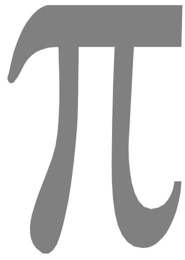

PAIDEIA

TEACHING & LEARNING AT MOUNT ALLISON UNIVERSITY
THE NEWSLETTER OF THE PURDY CRAWFORD TEACHING CENTRE

THE IMPORTANCE OF GOOD TEACHING

What ***is*** good teaching anyway? In 2001, I attended a conference presentation in St. Louis at which the presenter, Dr. Dee Fink, posited that good teaching begins long before the instructor walks into the classroom. Not surprisingly, he said that good teaching starts with subject knowledge: identifying central concepts, pitching them at the right level for students, knowing what to leave in and what to take out. Next (and still before the first day of class) is course design: having clear objectives, choosing appropriate activities and assessment techniques, and integrating assessment with learning. Once the course actually begins, good teaching is about how the instructor interacts with students, helping them learn the core concepts in engaging ways, earning their trust, and treating them fairly. And finally, good teaching includes a considerable amount of old-fashioned management: preparing individual classes, collecting and returning assignments, keeping records. All of those are the nuts and bolts of good teaching, said Fink, yet its primary measure is that good teaching results in *significant student learning*. Fink has gone on to elaborate his theories on good teaching and significant student learning in many influential books and articles.

In this issue of PAIDEIA, two award-winning teachers from the Atlantic region share their 'take' on the importance of good teaching: Dr. Shelagh Crooks (Saint Mary's) and Dr. Erin Steuter (Mount Allison). Their pieces are adapted from presentations each made to regional University Presidents when she won the Association of Atlantic Universities Distinguished Teaching Award. Also included are details about student learning outcomes; an invitation to attend this year's Fall Teaching Day, at which Shelagh Crooks will give a featured presentation; some thoughts on writing across the curriculum; and information about PCTC events this term.

Best wishes for the academic year ahead!

You are warmly invited to attend

Lectures: Dead and Alive

By Dr. Bruce Robertson (Classics)
2010 Recipient of the Herbert and Leota Tucker Teaching Award

Wednesday, September 1st, 3 pm in Crabtree Auditorium

A reception will follow at Cranewood.

Mount Allison University
http://www.mta.ca/pctc

The Importance of Good Teaching: Inquiry

Shelagh Crooks
Saint Mary's University

Universities have long fostered a robust academic culture for sharing the results of disciplinary research. This tradition of open exchange is the essence of the academy, and it is essential to the advancement of knowledge. It is no accident that this is so: knowledge is a social phenomenon, and it grows through social interaction. The hurly-burly of intellectual debate among peers is the testing ground of academic theories. In debate, theories are clarified, refined, corrected, extended, and they become the creative spark for new theories, and for new ways of conceptualizing issues.

But teaching in the academy is not at all like this. It operates within a culture of individualism and isolation. As teachers, we have developed few habits or conventions for exploring the impact of our pedagogical practices on student learning, or for sharing what we know about teaching with colleagues who might build upon it. As teachers, we almost always work alone. When we walk into our workplace, the classroom, we close the door on our colleagues. When we emerge, we do not talk about our teaching—about what is going well, what is not, and why—for we have no shared experience to talk about. Indeed, teaching problems are seen to have a significantly different status in the academy than research problems.

Teaching problems are regarded as 'troubling' or, perhaps, 'bothersome', but not 'interesting' and 'important.' They are problems to be 'fixed' or failing that, covered up and ignored, but they are not problems to be 'investigated.' In teaching, a problem is something you don't want to have, perhaps because it signifies personal failure of some kind. In research, a problem is a good thing; it is the point of departure for inquiry, the centre around which all intellectual activity revolves. And so side-by-side in the academy we have two disparate cultures, two solitudes—one is deeply based in inquiry and collegiality, and the other is anything but.

I find this state of affairs remarkable because the university is a place of learning, yet there is very little systematic research about learning going on. It is remarkable because the university calls itself a community of scholars yet, with rare exceptions, no such community exists for those who want to pursue inquiry into teaching and learning. It is remarkable because faculty, who ordinarily demand rigorous standards of evidence and justification for knowledge-claims within their special field of inquiry, seem content with lesser standards for beliefs and practices in regard to teaching. And it is remarkable because it is not at all clear that problems in teaching are any less significant and less deserving of rigorous investigation than research problems within the disciplines.

