Centre for Learning and Teaching
# focus
on university teaching and learning

Volume 15 Number 1 • Winter 2007

## From the Director

Critical reading, thinking, and writing are essential tools for academic work—and for citizenship. In this issue of *Focus*, colleagues challenge us to create learning experiences in every discipline that explicitly develop and assess this interlocking skill set.

Lynn Taylor, Ph.D.
*Centre for Learning and Teaching*

EDITOR
Suzanne Le-May Sheffield, Ph.D.

ASSITANT EDITOR
Zita Hildebrandt

PUBLISHED BY
Centre for Learning and Teaching
Dalhousie University
Halifax, NS B3H 4H8
Ph: (902) 494-1622
Fx: (902) 494-3767
Email: CLT@Dal.Ca

www.learningandteaching.dal.ca

DALHOUSIE UNIVERSITY
*Inspiring Minds*

# Teaching Writing in the Disciplines

Margie Clow-Bohan, *Director, Dalhousie Writing Centre*
Lyn Bennett, *Department of English*
Cindy Staicer, *Department of Biology and Director, DISP*

*During CLT's September 2006 TA Days, the authors presented a plenary session for graduate students on teaching writing. Each of the authors described her disciplinary perspective on teaching writing and, in the follow-up discussion, highlighted the commonalities across disciplines. This article provides the broader Dalhousie community an opportunity to benefit from this discussion.*

"Writing is thinking on paper," says William Zinsser in *Writing to Learn* (p.11). This claim captured a common theme in our discussion about how we might help teaching assistants better understand how they can teach students to write – and think – in their disciplines. Discipline-specific writing naturally focuses on how we do things in English or Nursing or Commerce or Biology. Yet, in the course of ruminating about our best practices for teaching writing, in the humanities, for professional communication, and in science, we wondered if there were commonalities among disciplinary approaches: shared practices that could provide a comprehensive guide to writing pedagogy while preserving our disciplinary interests and concerns. What unfolded turned out to be a lively discussion across our disciplines, as we considered the following questions:

- Do our distinctive, discipline-specific worldviews mould or shape our thoughts, words, and documents?
- Are some forms or genres of writing considered to possess more authority than others? If one writes in a formal, distanced (and therefore objective) manner for a scholarly community, is the material of more consequence than writing that is more informal, friendly, and directed at the general public?
- Is writing pedagogy the same in all disciplines?

It may be true that the Ivory Tower is really a series of towers, each with its own access stairs and accompanying décor; at the same time, our discussion revealed that our towers are interconnected in significant ways. This article summarizes our disciplinary perspectives on writing pedagogy, and some of the common themes that emerged from our discussion.

### Writing in the Humanities

The process of learning to write well in the arts and humanities isn't all that different from learning to write well in the professions or in the sciences. There are three questions we all need to ask if we want to teach writing effectively: What do we know that we can teach our students? How do we help them become better writers? How can we teach them to become their own best editors and coaches?

We all know that students need to learn that writing is hard work, that good writing is a process of rewriting, and that practice is the way to become a better writer. More than anything,

though, students need to be made aware that discourse communities have conventions and that learning to imitate them will go a long way toward helping them succeed. Broadly speaking, then, genre is the answer to the three questions and–herein lies our commonality–it is one that applies to every discipline and every profession. Under the broad umbrella of genre, we can find some more specific answers:

Lyn Bennett (Bennett Photo)

*What do we know that we can teach our students?*

Above all, we need to learn how to make explicit the generic conventions we probably learned by inference and through much (often painful) trial and error. Here's the most important knowledge we need to share:

- how to write effectively in our disciplines
- the conventions of format and documentation
- what does and what does not count as evidence
- that an essay (in the humanities, at least) makes a critical argument, that it has a clear thesis statement, and that it is made up of an introduction, a body, and a conclusion.

To share what we know with students, we also need to become more self-aware, consciously reflecting on habits of thought and of writing that may have been long ago internalized.

*How do we help our students become better writers?*

The most effective way is to heighten their generic sensitivity, which will help students to communicate effectively in specific and in multiple genres. We can do this by:

- encouraging students to pay attention to how their professors make arguments
- showing them how to get the most out of an assignment
- motivating them to start early by writing while they are reading
- teaching them how to learn from comments made on marked assignments (which also means learning how to mark constructively, shifting our focus away from surface errors and toward higher-order concerns).

