Motivating Students by Providing Feedback

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The Teacher as a Facilitator of Students’ Learning
Learning involves selecting relevant information and interpreting it through one’s existing knowledge. Accordingly, the teacher becomes a participant with the learner in a shared process of cognition (i.e. constructing meaning in a given situation). Thus, instruction is geared toward helping the student to develop learning and thinking strategies that are appropriate for working within various subject domains.

As facilitators of learning, teachers engage in various activities including:
- creating a supportive, caring atmosphere for learning,
- promoting discussion in the classroom,
- finding out what the students are thinking,
- helping students clarify and reflect upon their own ideas,
- challenging students’ ideas,
- encouraging students to find answers for themselves and ‘getting them to think’,
- giving feedback,
- motivating and stimulating students to learn (e.g. by giving positive feedback).

Monitoring students’ thinking processes, giving them feedback and motivating them to learn are not only very important tasks of a facilitator, but they are also intimately related. Traditionally, tests and examinations evaluate how students perform in terms of learning outcome. However in a learner-centred education system, it is more important to monitor students’ learning processes and to give them direct feedback. Such feedback can help students learn more efficiently; and if used correctly, feedback can function as a very powerful tool to motivate students to learn. Consequently, monitoring students’ learning processes demands the teacher’s ‘awareness and control’ (or metacognition) of his/her own teaching.

Metacognition, Self-reflection, and Monitoring
Teaching is basically an intellectual task. It is essential for a teacher to be aware of one’s place in a long sequence of operations, (e.g. knowing when a sub-goal has been achieved, detecting errors and recovering from those errors, looking ahead and looking back). To know whether a sub-goal has been reached in the classroom means information must be obtained from the students. If we accept the concept of ‘learning as a construction of knowledge’, a teacher should gather information on students’ learning processes as they learn in the classroom rather than information on students’ learning outcomes at the end of the lecture or at a much later stage during tests or examinations.
Superior teaching involves ‘metacognition’ on the teacher’s part. A teacher acts metacognitively (i.e., beyond the cognitive) when he/she appraises students’ reactions and then correspondingly adjusts his/her instructional input. It is as if the teacher activates a ‘freeze frame’ on his/her teaching in the classroom, steps back and takes a second look at what is going on. This activity in the teacher’s mind allows both the formulation of measures to correct the situation, and feedback to students that is necessary to facilitate their learning. To gauge a student’s learning process, a teacher must check certain ‘indicators of learning’ such as:

- level of interest and enjoyment,
- level of involvement and ownership,
- willingness to inquire and ability to ask critical questions,
- on-task behaviour,
- quality of discussion of ideas among students and teacher,
- learning-to-learn skills,
- transfer and linking of ideas,
- openness to new concepts,
- willingness to ascertain initial hypotheses and subsequent viewpoints.

Of the above measures, questioning can be considered as the most effective tool to monitor how students learn. Questioning involves those questions that the teacher raises to the students, and those that the students ask in order to seek clarification. The types of questions a teacher poses to students and how the teacher sequences these questions should capture students’ attention, arouse their curiosity, reinforce important points, and promote active learning. But being responsive to student questioning is just as important. Traditionally, teachers undertake monitoring through evaluating students’ answers to their questions. In contrast, a superior teacher not only allows, but also encourages/provokes students to ask questions. This is because much information can be gathered on students’ learning processes by evaluating the nature and quality of questions raised.

**Feedback as a Motivational Factor**

Within the context of education, there are two possible interpretations of ‘feedback’. In the instructional paradigm, it is important for the teacher to obtain students’ opinions about the quality of his/her teaching. In the learning paradigm, after gathering information on the students’ learning processes, it is essential for the teacher to reflect and then give his/her views on what he/she has observed back to the students.

Although feedback can be given to an individual, a group of students, or the whole class, it is more efficient if the entire class is privy to the monitoring process and feedback so that students can learn from one another. Direct feedback is also vital. The longer the delay between work and feedback, the less effective the feedback becomes. Ideally, feedback should be provided within minutes after finishing a task (and no longer than 24 hours after the task’s completion), or immediately after a student asks or has answered a question. When students learn new skills, feedback should be provided as frequently as possible (e.g. after each problem/succeeding stage of complexity faced) for maximum effectiveness so that students can steadily become more proficient with the new material/methods.

A positive approach should also be employed when providing students with feedback on their mistakes. Positive feedback generally provides more information than negative feedback, and strengthens a student’s motivation and self-confidence. For example, students can be told when they have succeeded in decreasing the number of errors made on a worksheet. One effective method to help a student decrease his/her error rate is to prompt him/her to realise the mistake made and articulate what went wrong, and then to guide him/her to understand how to arrive at a ‘correct’ or ideal response.

