How do you determine when your teaching is effective? UTS posed this question to me in an email earlier this summer. Great question.

However, the more I thought about it, the more it seemed that this was one question more easily asked than answered. More easily asked because ‘effectiveness’ is in some ways best assessed only after the course is done. This is one reason why I often mention to students that the real exam, that is, the real measure of what they have learned, doesn’t happen, indeed can’t happen, in the classroom. Evidence of what they have really learned really happens ‘out there’ in daily practice, and the exam typically lasts not for two hours at the end of a semester, but for three to four decades over the course of a lifetime.

So where does that leave us in terms of UTS’s question about teaching effectiveness? I think it may help to begin by understanding a bit about the word ‘effective’ and in particular how it differs from another word – ‘efficient’. The management guru Peter Drucker explains the difference most succinctly – whereas efficiency is a conversion ratio, like miles per gallon, effectiveness is asking whether we are getting where it is we want to go. The distinction is not trivial. Suffice to say, we can be making great gas mileage, but what’s the point if we’re going in the wrong direction?

One implication is that sometimes being effective means sacrificing at least some efficiency. More to the point, it seems that being effective may mean that sometimes one of our most important contributions is to provide our students with the space, in this case, a moment of intentional silence to reckon with just one or two important ideas, instead of presenting three or four more ideas. In short, less can be more.

This difference was brought home to me by one of the most effective teachers I was taught by – the late Dr. Ross Henderson, who led my capstone Business Policy course here at the University of Manitoba in the spring of 1981. In looking back, I would attribute
to Dr. Henderson a very interesting efficiency ratio—namely, the highest-student-learning-per-instructor-word-uttered ratio. In short, I learnt more from what the man did not say, than what he did.

Permit me to explain by remembering the second session of my Business Policy course. The class began with a question, rather than a statement, and was addressed by Dr. Henderson to a student named Warren. I will always remember Warren’s look of utter surprise on being asked; I will also always remember Professor Henderson waiting patiently for Warren to formulate and articulate his answer. As Warren answered Dr. Henderson listened carefully and then responded by asking another question, and waiting again for Warren’s response. The line of questioning and waiting, and questioning and waiting, was masterful insofar as it helped the student learn a lesson that was best learned by discovery rather than dictation.

Remembering this experience reminds me of my favorite book title of all time. The book, titled ‘Shut Up And Sell’, is based on the assumption that sometimes one of the most important things a salesperson can do is let the customer connect the dots on their own. While I don’t completely like the perspective that sees students as ‘customers’, there is, however, still a large grain of pedagogical truth embedded in the title—namely that there is a time for the teacher to speak, and a time, also, for the teacher to listen.

So given all this talk about not talking, how do I know when my teaching has been effective? Sometimes I can draw preliminary inferences by virtue of the quality of comments arising from a time of silence. Sometimes I also begin to develop my hunches for this question only after class when I read the students’ Post-Class Essays, that is, their one-to-two page summary that I invite them to write after a class session and then send to me by email before the next session (I can send interested readers a copy of my course syllabus where I explain how I use these essays in more detail). What I often see is what students have learned only after they have a chance to figure that out for themselves. And that ‘figuring’, that is, of coming to those insights, is not usually determined on an efficiency-based minutes-per-insight calculation.

So in summary, when I think about whether my teaching is effective, I think I’d begin by remembering that teaching for effectiveness means something fundamentally different than teaching for efficiency, and that sometimes the best thing we can do is ask rather than tell.
Chemistry Scored a “Hat Trick” in Teaching Awards

Many students take their first chemistry courses as a foundational component of their undergraduate degree, often because they “have to” rather than because they “want to”. Chemistry, many think, is “hard” and “dirty”. This makes it all the more remarkable that the Department of Chemistry this year scored a “hat trick” of teaching awards: Dr. Phil Hultin was chosen for an UM/UMFA Teaching Merit Award, Dr. Elena Smirnova received the Olive Beatrice Stanton Award for Excellence in Teaching, and Dr. Horace Luong, Dr. Elena Smirnova and Dr. Sean McKenna all won Science Student’s Association teaching awards. Also on average, chemistry teachers score well, typically around 4.0 on those questions of the SEEQ we consider most important. Clearly, our faculty members get the message across that chemistry is not just obligatory but can be interesting as well.

There is probably no simple single explanation for this. Members of our Department take teaching very seriously, but so do members of other Departments. We are serious about teaching when we hire new faculty, but so are others. We go to UTS professional workshops, and our new faculty members participate in the UTS New Faculty Program. Members of our Department have pioneered the use of I-clickers and virtual labs. But a passion for teaching is a personal thing, and perhaps we are just lucky that so many in our Department share this passion. Or maybe the bad reputation of chemistry in the world at large brings out the missionary in us; to show the world that chemistry is everywhere, is very useful, and is also a lot of fun. In any case, I am very happy to be a part of a Department with so many great teachers.

Photos left to right: Dr. Horace Luong, Dr. Sean McKenna, Dr. Elena Smirnova, Dr. Phil Hultin
Defining an overarching teaching strategy is not an easy task. Such a strategy must be flexible enough to account for all the situational nuances of each particular case. A true educator should consider his or her intuition in addition to the knowledge of the subject matter and practical skills. This intuition comes from one’s sincere love of the subject, the students, and, of course, the process of teaching itself.

