15–20 minutes. A personal touch, humour and anecdotes can go a long way in engaging students. As a teacher, I feel happy when my students remember my name long after they have graduated. Similarly, students are happy when the teacher remembers their names. Therefore, I try my best to remember the names of all my students though this is becoming increasingly difficult as the class grows bigger. Sometimes my ageing memory fails me, but students know that I tried and they appreciate it.

Every batch of students is different. What works perfectly for one batch may not be so for another. It is therefore important to seek students' feedback from time to time: "Can you hear me clearly from the last row?" "Am I speaking too fast?" "Are you comfortable with the pace of my lecture?" These are some questions I frequently ask my classes. The students' spontaneous response to these questions enables me to adjust the volume of my voice and the pace of my lectures accordingly. Most students tend to keep quiet when they are asked: "Do you understand the explanation?" Hence, the teacher has to be able to read the students' body language and quiz them to find out their level of understanding. In addition, I try to find out how students are coping with their studies, how I can help them achieve their goals and I welcome suggestions on how I can help them learn more effectively.

I have been enjoying wonderful partnerships with my students so far and I am glad that they appreciate the efforts I put into my teaching. More importantly, students have learnt what they are taught—an ultimate measure of effective teaching. This is the essence of student-centred teaching. I have enjoyed my 16 years of teaching at the department and I am looking forward to many more good years! ■

Getting Students to Assess Each Other

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Introduction

This paper describes a method for students to evaluate fellow students' tutorial presentations. In a continuous assessment activity involving graded tutorial presentations, a student presenter is evaluated by both his/her tutor (instructor) and fellow classmates (student-evaluators). In order to make peer evaluation meaningful and motivating for student-evaluators, the marks awarded by them account for a significant portion of the presenter's continuous assessment marks, and the student-evaluators are given additional marks for making an objective evaluation.

Learning Method

The tutor sets a list of tutorial questions for students to present in class and identifies a student to work on each question and then present his/her findings to the class. The presenter is then evaluated by both his/her instructor and student-evaluators. The tutor and student-evaluators use a specially designed evaluation form (see Table 1) to evaluate the presentations for clarity, accuracy and presentation skills.

There are three parts to the evaluation:

- a. The mark awarded by the instructor accounts for 50% of the total marks.
- b. The average mark awarded by student-evaluators takes up another 50% of the total marks.
- c. The student-evaluators are each awarded a mark for his/her effort if his/her mark falls within $\pm 5\%$ of the instructor's rating. This is to prevent student-evaluators from being biased in their assessments. For example, if they awarded their close friends with high marks or punish their 'enemies' with low marks, the student-evaluators will not earn any marks for the evaluation

exercise. Though the instructor's rating may be a fallible benchmark, it is more objective compared to the students'.

Table 1. Format for evaluation of presenters

	Please circle an appropriate number	0 =Extremely Poor; 6= Average; 8= Good; 10= Excellent											
		0	1	2	3	4	5	6	7	8	9	10	
1	Clarity (the extent to which you understood what was presented)												
2	Accuracy (correctness of the answer)												
3	Presentation Skills (public speaking ability)												
4	Other comments for the presenter:												

Learning Outcomes

The following six learning outcomes are achieved from this learning method:

1. *Students demonstrate mastery of the subject and better retention.*

The formal evaluation by instructor and student-evaluators require presenters to search for additional materials and construct their own knowledge, thus encouraging deep learning. The student-evaluators are also involved in proactive learning because they need to do some work before the presentations in order to evaluate the presenters accurately.

2. *Students learn how to 'sell' their ideas and defend their work.*

The ability to 'sell' an idea is important especially when students join the industry. During the presentations, presenters learn how to 'sell' their

ideas to the instructor and student-evaluators' and defend their work.

3. *Students learn from one another.*

In order to give an accurate evaluation, student-evaluators not only have to read up on the presentation topics prior to the presentation, but also listen attentively to the presenters during the presentations. Being attentive during the presentations enable student-evaluators to check their understanding of the topic and pick up new nuggets of information at the same time.