The truth is that teaching is a complex intellectual and human activity. It can be done well and it can be done poorly. If we are to be effective teachers, we need to know a good deal more than just our subject. We need to know how individuals experience the subject. We need to know the ways the subject can come to be understood, and the ways in which it can be misunderstood. To engage in this kind of inquiry, we must give some thought to the nature of understanding itself. We must ask ourselves, 'What is it to understand a concept or theory?' 'How is understanding to be manifested in the context of a conversation in class, in a group presentation, in an item of analysis, or in fictional writing?' 'How is understanding demonstrated in my discipline?' We must have a clear conception of why *understanding* a particular subject-matter, rather than retaining facts about it, should be the goal of teaching in the first place.

These are serious, challenging, intellectual questions. They are questions that cannot be answered intuitively or anecdotally; they require investigation and careful reflection on the results of that investigation. They are questions to be discussed and debated with peers, and (contd.)

even with students. Indeed, I would argue that these questions are presupposed in the very act of teaching, for the manner in which individual teachers answer them has consequences in terms of the decisions they make about curriculum design, teaching methodology, and assessment.

There are other questions to be investigated, questions which speak to pressing institutional and public concerns about student success in higher education. Among these are questions such as, 'Why do first-year students drop out of university at a rate of 30%?' and, 'Why do only 50% of students who are in university actually graduate?' And there are questions that are peculiar to a particular discipline or to a particular instructor. I teach philosophy, and I am intent that my students experience their learning in my classroom as relevant and, indeed, important to their lives. I want them to make a connection—to apply the concepts, arguments and critical methods of philosophers to the problems and issues that really matter to them. So I find myself inquiring into issues of teaching methodology. I ask, 'How can I create a bridge between my students' daily experience and decision-making, and philosophical analyses of, say, personal identity, or the principle of universalizability in ethics?' 'How will my students come to know that the real take-away from philosophical training is not a familiarity with the writings of the great philosophers, but the development of a capacity for analytic thinking, and with that, the development of their own intellectual autonomy?'

I believe that asking these questions, and countless others like them, makes me a better teacher. It makes me inquire into my own assumptions about my discipline, about my students, and about teaching itself. It makes me inclined to try new things in the classroom, to conduct experiments using different course materials and different pedagogies. It makes me engage the scholarly literature in teaching and learning, and it allows me to risk revealing to my colleagues that I actually have teaching problems and to seek their advice. In doing all of this, I learn about teaching and learning.

We must bring teaching out of the closet . . . . Inquiry into teaching must become a fully legitimate, 'counted' kind of scholarly work in the university.

And so, I speak not only to the *importance* of good teaching in the academy, but also of the ***importance of supporting good teaching***. Good teaching is no accident: it is the product of substantive intellectual work that goes well beyond the development of an individual or 'signature' classroom technique. Thus, if we are going to support good teaching, it is imperative that we create an institutional environment where teaching inquiry is respected and rewarded, where innovations in curriculum and pedagogy are tried out, and where questions and answers about education are exchanged, critiqued, and built upon. In short, we must bring teaching out of the closet in the academy. We must create a new culture around teaching—a culture that is dynamic, inquiry-based, and, above all, collegial.

Of course, cultural change, especially in the complex and often conflicted workplace of the university, does not happen quickly or easily. Institutions and their leaders must embrace the vision of teaching as inquiry, and they must commit to making change happen. In practical terms, this means that universities will have to put their money—understood both literally and figuratively—where their mouth is.

Let me be more specific. First of all, teaching inquiry must become a fully legitimate, 'counted' kind of scholarly work in the university. Faculty simply will not pursue teaching inquiry if, in doing so, they risk their careers. This means that teaching inquiry (contd.)

can't be treated as just something extra that a faculty member does—an add-on to her 'real' disciplinary scholarship. It must be recognized and rewarded as scholarship full stop.

Second, good talk about good teaching is unlikely to happen if the leaders in the university – presidents, deans, and department chairs—do not expect it and invite it into being. This means that leaders organize and protect time for interested faculty to work together on inquiry projects. And this work should be celebrated and made public, not just during the annual Fall teaching workshop for faculty—but in new venues and in new ways that are likely to draw attention to teaching and teaching inquiry in the university.