I will begin with a little bit of history. My mother was a French-language instructor in the city of Tbilisi in the former USSR. She had the reputation of being an excellent teacher whose students always gained active language skills. Her example inspired me to become a teacher too. Naturally, I was very interested in the secrets of her trade that could only come from experience.

One case was particularly noteworthy. A desperate mother of a nine year-old boy asked my mother to teach her son French. His behavior was completely out of control: he refused to attend school and once even bit his sister and his grandmother. During the first lesson the boy refused to speak with my mother. He did not want to sit down on a chair and continued to run around the apartment. The second lesson was a bit more successful: the boy climbed on top of our very tall cabinet, but answered her questions. After about two weeks of working in such difficult conditions, the situation normalized. The boy got bored of sitting on top of the cabinet, developed a liking for the French language, and actually enjoyed his lessons. His behavior improved, in general. My mother’s perseverance changed the lives of that whole family, not just the boy’s attitude toward learning.

This is a true story, which greatly affected my views about teaching. I understood that sometimes you have to find unexpected solutions to the problem at hand, and that your student’s interests should be your first priority. Every class has to involve a little theatre, in which the instructor is the performer, and the students are the audience. This “performance” must to be clear and
authentic. During my office hours, for instance, I imagine that I am the host and a student asking for help is my guest. I have to provide as much hospitality and be as accommodating as possible.

Even if I teach the same course for many years, I work on the lecture material before every lecture and almost always look at the material from a slightly different perspective. This process leads to many changes and tweaks. I try to put myself in my students’ shoes. Here, my method is to foresee the most difficult concept of the lecture and to simplify it as much as possible. In order to be understood by the class, I prepare as many visual tools as possible: movies, animations, models, diagrams, examples, analogies, and demonstrations.

Before the iClicker “era”, I posed many questions for the class. Depending on the response, I needed to either repeat the explanation or to continue with the material. Similarly, I find that the clickers are a very useful and an objective tool. You ask the class clearly formulated questions, and their answers indicate that you must either repeat the explanation, or find a better way to explain the concept, or even both.

The first- and second-year chemistry courses that I teach are saturated with problem-solving, and for many students this aspect is a substantial obstacle. Many textbooks recommend the development of a multistep strategic plan. In my opinion, this suggestion is not very useful. My own method to solving numerical problems involves reading the final question and working backwards.

Going against textbook recommendations, in general, should not be such a taboo. For instance, for years I have been proposing an alternative way of solving stoichiometric problems, and many of my students have been satisfied with using this method.

Being flexible with your schedule is also valuable. I am always ready to sacrifice my spare time, watching TV programs, reading interesting books, or socializing with my friends, if there is a need to improve the lecture, to prepare a challenging assignment for the students, or to answer their questions via email. When students do not come to the office hours, their absence may mean that the material was so difficult to understand that they have no hope to get help. Once, I encountered an unprecedented situation: certain students attended the office hours only to listen to their classmates’ questions.

Eye contact is a great indicator of a good class. However, its importance diminishes when the class is comprised of more than 200 students. When a large class size is problematic, I recommend introducing evening tutorials. Students feel more relaxed, less shy, and are not afraid to ask questions. The instructor is not limited by time-constraints and can provide more detailed explanations. However, these tutorials should only be used to elaborate on covered material rather than new concepts.

Expectedly, student feedback is one of the most important indicators of teaching effectiveness. It is here that intuition and case-specific modifications play the greatest role. Perhaps, the most obvious sign is if students enjoy attending my classes and look forward to the next one. At the end of the course, the students keep good memories about the course, specifically, and the subject of chemistry, in general.

What does a student expect from a course? The following brief hierarchic list is based on many conversations with my students over the years:

■ Must successfully complete the course with the highest possible grade;
■ Must enjoy taking the course; and
■ Must gain useful knowledge from the course.

If this list is satisfied, then my teaching had been effective. Ultimately, I have a dream that all of my students pass my courses with A+ to B grades. This dream keeps me busy.
This highly practical and useful book is ideal for exploring our effectiveness as teachers. "How am I teaching" presents a variety of alternative strategies to collect feedback on teaching. The strategies are primarily composed of checklists and questionnaires designed to explore teaching practices. It assumes that data collection will include students, peers and use self-reflection. We are encouraged to take an inventory of our classroom environments and offer our course materials for peer and student review. The book also includes forms for instructional observation by both peers and students including a review of videotaped teaching. It ends with a teaching behaviours inventory rating scale. Even if a teacher did not choose to use the specific forms in the book, they can provide great insight into expectations of effective teaching.

Growing as a teacher involves reflecting on those experiences. As you taught more and more classes, did you notice subtle or obvious shifts in your focus, a natural evolution in the strategies and tactics you began to use as you developed your expertise in teaching? Did you get a chance to reflect on why and how your teaching began to change? As you began to solidify or modify your classroom practices, did you get a chance to evaluate the success of your efforts? If you used student evaluations as a feedback tool, did the results align with your expectations or did you discover something new from the results?

Evaluating teaching is a part of self development, a tool to help you grow as a teacher. Student ratings of teaching effectiveness are one of many tools that can help provide feedback on teaching. At the University of Manitoba, The Student Evaluation of Educational Quality or SEEQ is the senate approved tool for student evaluation of teaching effectiveness. This article will explain what the SEEQ is, explore some arguments for its use and discuss how it can be applied to help review your teaching.

What is the SEEQ?