4. *Students develop better communication skills.*

During the presentations, presenters must make a conscious effort to communicate effectively as this is an evaluation criterion. While presenters learn the nuts and bolts of public speaking through hands-on experience, student-evaluators learn as they observe the presenter closely and conclude what works and what does not. Thus, student-evaluators also improve their own presentation skills by evaluating their peers,

5. *Students acquire the ability to think critically and evaluate objectively.*

As student-evaluators will only score additional marks if their marks are within a specified range from the instructor's, they have to think critically, learn to respect other people's ideas and make sure that their evaluation is not affected by their own partiality.

6. *Students understand what is achievement-based work ethic.*

Presenters have to put in extra effort in their preparation because they are graded by both the instructor and their classmates. This gives them a good understanding of achievement-based work ethic (i.e. the reward will commensurate with the effort put in) and motivates them in their learning.

Personal Experience from Using This Method

When I first used this method in AY 2002/2003, student-evaluators could earn marks if their ratings fell within $\pm 10\%$ of my rating. Over the years, I found that when I gave student-evaluators feedback on their rating accuracy, their ability to evaluate objectively improved. Therefore, I now award marks to student-evaluators for ratings that fall within $\pm 3\%$ of ratings.

My students enjoy learning with this method. Some comments from students include:

- "Getting students to evaluate a fellow student's presentation is an innovative learning method."
- "We were asked to evaluate the presenter. This made us pay full attention."
- "The new method of earning marks is a great improvement; it encourages students to think critically." ■

My Teaching Philosophy and Approach

Professor Koh Khee Meng
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Teaching Philosophy

Teaching is an interactive activity; the teacher learns from his students as much as the students learn from him. To facilitate learning, a teacher must impart analytical and problem-solving skills

to students so that they can think critically and independently.

In addition, I believe that a teacher must be knowledgeable, especially in his area of

specialisation. He must be scholarly, active in research and constantly keeping up with the latest in his field. A teacher's task does not end in conveying the required knowledge to students, but he should also be capable of stimulating students' interest in the subject. Such a teacher is also probably able to incorporate relevant pedagogical methods in his teaching and is constantly striving to improve his teaching by encouraging student feedback.

Teaching Practice

Foundation. A solid knowledge of fundamental concepts and theories of a subject would enable one to pursue it further. Thus, in my teaching, my primary task is to help my students gain a good knowledge of fundamental mathematical concepts and theories. To achieve this, it is essential to explain difficult or abstract concepts to students clearly and plan my lectures carefully and systematically.

Problem-solving. The ability to solve problems is an invaluable life skill. During my lectures and tutorials, I often discuss with my students the study and application of heuristic methods and processes in solving problems. To me, it is not important whether students can solve the problems completely. However, it is crucial that students get to experience the setbacks and successes in the process of problem-solving. I also show students that there are various ways to solve a problem depending on one's perspective and that there is no 'standard solution'. Students are constantly encouraged to solve problems using their own ways, and learn to appreciate their peers' ideas. While solving easy or routine problems all the time would not help to improve one's problem-solving skills, solving more challenging problems requires time and perseverance. I often encourage students not to give up too easily whenever they encounter difficulties in problem-solving.

Mathematics is not boring. Many students have the perception that mathematics is boring. To them, mathematical results are just collections of definitions, lemmas, theorems and corollaries, mixed with some inexplicable notation and symbols. As a mathematics teacher, I help my students appreciate the subject better by highlighting the historical background, meaning, significance, impact and application of mathematical findings wherever appropriate. This has made my lectures more interesting and lively.

When we study the results of mathematicians in class, I like to show students pictures of the mathematicians. This helps students pay more attention to what is taught and remember the materials better. At the end of the course, it has been encouraging to hear many of my students commenting that mathematics can be interesting, lively and relevant. ■



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