Third, taking teaching inquiry seriously means investing in it. The mechanisms of support in place for disciplinary research—grants, sabbaticals, assistance with grant writing, travel money—must be available to scholars of teaching, and should be seen as an important investment in the development of an institutional culture of teaching and learning.

Finally, though teaching inquiry is valuable in itself, I believe that its greatest value lies in its potential to have a positive impact on what happens in the classroom between the teacher and her students, and, by extension, its potential to address the very serious problems of student retention and success that I alluded to earlier. If I am right about this, then universities have a very powerful reason, *indeed an obligation*, to get into the business of promoting and developing teaching inquiry among faculty. And given what is at stake here—student success or failure—we should waste no time in getting on with it.

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PCTC warmly invites you attend

Fall for Teaching, 2010
Wednesday, September 1st
8:30-noon, AVDX G12

Analysis and Evaluation: Making Explicit What Good Writers, Readers, and Thinkers Do

Shelagh Crooks
Saint Mary's University

The Anti-Syllabus
Stephen McClatchie

Caring in the Classroom
Leah Huff

Critique & Feedback
Leah Garnett

Learning Portfolios
Rosemary Polegato

For complete details, visit the PCTC website: http://www.mta.ca/pctc/

The Importance of Good Teaching: Principles

Erin Steuter
Mount Allison University

I think about teaching every day. I think about what is going well and take satisfaction in it. I think about what isn't working and develop ideas to fix it. I think of the teaching challenges faced by my colleagues and provide advice. I think about my role in the classroom and the nature of my relationship with students. I think of new things to try and ways to re-vamp the tried and true. Reflecting on teaching is one of the chief joys of my profession. To this end, I have developed some core principles of good teaching that work for me and may resonate with others.

Safe Space - I believe first and foremost that learning needs to take place in a safe space in which students are never mocked, where all ideas can be legitimately explored, where passionate debate takes place within a climate of respect and civility, and where students feel safe enough to try out new ideas and explore new forms of learning. Having been marginalized by teachers when I was a student for my support of unorthodox ideas, I now make it a principle never to require students to agree with me or with any given perspective. They always know that they need to demonstrate accurate knowledge of the course material but that they are then completely free to develop their own informed perspective on the issues. Nothing would mortify me more than thinking I had in any way silenced a student in the classroom. Freedom of thought and speech are the cornerstone of a good education, and I seek to uphold this in my classroom every day.

Organization in All Things - I'm the kind of person who reads all the guidebooks before I go on a trip so I know all the details in advance. Providing a well organized and structured course is a central priority for me as a teacher. I very carefully plan out all the course components, due dates, duration of units, and structures of evaluation. The students know from the first day of class how the course will unfold. Of course, I have also scheduled in unexpected delays and opportunities for creative side trips and tangents! Someone once told me that trying to learn huge amounts of information in a course is like trying to drink from a fire hydrant; therefore, I try to pace the course so that students have enough time to process and reflect on the new material.

Second Chances - Universities are places of growth and development, where students must be able to learn from their mistakes without facing insurmountable penalties. If students submit late work, miss class, or are guilty of academic dishonesty, there should be appropriate consequences for their actions, but they also need a second chance to show that they can mature and develop their skills. I often provide my students with a "get out of jail free card" which allows them a one-week extension, no questions asked, to be used once at any time in the term. I am never "at war" with my students. I enjoy their stages of academic maturation and offer firm and consistent penalties with a good measure of humour and tolerance for the inevitable missteps of the undergraduate learning curve. I once heard a former prostitute on the radio; she was now running a shelter to help sex workers leave the streets. She said that she would never have been able to leave her former life and finish university had it not been for the understanding and second chances offered by her professors. I would like to think that I might be that understanding person in some student's life.

Try, Try and Try Again - I once had a course I hated teaching. Too big to suit my teaching style, it wasn't working for me or my students. On hearing my complaints, a colleague stated that he always had one course that he dreaded teaching and that was just the way it was sometimes. I couldn't bear the thought (contd.)

of having a "hated" course in my rotation, so I kept trying innovations, confident that if I could just re-organize the course in some way, all would be well. It took almost 10 years but I eventually found the right solution and now happily teach this first year course using a successful experiential approach. It is one of my principles of teaching that there is a solution to every pedagogical problem, and it is worth the trouble to find it.