It is a survey questionnaire containing rating scales (e.g. strongly disagree to strongly agree) asking students to evaluate the teaching quality of their instructors. The SEEQ asks students to evaluate the multidimensional aspects of instruction. Instead of just a global or combined evaluation, the SEEQ separates teaching into nine dimensions (learning, enthusiasm, organization, group interaction, individual rapport, breadth, examinations, assignments and overall). Factor analysis was used to find the consensus which formed the basis for the SEEQ nine dimensions (Feldman, 1989).

“If designed carefully, distributed appropriately, and tabulated thoughtfully, student evaluations of teaching can contribute to the accurate evaluation of an instructor’s teaching and can be used to improve the teaching abilities of the instructor being evaluated” England (1996, p. 20).
Why the SEEQ?
The strength of the multidimensional SEEQ is that it is reliable and stable over time. Coffey & Gibbs (2001) commented on the impressive reliability of the SEEQ. The authors assessed that “…the psychometric characteristics of the questionnaire are developed to a high degree. The SEEQ has an exceptionally high level of reliability \( r = 0.88 \) to \( 0.97 \) \((p.90)\) [2006].” The SEEQ results are also steady over time as Marsh notes that in a longitudinal study, “the mean ratings of the same [195] teachers are remarkably stable over a 13-year period.”

The SEEQ itself is used to obtain teaching feedback throughout North America and Australia. As part of an arsenal of methods to evaluate teaching, the SEEQ uses language and concepts that are universally known in the literature concerning student evaluations of teaching.

Why use Students as Evaluators?
You might ask, what makes students suitable to rate your teaching? “Students are in a unique position to rate their own increased knowledge and comprehension as well as changed motivation toward the subject taught” (Scriven, 1995, p. 2). Not only can students identify the impact of teaching on their own learning, their impressions are reflective of teachers’ self-evaluation of their own teaching. Students and instructors agree on the teaching aspects that are important in the classroom, as instructional dimensions identified by students correlated strongly \( r= .71, p<.01 \) with those identified by faculty (Feldman, 1989). When the SEEQ was used as a self-evaluation tool by faculty, the mean difference between those SEEQ results and those completed by students was small (Marsh, 2006), suggesting that when interpreted correctly, student ratings can be useful evaluations of teaching effectiveness. “If designed carefully, distributed appropriately, and tabulated thoughtfully, student evaluations of teaching can contribute to the accurate evaluation of an instructor’s teaching and can be used to improve the teaching abilities of the instructor being evaluated” England (1996, p. 20).

How Can It Help My Teaching?
Despite being statistically robust it is important to note that the SEEQ does not need to be the sole form of the feedback you obtain on your own teaching effectiveness. The SEEQ can be used to help you review the strengths and weaknesses of your teaching but it is most effective when it is customized to reflect your teaching and when it is supplemented with other feedback forms in order to give a more complete picture of your instruction.

So you have received your SEEQ results and the most tempting thing to do is to look at the overall results and calculate the average. In contrast to just using overall scores, you can analyze your results by categorizing the student responses using the nine SEEQ dimensions. The SEEQ is developed so that each individual question reflects an aspect of teaching. The questions may help you determine your teaching strength and weaknesses. Looking at each SEEQ domain and its corresponding questions is important because performance in each area may vary.

The SEEQ is an excellent machine like a Porsche, but to drive it during the winter you may have to modify it by adding winter tires or specialized window wipers.

Because performance on the SEEQ is domain specific it is important to customize the SEEQ to reflect your teaching and your teaching environment. The SEEQ is an excellent machine like a Porsche, but to drive it during the winter you may have to modify it by adding winter tires or specialized window wipers. Just as each modification will help the Porsche adapt to winter conditions, customizing the SEEQ will help you better represent what you are doing in your classroom and therefore gather more specific feedback on your teaching. The University of Manitoba has a pool of additional questions available to you. The process is that you may request that the central administrators of the SEEQ add the additional SEEQ questions in the “Supplemental Questions” area on the back page of the SEEQ (the space just above the comment section). In this case, the form that you distribute to your students will have the core SEEQ questions as well as up to seven.
additional questions that you have added to customize your SEEQ evaluation form. The additional items are divided into broad categories like questions for clinical sessions, field placement, online learning, course components and group work. You can also obtain more specific feedback on your teaching methods and the student’s own view of their learning.

In addition to customizing your SEEQ, it is important to supplement your results with other forms of student feedback because the SEEQ is not the sole means of gathering feedback on your teaching. The SEEQ results are a tool to help you self-reflect. The SEEQ is a snap shot of student responses to your teaching. As teaching is multi-faceted, complex and individualistic, the picture SEEQ results may give you may be incomplete. In order to get the whole picture regarding your teaching, you made need to overlap your SEEQ results with feedback from other sources like a supervisor, peers and your own self impressions. Just like good research involves triangulation of various data gathering methods and sources, investigating one’s own teaching entails examination from different angles. Explore your SEEQ results in conjunction with other forms of feedback that you can design, deliver and distribute to students. For example, you can ask students to comment on how you are doing throughout the course. Getting a peer to observe your teaching is also an excellent method of gathering feedback on your teaching. “Involving peers in the course of reviewing one’s teaching can lead to improving its quality and can create a campus climate that supports quality teaching” (England, 1996, pg. 20).

In sum, the SEEQ (Student Evaluation of Educational Quality) is statistically robust and “designed carefully” (England, 1996, p. 20). If used as a tool for self-reflection on teaching, customized and supplemented with other forms of feedback the analysis of the SEEQ results can be “tabulated thoughtfully” to help “improve the teaching abilities of the instructor being evaluated” (England, 1996, p. 20).