Whether feedback is given continuously or differentially influences its efficiency. When continuous feedback is employed, students receive feedback on their performance each time they perform a given task whereas differential feedback is only provided when a student performs better on the task. One advantage that differential feedback offers over continuous feedback is that it places the major emphasis on improvement rather than upon a student’s absolute level of achievement. Hence, all students have a near equal chance of obtaining recognition.
It is the responsibility of a teaching academic to impart to his students more than just knowledge alone. It is an integral part of the teaching process that academics impart the joy of learning to their students such that the sheer love of learning becomes an intrinsic motivator for them to excel for themselves. This can be rather loosely defined as ‘Motivation’.

**Motivating Students to Learn: Stories, Questions and Students’ Names**

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In examining the reasons why our students attend university and learn, a consistently cited reason is the economic advantages acquiring a degree can confer on them. This is what I call ‘doing a Jerry Maguire’: “Show me the money!” This is still one of the major extrinsic reasons for studying at university. However, should it be the sole reason for them doing so? If our students are never presented with the love of learning, then they will learn mainly because the outcomes associated with it are desirable, even if the process is not; and many will accept the option of merely passing but not excelling. Nonetheless, how can we motivate students to love learning?

The first thing we, as an academic community, have to do in motivating students to learn is to offer our students valid and meaningful reasons and outcomes for attending our lectures, tutorials, workshops or seminars. If we do not, then why should they attend? The number of times I, in my undergraduate years, attended lectures that were so boring that the academic was a contender for an Olympic gold medal for monotony are simply too numerous to recount. Merely having a lecturer stand in front of an audience for two hours and read notes does not constitute teaching. Teaching is both a skill and an art that needs to be practised and developed in such a way as to attract students willingly into our lectures. This means that we need to utilise our capacity as storytellers to impart not merely knowledge but understanding into both the minds and hearts of our students. Storytelling, the oldest of human methods of communication, is still as valid today as it was in the pre-historic societies that form the basis of our literate ones today.

I will recount a simple story that carries a very clear message. In business, the most difficult concept to sell to a client is a service agreement; something for which they pay money and yet do not receive anything tangible in return. To get a client to agree to it is the most difficult part of all. One salesman used a very simple method to get agreement. He simply asked the client if they understood what was involved and, rather than ask them if they would sign, asked a simple question, “When you sign this agreement, whose pen would you like to use: yours or mine?” He would then offer his pen and the client would either use it or use his own pen; so the decision was not whether to sign, but whose pen would he use. Thus, the little decision carried the big one. So, storytelling allows for large abstract and complex theoretical issues to be retold in simpler easier terms that then allow the students to make their own connections.
The purpose of telling any story is not to give the audience the answer, but for them to apply the story and discern the answer for themselves by means of our well-thought-out questions. Thus, the next step in being an effective storyteller is to have questions, worked out in advance, that encourage the audience to answer. In my own teaching, I would try to give new or uncertain students the opportunity to answer my question but do so without them suffering the consequences of failure. I would often ask a question to the whole class. That way, they all have to think of the possible answer and then, I would ask a specific individual. If this individual is uncertain, I will give him a ‘yes or no’, ‘true or false’ scenario; if he does not give me the answer I want, I then invite him to try again and praise him when he gives the expected answer. Whether students give me the expected answer at the first or second try I always praise them for having a go. Why?

It is important to keep your stories simple, but more importantly they need to be designed and told in such a way that allows the students to build up their confidence in their ability to learn. By praising students, even when they do not give the answer you expect or want, it allows their confidence to be built up and to grow. This in turn reinforces the joy of learning, as the desire to learn is fanned by a sense of achievement by being successful. By being lavish with your praise, at least in the early days, it allows you to build another important factor into your teaching—your rapport with your students.

One way to both quickly and effectively build a lasting rapport with your students is to know each of them by name. The effectiveness of this simple practice cannot be over-emphasised. I teach on a small campus, where I am the only full-time staff member and so I teach five different units in the course of an academic year. Hence, I often have the same student in the different units, even up to four times. So, from semester to semester, I try to remember each of their names. Recently, one student, who was new to my classes, remarked to me that she was exceedingly impressed that I greeted all my old students as friends and new ones as friends-to-be. She went on to explain that she was worried at first that by knowing her name, she could not escape my questioning. However, she found that me knowing who she was and asking her by name to answer a question gave her a sense of importance, as she knew that she counted as an individual. This, she explained, motivated her to learn.

By motivating students to learn through using stories and questions, and knowing students by name, we as teachers can both easily and effectively motivate our students to pass beyond merely being rote learners, to become life-long learners who are motivated and love to learn.

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CDTL will be organising its 2nd Symposium on Teaching and Learning in Higher Education to continue bringing teachers together to promote and exchange ideas, solutions and experiences across a broad range of topics related to teaching and learning in higher education today.