Critical Thinking - Developing the skills to analyze social situations with insight and sophistication is the central tenet of my discipline, and I embrace this mission whole heartedly. I regularly ask students to consider who benefits and loses by the current social arrangements of various institutions in our society. We explore core critical thinking concepts such as blaming the victim, unanticipated consequences, and vested interests; we examine the way in which certain forms of knowledge become authoritative while others are marginalized; we deconstruct the concept of objectivity in the media. For me, good teaching in my discipline means that students will leave my course with a toolkit full of critical thinking strategies to help them make sense of their social world.

Applied Knowledge - Another principle of good teaching is to make the course material relevant to students' lives. I have designed assignments where students apply a particular theory to their own family dynamics; write letters to their grandparents explaining a current social issue; and ask students to select issues of personal importance and develop action plans for social change. One particular favourite is an exercise where students apply principles of equitable division of labour to the household chores they share with their roommates.

Experiential Learning - Every year in a large introductory course, after testing all the students on their learning style, and I find that there are increasing numbers of "K" learners—those who learn best by doing. Perhaps in a less credentialist culture, these students would have bypassed university in favour of a career where they would receive on-the-job training. I strive to address the needs of all types of learners in my classes; for the "K" learners, I have developed hands-on activities where students discover for themselves the insights and analyses necessary to make sense of a social problem.

Independent Learners – There are a few moments in every course when I am the "sage on the stage", but in general students benefit greatly from discovering knowledge for themselves. In the information age, the process of doing independent research and the skills gained in learning where to find relevant and reliable information may be the most significant legacy of their undergraduate educations.

Professionalism - Instilling professionalism in students so that they produce first-rate work is an important element of good teaching. My strategies for this are modeled on those used in professional schools, such as Medicine or Engineering. In these professional schools, students have assignments that have real-world consequences: a C student can't be allowed to make someone ill or build a structure that will fall down! I believe that cultivating professional expectations builds student pride in their own work and helps to start them off on a confident footing in their careers. When students go out into the world, they should be capable of truly connecting to real-world issues which they have personally understood and thoughtfully analyzed. At the same time, they should be able to deliver professional-quality work—for the sake of their own confidence, for the reputation of myself and the school, and for the benefit of the community that they will be joining.

Community Outreach – Historically, the Ivory Tower has been a place to retreat from the distractions of the world in order to have the time and energy to focus on higher learning. Yet, critics argue that the development (contd.)

and dissemination of knowledge exclusively within an academic institution is not representative of the challenges and realities of the "outside" world. They maintain that the education produced in this setting is elitist and unrepresentative of the broader diversity of opinion and knowledge in the rest of society. I address this challenge by trying to harness the students' outward-looking energy, and steer it toward the theoretical pedagogical goals I set for the course—with the thought that I might also improve their confidence in those real-world skills. Therefore, my courses contain community outreach activities in which students have, for example, written a resource guide for women in shelters; set up and run a girl-power camp for children in the community; written a children's work book that explores gender issues; and developed media literacy clubs for school children.

Care and Consideration - My final principle of good teaching revolves around my relationship with students. Though it just isn't my way to be friends with students, I do care tremendously about their learning process. I seek to ensure that I am fair, that I respond to their concerns, that I take into consideration the rest of their workload and their life activities. I also am very careful about recognizing power dynamics with my students and respecting professional boundaries. Students have let me know that they recognize and value my caring approach to teaching.

Final Thoughts - I am grateful to have discovered the community of educators that convene at local and international teaching conferences. I have learned tips and techniques from them including, among others, free-writes, random acts of poetry, grading rubrics, Writing Across the Curriculum, simulations and role play activities. They are inspirational teachers.

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PCTC's Fall Workshops
Mark Your Calendars!

SEPTEMBER

10th: *Balancing Our Teaching and Professional Selves: A Roundtable Discussion* (3:30 pm)

16th: *Teaching Portfolio Essentials* (4 pm)

21st: *Te[a]chnology Series: Increasing Student Interactivity* (4 pm)

OCTOBER

1st: *Learning Outcomes Statements--Why all the fuss? A Roundtable Discussion* (3:30 pm)

6th: *Student Writing* (3:30 pm)

14th: *How Are You Teaching? Formative Evaluation* (4 pm)

22nd: *The Portfolio Process: Student Learning Portfolios* (3:30 pm)

29th: *Te[a]chnology Series: Top Tech Tips*

NOVEMBER

5th: *Teaching Evaluation at Mount A* (3:30 pm)

19th: *If I Could Do It Over Again--A Roundtable Discussion on What Has Gone Well [and perhaps not so well] This Term* (3:30 pm)

26th: *Te[a]chnology Series: Creating Engaging Power Point Presentations* (3:30 pm)

All locations and further details will be confirmed. If you have a session idea, please e-mail pctc@mta.ca

What Are Learning Outcomes And Curriculum Mapping?