References


The SEEQs for your last course are available! This knowledge can create a roller coaster of emotional reactions for the teacher. The heart starts to palpitate. Breathing changes to short, rapid, shallow breaths. The palms feel sweaty. The envelope is opened tentatively. Some teachers scan the first page, hoping to delay the inevitable written comments. Others jump into the deep end and go straight to the comments. "The teacher was very approachable and made me feel valued" – this is good, the teacher feels validated and continues to scroll through the comments and reads "I do not know why they let this teacher teach at this University - they are completely useless at their job, I hope they never get tenure!" This inevitably evokes an even greater reaction – it likely begins with denial, followed quite closely by anger – Who do they think they are? This is not fair; students know nothing about my subject matter, etc. Then the anxiety begins to set in as the instructor experiences a sense of vulnerability, perhaps even failure. This scene is played out in many offices throughout universities everywhere. Some teachers have even resorted to "filing" their SEEQ results in an obscure cabinet or perhaps even in file "G"-unopenened. Others take an apathetic view of a process they view as invalid.

So, why do so many of us experience an increase in anxiety, perhaps even a sense of panic when we are faced with the "student evaluations of educational quality" (SEEQ)? Although there are many reasons why this feedback can be received with a certain amount of anxiety, the most common reason for pre-tenured faculty is the realization that the their department head is going to see these results and hold them accountable. Ronald Berk (http://ronberk.blogspot.com/) reports in his blog that "in surveys over the past decade, it was found that 86% of U.S. liberal arts college deans and 97% of department chairs use student ratings for summative decisions about faculty. Only recently has there been a trend toward augmenting those ratings with other sources of evidence and better metaphors (Arreola, 2007; Berk, 2006; Knapper & Cranton, 2001; Seldin, 2006)". Unfortunately we know that anxiety is a limiting factor for learning. So, how can we better manage the stress associated with our SEEQ results?

First of all - open your SEEQ results in private. Give yourself a chance to emotionally react to both the positive and not quite so positive feedback. Take a few deep breaths to calm your physical self which is reacting to your mental interpretation of the feedback (Wehrenberg, 2008). If your locus of control is external, you might find this feedback more helpful than if you operate with an internal locus of control (Brinko, 1993). In that situation, you might be more tempted to dismiss the feedback. Additionally, if you have a strong sense of self-esteem you may perceive negative information less clearly than positive information. Conversely, if you find yourself to be feeling rather insecure about your teaching, you may place more emphasis on the negative feedback and less on the positive feedback (Brinko, 1993). Once you feel physically calm, allow yourself to reflect on whether there could be a grain of truth in the comments.

In all situations you might consider that a slight shift in perspective or reframing could be helpful (Botterill, 2003). The SEEQ provides feedback on performance. "Among all instructional development efforts, the most promising
way of fundamentally changing post-secondary teaching is to provide faculty with individualized formative feedback” (Brinko, 1993). Feedback on performance is always challenging to receive as there is always something that can be improved upon.

Another perspective is the recognition that teaching is learned; and the process of developing expertise in teaching relies on making regular and frequent adjustments to our practice. We need feedback to make those adjustments. At this point, you may be tempted to argue that the SEEQ student feedback is anonymous and that lack of accountability allows students to provide personal, hurtful criticisms. You may argue that the evaluations are meaningless. Although there is a large body of research around student evaluations which support their validity and reliability (Coffey & Gibbs, 2001; March & Roche, 1997; Wagenaar, 1995), this does not mean that the SEEQ is the only form of feedback you can collect on your performance. You can collect ongoing feedback from students on your performance, from your colleagues and from your own self-reflections (Weimer & Kerns, 2002). Just as good teaching encourages multiple forms of assessment, so too should the teacher collect information on his/her performance in multiple ways. Some suggestions can be seen on page 6.

Given that learning to teach is a process, it might be helpful to take 5-10 minutes after the conclusion of a class to jot down some reflections—What went well in today’s class and why? What did not go as well as I would have liked and why? What would I repeat for the next time I teach this class and what would I do differently? Take a risk and try something new in your class. Ask your students—how did this help you learn? What was good about it? How can I make it better? If these notes are kept with the lesson plan and class notes, the next time the class is taught, the notes will trigger adjustments to the lesson plan and instructional strategies. If this investment of time is not completed it is very easy to become frustrated with poor classes and not know how to improve poor teaching or to replicate good teaching. There needs to be time and effort put into analyzing the effectiveness of the teaching in an ongoing manner in order to grow as a teacher (Weimer & Kerns, 2002).

Developing expertise in any domain, including teaching, takes several years of dedicated practice (Ericsson, 2006) during which the teacher responds to ongoing feedback and works within a supportive community of practice (Ericsson, 2006). So, you might consider sharing your SEEQ results with a trusted friend, colleague or mentor to gain a less biased perspective. And give yourself a break. This is about being on a journey, not the destination. What do you do well? How can you do it better? What is your greatest area of weakness? How can you improve? Who can help you? Learning to teach is not a solitary activity. Find a teaching mentor (Lomas & Kinchin, 2006; Fernandez & Yu, 2007). Go to professional development workshops and teaching conferences. Read an article or book on teaching. University Teaching Services can provide a broad variety of resources, including a library as well as provide individualized support for you in your journey. An experienced colleague and expert teacher could be a great resource.