Theme: Paradigm Shift in Higher Education
Date: 4–6 September 2002

For more information about the programme as well as details about submission of papers and registration, please refer to http://www.cdtl.nus.edu.sg/tlhe or contact:

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Motivating Students Taking CFM and GER Modules

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Introduction
With the move towards broad-based learning, more and more students will need to read Cross Faculty Modules (CFM). In academic year 2001/02, students will also read General Education Requirement (GER) modules. The objective of this article is to explore ways to motivate students who are reading CFM and GER modules. Experience has shown that motivating students who read CFM and GER modules may be different from motivating students who major in the subject matter. In the latter case, students need to know the subject matter because they are specialising in it. In the former case, students continually ask themselves: “Why should I learn this? How can this be of use to me?” Hence, different tools may be needed to motivate them.

Methodology
To produce the list of motivators, the methodology employed was to ask the students who read EM2201: Introduction to Construction Economics as a CFM what motivated or demotivated them. 21 non-Building students from Arts and Social Sciences, Business Administration, Engineering, Law, Real Estate, and Science registered for this module in Semester 1 of Academic Year 2000/01. An email was sent to all of them, asking them whether they were motivated, and what motivated them in the course of reading the EM2201 module. They were assured that their feedback was to help the lecturer improve, and would not be taken against them, or to help them in the examination.

Results
13 students responded to the email. Students pointed out the things that were provided for in the module, which motivated them. They also suggested some other things that should have been provided to motivate them further. These motivators are now discussed.

1. Provide glossary list, pictures and models. Since the students are not from the faculty that hosts the module, there might be some difficulty in understanding some of the key concepts. Students should be given a list of technical terms at the first lecture to help them understand the rest of the lectures. The lecturer should also spend some time in the first lecture explaining technical terms that would be commonly used in the lecture. Students also suggested that visual aids such as pictures, photographs, models and video recordings might be used to help them understand and visualise what is to be learnt.

2. Explain relevance of each lecture. In professional courses, the relevance of each lecture delivered in an essential module may be straightforward; students need to know the subject matter in order to become a competent professional. For CFM and GER modules, in each lecture, the lecturer would have to spend some time explaining how that specific lecture may be of use to students. Once students understand why the knowledge is useful to them (besides meeting graduation requirements), they would be more motivated. One respondent said: “You motivated me to study because you enable me to see the relevance of this course in my life.”

3. Give many examples. Students feel that examples such as stories derived from practical experience make it easier for them to understand the subject matter. Examples and stories are also important because they leave a deeper impression in students. These students can then internalise the issues that they learn. While giving examples may already be the norm when delivering any lecture, CFM students need many more examples to sustain their interest and to enable them to grasp issues that are not within their area of specialisation.

4. Give the big picture. Students studying a module as a CFM prefer to know the general or macro issues, without going into the nitty-gritty. This is ex-
5. Require students to present tutorial answers formally. When students are required to formally present the answers to tutorial questions in class, they would be motivated to read up about the topic. This gives them a better understanding of the tutorial questions and improves the quality of their presentations as well. They would not want to ‘lose face’ by presenting an ill-prepared answer to their classmates.

6. Mount modules with higher Modular Credits (MC). Students, being practical as they are, are motivated to read modules with higher MC, so that they can fulfill graduation requirements with the least number of modules/examinations. If a high subscription rate is the aim, modules which now have only 3 MC should be upgraded.

7. Give the module an interesting title. Students said that they may not be motivated to sign up for a module which has an uninteresting name, as it gives them the impression that the module will be dry and boring. Therefore, besides concentrating on the substance, the form should not be overlooked. Sometimes, being in the centre of the action, it is not easy for the lecturer himself or herself to know that the module title is boring. An example is “Introduction to Construction Economics”, which sounds appropriate to staff in the Department of Building, but may sound very boring to students who major in English Literature. One respondent said: “I thought initially that the course would be dry and boring as the title suggested…”

Conclusion

Several methods to motivate students who read CFM and GER modules have been identified above. The three most important things that the lecturer should bear in mind when teaching these students are to take extra time and effort to explain technical terms, tell the students how the knowledge may be of use to them, and give more examples in the lectures to help students to enjoy the module.

Acknowledgement

The feedback from students who read EM2201 in Semester 1 of Academic Year 2000/01 is acknowledged with thanks. Special thanks to Pui Chin Loon, Eugene Wong, Huiyi, Tan Hwa Ling, Jennifer Tay, Jerry Ting, John Low, Jonathan Tay, Laurinda Wee, Wong Pui Yee, Koh Seah Poh, William Teo, and Lee Yen Li, who took the time and trouble to give written feedback.

The Centre for Development of Teaching and Learning (CDTL) engages in a wide range of activities to promote good teaching and learning at the National University of Singapore, including professional development, teaching and learning support, research on educational issues, and instructional design and development.

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Printed in Singapore by Grenadier Press Pte Ltd.