Eileen Herteis, PCTC

Making learning outcomes explicit at the course level and aligning those outcomes to create a program- or degree-level "map" are important aspects of curriculum planning. The University's Academic Renewal Plan: *Changing to Preserve* (pp. 7-8) speaks of our shared responsibility to ensure that graduates fulfill the learning outcomes we deem to be essential.

Simply put, outcomes and maps encourage us to find curricular coherence by focusing on the characteristics we would like to see in our graduates, characterized by the level of content mastery we and other stakeholders expect, the skills necessary to complement content knowledge, and the values, attitudes and intellectual traits that underpin all.

Similarly, aligning or mapping outcomes helps us to achieve our pedagogical goals in a sustainable way: making the best use of learning time; using the best teaching strategies, content delivery methods, and learning assessments; and at the same time, eliminating duplication and remediating gaps in the curriculum.

Making Learning Explicit

Learning is more than recall of facts or accumulation of credits; Peggy Maki (2004) defines learning as a "complex and dynamic" process composed of many facets:

- Constructing meaning
- Framing issues
- Drawing on strategies and abilities that are honed over time
- Reconceptualizing one's understanding
- Repositioning oneself in relation to a problem or issue
- Connecting thinking and knowing to action (p. 32).

Given the complexity of learning, then, it is necessary to articulate our expectations clearly and to be explicit about the ways for students to demonstrate their learning.

John Biggs (2007) encourages us to differentiate between what he calls "declarative knowledge" and "functioning knowledge." An essential, but only the *first*, part of learning, declarative knowledge is what has been discovered by others, understood by the learner, and declared by him or her in writing or presentations. "Functioning knowledge," on the other hand, is declarative knowledge put to work—to solve problems (real or academic) and to help learners see the world differently.

When you write the learning outcomes for your course syllabus, make them **C-L-E-A-R**:

Comprehensible to the student;
Learning-Focused rather than focused only on content (emphasize students' responsibilities);
Evident in achievement and in significance;
Attainable; and
Related to the course content, relevant to the students' stage of development, replicable.

Benefits of Clear Learning Outcomes Statements

Clear, learning-focused outcomes statements are important because they help us to be explicit about our expectations: the learning we require of students, the levels of understanding, and the means of demonstration. In other words, they state unambiguously what we have in the back of our mind anyway when we are designing courses.

Clear outcomes statements have other benefits:

- Helping professors organize their thinking when planning a course;
- Articulating for the student the learning valued not only in the course but by the discipline;

(contd.)

- Providing guidelines for assessment by outlining performance criteria that can be tested and measured;
- Enabling professors to see whether the course has been effective; and
- Informing colleagues about how courses connect (*this is related to curriculum mapping*).

So, outcomes focus on measurable, observable results: How will the students be different after this course or degree program in terms of skills, knowledge, values, and attitudes?

They also indicate the assessment criteria that will be used: How will the students demonstrate (e.g., to professors, employers, graduate schools) that they have achieved the necessary learning?

Writing Learning Outcomes Statements
Learning outcomes statements comprise three parts:

1. What the students will **do** to demonstrate learning;
NOTE: Use **active** verbs—avoid words like *appreciate*, *know*, *understand*, or *become familiar with*, which are not measurable, observable, or performance-based. (See p. 11)

2. The context, conditions, or limitations within which the students will demonstrate learning;

3. How well or to what level they have to demonstrate their learning.

Take a look at the following example:

*By the end of this course, students **will have a deeper appreciation** of French language and literature.*

Although a very reasonable expectation, having a "deeper appreciation" is too vague a term to be considered a learning outcome. It is difficult to measure and observe and hard to demonstrate in a functional way. The following amended version is a better learning outcomes statement that makes performance expectations clear:

By the end of this course, students will demonstrate a deeper appreciation of French language and literature by:

*a) **Translating unaided** short, unseen excerpts from French literary texts*
*b) **Asking and answering** in French questions about language*
*c) **Explaining . . . .***
*d) **Comparing . . . .***

Tips for Course-Level Learning Outcomes

- Limit the course-level learning outcomes to 5 to10 statements on the course syllabus;
- Use the outcomes statements to specify the over-arching concepts and essential knowledge, skills, values;
- Describe the desired results of the learning experience; and
- Represent the ***minimum*** needed to succeed in a course or program.