Learning to accept and act on negative feedback is its own journey. But we are all travelling the road together. Let’s support each other as we grow into excellent teachers!

References:


As you can see from this newsletter there are a number of ways to measure teaching effectiveness. At an institutional level many universities participate in the National Survey of Student Engagement.

What is the National Survey of Student Engagement?

The National Survey of Student Engagement (NSSE) is an annual survey of first and final year undergraduate students that measures the extent to which students engage in educational experiences associated with effective practice. These experiences are grouped into the following benchmarks:

- Level of Academic Challenge
- Active and Collaborative Learning
- Student Faculty Interaction
- Enriching Educational Experiences
- Supportive Campus Environment

(NSSE, 2010)

The purpose of the NSSE is to assist universities to identify areas of strengths and challenges associated with the educational experiences of undergraduate students. This information can be used to highlight approaches and strategies that are working as well as concerns that need to be addressed. Each Faculty receives The University of Manitoba NSSE results as well as comparisons to comparable universities. Although the comparative data is important and we need to be mindful of where we stand nationally, our focus should also be internal as most of the variation in scores is within a university, about 90% vs. between universities 10%.

Two other external sources of information that can assist us in our internal analysis are the FSSE which is the faculty version of the NSSE and the CLSSE which is a classroom version. Integrating responses from faculty is a critical factor as they can be important catalysts for change. Faculty members are often reluctant to take on new initiatives or change existing practice unless it can be proven that their efforts will result in some significant change. However, the research on changing instructional practices often reports that there is no significant difference. One of the reasons is the impact of a change in practice is often instructor specific. In other words, the innovation may produce promising or exciting results in one classroom and very little difference in another. Grouping the individual results together can produce a regression to the mean that often results in no overall significant difference. For this reason it is important not only to include faculty perceptions in the analysis of the data but also to allow flexibility for instructors to select learning strategies that match their talents, interests and creativity. In cases where instructors are interested in changing their practice the administration of the CLSSE can provide specific data to individual instructors.

Another factor to consider in your analysis of NSSE data is that certain items are more critical to student learning than others and that certain items are more important at certain stages of the learning process. For example, items like:

- “Examined the strengths and weaknesses of your own views on a topic or issue” (6d)
- “Tried to understand someone else’s views by imagining how an issue looks from their perspective” (6e)
- “Learned something that changed the way you understand an issue or concept (6f)
- “Writing clearly and effectively” (11c)
- “Speaking clearly and effectively” (11d)

are important components associated with the development of critical thinking. Identifying items that are of particular interest/importance to your Faculty and students will assist you in focusing your efforts. In addition, there are many approaches that result in improving student achievement and satisfaction. For example, if your Faculty is interested in improving student engagement this can be accomplished in multiple ways such as active learning activities, incorporation of technology, storytelling etc.
Since we know the impact of changing teaching practice can be instructor specific we encourage instructors to choose a strategy that works well for them rather than instituting a one size fits all approach.

**How can University Teaching Services Help?**

UTS provides individual or Faculty consultations on all aspects of teaching and learning. We can support your NSSE data analysis and provide assistance implementing teaching and learning strategies specifically designed for NSSE benchmarks and item questions including:

- Development and review of curriculum or courses
- Selection and implementation of a broad variety of instructional strategies
- Development and implementation of assessment tools, implementation and critical review of student evaluation measures
- Design and review of measures of personal teaching effectiveness
- Design, implementation and evaluation of technological tools and practices in teaching/learning

Consultations can be arranged by contacting [www.umanitoba.ca/uts](http://www.umanitoba.ca/uts).

**References:**


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(Continued from page 12)

I love to Teach CONTEST

University Teaching Services will be **CELEBRATING TEACHING and TEACHERS** with the theme of “I Love to Teach” during the month of February 2011. We would like to extend an invitation to members of the U of M teaching community to share their teaching expertise by describing their most effective teaching practices using the “I Love to Teach” form available at any UTS workshop and online at [http://intranet.umanitoba.ca/academic_support/uts/Contest.html](http://intranet.umanitoba.ca/academic_support/uts/Contest.html).

Upon successful completion of the form your name will be added to a Draw for an Apple iPad. The feedback we receive will
University Teaching Services, in collaboration with the Faculty of Graduate Studies, offers a Certification in Higher Education Teaching (CHET) program for graduate students at the University of Manitoba. It is an opportunity for participants to garner an understanding of basic teaching principles, gain some confidence to teach and present to an audience, and provide much needed support in developing a teaching dossier.

Many students have benefited from having participated in the CHET program since its inception. One student writes, “I would recommend the program to everyone who cares about teaching and desires to be a good teacher”. It was the strategies learned in the various workshops and courses which enabled this student to improve on her teaching style, enhance cultural sensitivity, and develop better presentation skills.

Muthukumar Bagavathiannan is a PhD student in the department of plant science and a graduate of the CHET program. He received a graduate student teaching award of merit (2009) from the North American Colleges and Teachers of Agriculture (NACTA) for meritorious efforts in college teaching.

According to Muthu:

I must tell you that the workshops and teaching assignments provided me with the essential classroom managements skills and most importantly helped build up the confidence in front of the students. Being an international student, I feel much honored about this recognition and it would not have been possible without the CHET program.