Outcomes at the Program Level: Constructive Alignment
As you will have discerned, so far most of the benefits outlined have focused on learning outcomes and their integration within individual courses. This may be called *horizontal* alignment. Learning outcomes have a role to play at the program level, too. *Vertical* alignment refers to the way learning outcomes are tiered throughout the program from 1000- to 4000-level courses and also to how these program-level outcomes relate to institutional expectations. At Mount Allison, these institutional expectations include the Essential Outcomes and Literacies listed in the Academic Renewal Plan (p. 51).

But clear learning outcomes statements (contd.)

on course syllabi are only part of the equation. Biggs (2007) reminds us that teaching and learning take place within a system that includes many levels: the classroom, the department or program, and the institution. Therefore, it is essential to integrate and align our expectations for student learning system-wide. This process is known as "constructive alignment" and, Biggs asserts, it makes learning inescapable:

Constructive alignment starts with the notion that the learner constructs his or her own learning through relevant learning activities. The teacher's job is to create a learning environment that supports the learning activities appropriate to achieving the desired learning outcomes. The key is that all components in the teaching system - the curriculum and its intended outcomes, the teaching methods used, the assessment tasks - are aligned with each other. All are tuned to learning activities addressed in the desired learning outcomes. The learner finds it difficult to escape without learning appropriately. (p. 2)

Constructive alignment means that our instructional strategies and assessment techniques complement and facilitate the fulfillment of the intended learning outcomes.

Answering the following questions, individually and with departmental colleagues, will help you to align and map the curriculum:

- What do we want the students to learn in our courses? Why?
- How and where are they going to learn it (teaching/learning activities)?
- How will we assess their learning (tests, assignments, fieldwork, performance)?
- How do the courses in the program fit together? Gaps? Overlaps?
- What constraints face us (e.g., class size, resources, faculty turnover)?

In summary, then, reflecting on learning outcomes should be a continuous part of developing every course and program. Clearly articulated and constructively aligned learning outcomes statements help to integrate content, activities, and assessment meaningfully within courses and across the curriculum.

References and suggestions for further reading:

Bloom, B. S. (1956). *Taxonomy of educational objectives: Handbook 1: The cognitive domain.* New York: McKay.

Biggs, J. B. (2007). *Aligning teaching for constructing learning*. York, UK: The Higher Education Academy.

Maki, P. (2004). *Assessing for learning: Building a sustainable commitment across the institution.* Sterling, VA: Stylus/AAHE.

McClatchie, S. (June, 2009). *Changing to preserve: An academic renewal plan for Mount Allison University, 2009-2016*. Available online http://www.mta.ca/administration/vp/Renewal/MTA_Academic%20Renewal%20Plan09-16.pdf

Schuell, T. (1986). *Cognitive conceptions of learning.* Review of Educational Research, 56, 411-436.

Students' Responsibility

By emphasizing what learners must do to succeed in a course or program, learning outcomes statements remind students that learning is **their** responsibility—it is not something that the teacher transmits or delivers.

Shuell (1986) sums up the necessity for students to be actively and constructively involved in the learning process in this way (and regulars at PCTC workshops will recognize it as an oft-shown PowerPoint slide!):

It is helpful to remember that what the student does is actually more important in determining what is learned than what the teacher does. *(p. 429)*

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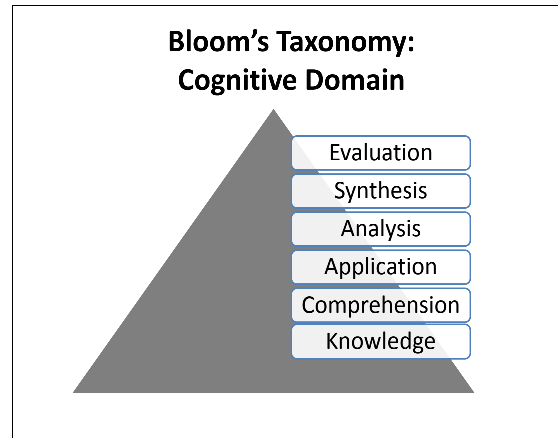
Benjamin Bloom's Taxonomy of Educational Objectives in the Cognitive Domain (1956) comprises six levels of thinking. Matching the required type of thinking with the appropriate verb helps you to replace vague terms such as *know*, *appreciate* or *be familiar with*, and thereby to create clear outcomes statements that explain exactly what students must do to demonstrate their learning.



Knowledge Acquire specific facts, ideas, or vocabulary; recall information and move it from short-term to long-term memory;
Verbs: Define List Record Repeat Name Recall

Comprehension Grasp the meaning of material learned; communicate and interpret what has been learned;
Verbs: Describe Discuss Explain Translate Identify Locate Report Paraphrase Re-phrase

Application Use learned knowledge in new or concrete ways, or to solve new problems;
Verbs: Apply Illustrate Demonstrate Dramatize Employ Use Extend Connect

Analysis Dismantle concepts into their components; seek links between concepts (compare) or find what is unique (contrast);
Verbs: Analyze Calculate Distinguish Differentiate Examine Experiment Relate Solve

Synthesis Re-organize parts to create a new or original concept or idea; find patterns; make predictions based on analysis of knowledge;
Verbs: Arrange Compose Formulate Construct Plan Design Create Model

Evaluation Make judgments or decisions based on logical criteria or conditions; rate or assess conclusions; make valid choices;
Verbs: Assess Select Rate Estimate Compare Judge Critique Revise Review

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Writing Across the Curriculum

At Spring Teaching Day (May, 2010), participants discussed writing across the curriculum, focusing on the level of writing ability we would like to see in all Mount Allison graduates, regardless of discipline.[§] The discussion included a wide range of topics, such as whether writing should be dealt with in individual disciplines, through a writing centre, or in a composition course. While participants agreed that we have an institutional responsibility to support student writers and to emphasize writing in all courses, they also identified several constraints.

What is good writing?
Regardless of the discipline, good writing involves more than mechanical elements such as vocabulary, punctuation, grammar and syntax. Good writing includes analysis and argumentation; a sense of audience, their needs, and the appropriate format and tone to meet them; an understanding of the differences between written prose and speech; and an internalized set of criteria and skills to analyze one's own and others' writing.

Good writing takes time . . . Students are better writers when they know what they're talking about and when they spend time structuring arguments, editing, and formatting. When students complete written assignments at the last minute, they miss the developmental aspects of writing. Similarly, how can professors create the time in their courses for more writing? Must they give up content or other tasks, such as assigned reading? Careful grading and constructive feedback are essential, and there are no shortcuts—yet the time required to do this is substantial, especially in larger classes.

Is there room for a compulsory composition course at Mount Allison?
Some universities require that students complete an entrance writing test, and those who fail must take a remedial composition course. While some participants saw the value in this approach, others pointed out that the testing and then offering a compulsory composition course would require considerable resources. There was also discussion about whether such a course should be for credit and, if so, how it would fit into the students' program. Many participants felt that, although common elements and behaviours are associated with good writing, there are also strong disciplinary roots and conventions. A common composition course may not address specific disciplinary needs.

Would it make sense then, some asked, to have one course in each discipline designated a writing-intensive course? Or is it time, perhaps, for Mount Allison to establish a professionally staffed writing centre whose director/facilitators consult closely with faculty?

The discussion on student writing will continue in the Fall.

[§]Thanks to Toni Roberts and Elizabeth Wells who acted as 'scribes' during this lively discussion.

Some Useful Writing Resources:

Purdue University. Online Writing Lab. http://owl.english.purdue.edu/.
This extensive site contains resources and exercises that address every stage of writing. They are available for download and use.

Western Washington University. Writing Resources Website. http://www.wwu.edu/wis/resources.shtml.
This is a rich, comprehensive website full of samples, thoughtful commentary, and links to the literature—well worth a visit!

Zinsser, W. (2009). Writing English as a Second Language: A talk to the incoming international students at the Columbia Graduate School of Journalism. *The American Scholar*. http://www.theamericanscholar.org/writing-english-as-a-second-language.
Don't let the title fool you—this piece is full of solid tips for every writer.