The CHET program has four requirements: core course(s), teaching practicum, workshops, and a teaching dossier. Although the program is not a comprehensive teaching program, it does provide an invaluable base for graduate students who have little background in teaching and wish to pursue an academic career. It is also helpful for students who may have teaching experience in another country and desire to gain some teaching knowledge in a Canadian setting. ▪ [http://intranet.umanitoba.ca/academic_support/uts/programs/chet.html](http://intranet.umanitoba.ca/academic_support/uts/programs/chet.html)

Further inquiries can be directed to junge@cc.umanitoba.ca.
GRADUATE STUDENT FALL
WORKSHOPS & COURSES

TEACHING Dossier

The Teaching Dossier (TD) is an essential document for all instructors and academics. In the TD an instructor:
• records his/her approach to teaching
• provides supporting evidence for teaching effectiveness and
• self-reflectively chronicles his/her growth of teaching expertise.

Note:
• A Teaching Dossier is a CHET requirement.
• The teaching dossier content will be delivered in 5 sessions over the fall 2010 and winter 2011.
• It will be most beneficial if participants could attend all sessions but it is not mandatory.

I. The Basics Thursday, Oct 14, 2010 10 am - 11:30 am 207 Isbister
The Basics workshop is designed to explore the fundamental design and purposes of a teaching dossier. This foundational understanding is necessary for the instructor to begin to plan, record and reflect on teaching activities while they are occurring.

II. Curriculum Vitae Thursday, Oct 28, 2010 10 am - 11:30 am 207 Isbister
The CV development will utilize the standardized U of M CV template. Design, content, formatting, and tone will be discussed. Individual consultations will be available.

III. Teaching Philosophy Winter 2011 207 Isbister
This workshop will facilitate the exploration of individual philosophies of teaching and learning with the aim of having a draft outline developed by the end of the session.

IV. Evidence of Teaching Effectiveness Winter 2011 207 Isbister
Specific direction on forms of collection and on the types of documents which provide teaching evidence will be discussed.

V. Finishing Touches Winter 2011 207 Isbister
Putting it all together and reviewing the dossier using a teaching dossier rubric will conclude the workshop sessions. Participants who have completed the various components covered in the previous workshops will have a completed teaching dossier after this workshop.

Rubric Development
Thursday, October 7
9:30 - 11:30

Creating and Delivering Dynamic Presentations
Tuesday, October 19
10:00 - 12:00

Course/Class Content: Too Much or Not Enough
Wednesday, November 24
1:30 - 3:30

CHET Core Course Alternatives for 2010—2011

OPTION 1: EDUB7416 Teaching and Learning in Post-Secondary Education (30 hrs) (Tentatively Scheduled for the 2011—2012 Academic Year)

OPTION 2: CHET Theory Non-Credit Course: The Teacher In You (30 hrs), (Scheduled for Winter 2011-Week of January 10th Start Date - Approx. 3 – 5 hrs per week, Online Course)

OPTION 3: Teaching Techniques (15 hrs) Scheduled for Fall 2010 (See Complete Schedule on UTS Website)

AND:

OPTION 3: Course Construction & Organization (15 hrs) Scheduled for Winter 2011 (See Complete Schedule on UTS Website)

Note: Option 3 includes these 2 courses plus 2 Research Papers.

IMPORTANT
All UTS workshops will be held in the UTS boardroom - at our new location, 207 Isbister Bldg.

For workshop registration, please visit us at
I CAN ALMOST HEAR YOUR THOUGHTS WHILE YOU'RE READING THIS. "Yeah, yeah, using technology in my teaching. I've heard this before, but my field just isn't conducive to using technology", or maybe "Sure, technology would be useful in my classroom...that is, if I were teaching my students how to waste time!" Even if you are not thinking these things, many are. In fact, I used to be one of them. My name is Rob Borgersen, and I am an instructor in Mathematics here at the U of M.

I have always been a bit of a computer geek. I have always loved technology, and have loved playing around with it. When I started teaching, I immediately made a website. Everyone is on the web today, and it is a great way to distribute paper work to the class (assignments, course outlines, worksheets, old exams, and the like). Today I wouldn't run a class without a website, no matter how small. But, looking at other technologies out there, other new "toys" that were being produced, and other Web 2.0 apps being created, I would have never considered using most of it for my teaching. To me, technology was a lot of fun, but often it just ended up being a big waste of time. I would surf and find the latest Web 2.0 application, and try it out because it was fun. But, when I really needed to get some work done, I would put the cool little apps away, and get back to "real life".

Take for instance Twitter. For those of you who have never used it, let me give you an idea of what it is. Twitter was designed so that you could instantly and immediately tell anyone and everyone who cared, what you are doing, at any moment and from anywhere. It utilizes text messages and mobile technology to update from your cell, and web technology to update from any Internet connection. Haven't you always wanted to let your closest friends know when you are going to the bathroom? Now you can! <end sarcasm>

For those of you who know this much about Twitter you have probably envisioned exactly the above bathroom scenario, and have said to yourselves "what's the point?", and never looked back. This was me about a year ago.

One day, when I was nearly done with playing around with Twitter, I came across the following tweet:

Requested my Google Wave Invite! Get yours now at http://www.(website removed).info - #googlewave #googlewaveinvite

In case you've never heard of it, Google Wave is a rather cool little piece of software. I won't get into the details here, but suffice it to say, at the time it was just another new Web 2.0 app I wanted to play with. It had just come out in beta, and so it was invite only. Now suddenly Twitter had a purpose. This person had used Twitter incorrectly; that is to say, not sharing what he was doing, but sharing some piece of information (a website) that I wanted to know.

When this website didn't get me the invite, I went searching on Twitter, and while looking for it, came across this tweet:

The missing instruction guide to Twitter! http://tinyurl.com/czkakl

This manual really helped and I started using Twitter for what made it so popular: sharing information. Some of it funny, some of it inspirational, some of it useful, some of it cool, and some of it just plain weird. I began to follow
users like Sean Malarkey, who provided cool techno tips and tricks, and RedFlagDeals, a website and Twitter account devoted to finding deals for Canadians.

None of these users are sharing what they are doing. I said to myself, “they are and have been using Twitter incorrectly!”, but the results were much more interesting. Today this is closer to what Twitter has become: a forum to share information among the masses. Follow those with similar interests to you, and you will receive a ton of information, likely much of it interesting to you, updated regularly, and receive it instantly anywhere and everywhere you are, either through a standard browser, or on your mobile!

So what about using Twitter for education? The key as I have found it is the following principle: anything and everything can be useful for education, just be open minded. Here is an outline of the history of events that took place with Twitter: 1) Educators like you and me start using Twitter. 2) They find each other through various methods. 3) They began chatting and sharing education tips and tricks with each other. 4) More and more educators got involved, and they organized. 5) #EdChat was born. #EdChat is an online chat discussing education issues that takes place on Twitter twice every Tuesday! A whole lot of educators participate, and it is growing every week! All these educators did was use something they were using anyway, were open minded about what could be done, and formed a networked group of educators helping, encouraging and sharing with each other (you could almost just say that they let it happen rather than made it happen). More than that, all these people come together and share ideas, blog posts and actual recent results of using technology for education.

Here is a really basic outline for getting involved in #EdChat. If you haven’t used Twitter before, or you would like a little more detail, check out my blog post on it at http://edtech.robertborgersen.info/?p4

1. Sign up for a Twitter account at http://www.twitter.com and log in
2. Perform a search for #EdChat search box is on the right vertical bar
3. You are in! To chat, send your tweet using the box at the top of the screen anything including the exact word “#EdChat” usually at the end of your tweet to make sure others will see it.
4. Retweet comments people make that you like mouse over a tweet and select Retweet
5. Have conversations by talking to another user using the “@” operator. For instance, my user name is robertborgersen, and so to send a public message to me, you start your tweet with “@robertborgersen”. Again, make sure to include “#EdChat” at the end so that everyone can be involved in the conversation!

Here are some links I found through #EdChat about using Twitter in education:

“Twitter Tweets for Higher Education” (link: http://tinyurl.com/yvpwn6)

“50 Ideas on Using Twitter for Education” (link: http://tinyurl.com/6cu7kb)

“Using Twitter in Education” link: http://tinyurl.com/dqgic2

“50 Ways to Use Twitter in the Classroom” (different from the above 50! link: http://tinyurl.com/22tmv

This is only one technology. One Web 2.0 app. There are thousands I have not
What Graduate Students and Teaching Faculty should know about Open Access Publishing

Introduction to open access

Do publicly funded universities have a democratic, even moral obligation to ensure that academic scholarship is accessible on the internet? Should teachers inform their graduate students about the advantages of retaining copyright? What should teachers tell graduate students about online publication in an era where open access publication is challenging traditional publishing venues?

Librarians and many academic researchers and administrators have long been frustrated that publicly-funded research can only be made available to their faculty and students through costly subscriptions to journals and databases, subscriptions that have furthermore been subject to high inflationary increases – at times as much as 17% a year. The open access movement emerged from a combination of issues around high cost, copyright and different publication models that the Internet has made possible. The key goal of the open access movement was set out in the Declaration of the Budapest Open Access Initiative in 2002, the 2003 Bethesda Statement on Open Access Publishing and the 2003 Berlin Declaration on Open Access to Knowledge: that scholarly literature is made freely available on the Internet so that any lawful use can be made of it (reading, downloading, printing, etc.) without financial, legal or technical barriers, subject to proper attribution of authorship. Open access is not vanity publishing or self-publishing. It concerns the types of intellectual output that scholars generally give away for free to publishers and conference attendees – peer-reviewed articles, conference papers, project reports, etc.

Benefits of open access

Open access repositories are indexed by Google, allowing for much greater visibility of research than provided by toll access, where only those who can afford to subscribe to the journal or database can access the article.

For graduate students and faculty the potential benefit of having their work cited more often when published in open access publications or deposited in open access repositories is certainly attractive. A number of studies have shown that open access publishing can significantly increase the citation impact of the article, depending on the discipline (see Michael Norris’s PhD thesis, “The citation advantage of open access articles” [http://hdl.handle.net/2134/4089] and A. Ben Wagner’s “The open access citation advantage: an annotated bibliography” http://www.istl.org/10-winter/article2.html). In addition, time to publication can be much shorter through an open access publisher, and research can advance more quickly.

Allowing students and scholars in developing countries unimpeded access to text books and research, as well as giving them the ability to make their own research available to scholars worldwide, are further benefits of open access.

Peer review

Open access does not mean that articles or books bypass the peer review process. Quality assurance through peer review is the basis for scholarly publishing and open access journals use similar methods for peer review as toll access journals. An article that an author decides to archive in an institutional repository has generally been through the peer-review process as part of being published in a toll access journal. A number of disciplines, notably physics and economics, have embraced open access for preprints and working papers; research is circulated and commented on before formal publication.

Two ways to ensure open access to research

There are two ways of publishing through open access: the gold route and the green route. By following the gold route, graduate students and faculty publish their articles in open access journals or with open access publishers in the case of books. These journals and publishers might be wholly open access, such the Public Library of Science (PLOS) and BioMed Central (BMC), or ‘hybrid’ where journals continue to be published traditionally but authors pay a fee so that their article is
available to anyone whether they have a subscription to
the journal or not. Wholly open access journals may also
require the researcher to pay a fee, but this can be
subsidized by the institution or grant support. In the case
of BMC, the University of Manitoba Libraries recently
became a pre-paid member which means that U of M
authors, whose works are accepted for publication, no
longer pay author fees when they publish in BMC
journals. The Libraries also provide a listing of more than
5,000 open access journals through the Directory of
Open Access Journals.

The green route to open access is self-archiving in a
repository, which can be institution- or discipline-based.
In this scenario a graduate student or faculty member
publishes an article in a toll access journal but also ar-
chives it in one or more repositories. The University of
Manitoba’s institutional repository, MSpace, already has
an established collection of graduate student theses
and research publications (available at http://
mspace.lib.umanitoba.ca/handle/1993/2761) all of
which are indexed by Google.

In order to archive a copy of an article in MSpace, the
researcher must ensure that he or she has the copyright
holder’s permission. If he or she has retained copyright,
the article can be deposited – this is the best scenario
and researchers should always try to retain copyright for
their works. However, if copyright has not been retained,
SHERPA RoMEO (http://www.sherpa.ac.uk/romeo/
) provides a summary of permissions that are normally
given as part of each publisher’s copyright transfer
agreement. If the journal does not allow the article to
be archived in MSpace, then the author can still archive
the preprint and corrigenda (the differences between
the preprint and postprint).

When open access is required
Funding bodies in Canada and across the world are
beginning to make open access to research results a
requirement of their research grants. In Canada, both
the CIHR and the NRC call for grant holders to archive
their work in open access repositories. CIHR requires the
deposit of the author’s final version of peer-reviewed
publications into PubMed Central Canada at the earliest
possible opportunity. NRC requires the deposit of peer-
reviewed publications, conference papers and project
reports (either the publisher’s version or the author’s
final version) into the NRC Publications Archive (NPArC),
also at the earliest possible opportunity. University of
Manitoba graduate students and faculty are encour-
aged to deposit their research to MSpace, and protocols
are being developed that will allow deposits in PubMed
Central Canada to be automatically copied to MSpace
when deposited by a University of Manitoba author.

You are invited to attend!

The University of Manitoba Libraries will be
holding an Open Access Forum open to the
entire campus and the public. Michael Geist,
Canada Research Chair in Internet and
E-Commerce Law at the University of Ottawa
will be speaking about open access and copyright,
followed by a panel and an information session.
Panelists include Karen Adams, Director of
Libraries; Diana Brydon, Canada Research Chair
for Globalization and Cultural Studies;
Digvir Jayas, VP Research; Kelvin Seifert,
Faculty of Education; and Michael Geist.

Please join us for morning
coffee and refreshments!
A draw for two door prizes will be
held for registered participants.

October 18, 2010
Cross Common Rm., 108 St. John’s College
9:00 am — 12:00 pm
Register for this event at:
http://www.umanitoba.ca/libraries/units/health/
archives/openaccess.html

You are invited to attend!
10 Tips and Tricks for Using the iPod Touch in Classrooms

by David R. Wetzel

http://preview.tinyurl.com/IPods-in-the-Classroom
Fall 2010 Workshops for Faculty

Facilitating Focus in Students with Attention Disorders
Tuesday, October 26
10:00 - 12:00
207 Isbister
Facilitators: Miriam Unruh, Coordinator, U1/Learning Assistance Centre & Roslyn Gaetz, Accessibility Advisor, Disability Services

Better Testing for Better Learning
Thursday, November 25
9:00 - 12:00
207 Isbister
Facilitators: Donna Martin, Asst. Professor, Nursing & Eunice Friesen, UTS, Assoc. Director

Enthusiasm: In the SEEQ and In your Classroom
Tuesday, November 16
2:30 - 4:00
207 Isbister
Facilitator: Angela Tittle, UTS, Assoc. Director

LINKED SERIES OF WORKSHOPS: DEVELOPING ENGAGING ASSIGNMENTS

Workshop 1:
Shopping List or Learning Tool? The Anatomy of the Student Assignment
Thursday, November 18
10:00 - 11:30
207 Isbister
Facilitator: Betty Braaksma, Information Coordinator, Libraries

Workshop 2:
Lessons Learned: Developing Engaging Assignments
Wednesday, December 1
9:30 - 11:00
207 Isbister
Facilitator: Lena Horne, Assoc. Professor, Textile Sciences

Workshop 3:
Hands On: Developing Engaging Assignments in Action
Winter 2011
Date: TBA
Time: TBA
207 Isbister
Facilitator: Lena Horne, Assoc. Professor, Textile Sciences

Workshop 4:
Sharing the Wealth: Using Reference Management Tools
Winter 2011
Date: TBA
Time: TBA
207 Isbister
Facilitator: Betty Braaksma, Information Coordinator, Libraries

For ways to enhance your teaching & workshop registration, please
Recovery begins with teachers

5 October www.5oct.org