Again, the best way to help our students is to make explicit what is too often left implicit, making readily accessible what may be difficult for many students to discover on their own.

*How do we help them become their own best editors and coaches?*

We can build strong, independent writers by sharing with our students the habits we've already learned. Ironically, we become our own best editors and coaches by interacting with others, and we need also to encourage active student participation in our discourse communities. We can do this by:

- teaching them to talk to their professors and TAs about their work
- encouraging them to look or ask for models of good writing
- urging them to get in the habit of asking others to read their drafts
- instilling the habit of paying as much attention to how they say things as what they say.

Writing is a much more social activity than we may be inclined to believe. Yes, we most often produce texts with only our computers for company, but we produce them within communities we have come to know very well. The best thing we can do for student writers is to open wide our disciplinary doors and, in the process, give the lone writer agonizing in the garret the heave-ho.

**Professional Writing**

Professional writing is an umbrella term for any document written in the workplace rather than writing intended for an academic setting. It could be writing that has either a specific audience (e.g., lawyers write primarily for other lawyers) or a more general application and audience (e.g., engineering reports or press releases for public distribution). It should be noted that in academic disciplines such as law, medicine, social work, and business, researchers apply established conventions for academic publication that are not unlike those conventions used by many other disciplines (variations of research paper formats and heavy documentation standards). Here, however, that discussion is avoided in favour of workplace writing in a general sense–the documents produced at work.

Writing in the professions involves students understanding three distinct prerequisites:

First is a clear understanding of the community in which we are writing. Readers will respond to documents that shout "I belong!" while rejecting pieces that reflect a different community. For example, an advertisement geared to 18-22 year old Canadian women will reflect the language, interests, and culture of that demographic group. Second, a strong sense of purpose is required: knowing our purpose as writers and indicating it to readers is imperative–if one wants to persuade, inform, or make a request. Third, acknowledging the context or circumstances is critical; understanding the particular situation gives writers an opportunity to strategize in terms of their writing. All three aspects, in turn, give rise to using specific formats, styles, word choices, intellectual property conventions, as well as the usual conventions of language correctness.

As writing teachers in the professions (initially business or technical communication instructors, then content-specialists), we can best

Margie Clow-Bohan (L) with a student (Abriel Photo)

accomplish our task by introducing students to good examples. What makes a persuasive letter sent to an external audience different from a letter written for employees? What kind of evidence is required in a feasibility report and where should it be placed for best effect? If we provide excellent examples or models for students to imitate, they will soon learn. Allowing them to discuss writing approaches and elements of particular documents, conventions, and strategies will make the writing explicit. Experiencing the real world and finding verification (during co-op terms, for example) can also turn sceptical students into converts. Sharing our writing experiences and products also gives them a sense of the importance of the effort–the "if I can do it, so can you" approach. Pushing students to practice writing and providing directed comments on their work will help them to develop into competent writers. In the end, these efforts will have prepared students for workplace writing demands.


Cindy Staicer (Staicer Photo)

**Science Writing**

Science students may not realize the extent to which writing skills learned in English and other humanities classes are transferable to their science classes. We can emphasize that the same guidelines for organization of ideas, sentence structure, word choice, grammar, and punctuation also apply to their science papers and reinforce this notion by requiring science students to use a writing reference book or web site. By referring by name to errors they make in their writing assignments (e.g., comma splice), we can encourage their use of book or on-line reference materials. One of the most helpful things we can do is to show our students that good science writing is good writing.

Many students arrive at university with misconceptions about how to write a science paper. They often seem compelled to write verbose, passive, and complicated sentences peppered with jargon and long strings of prepositional phrases. They may have erroneously learned to equate such characteristics with the objectivity of scientific work. We need to remind students that, like other writers, science writers need to communicate clearly to their readers. Instructors also need to point out that if a reader cannot easily follow and understand their writing, they are not communicating effectively. Once convinced that the goal of science writing is to communicate clearly, rather than to "sound scientific," students are ready to improve their science writing.

Considerations especially important in science writing include precision and clarity as well as objectivity. Writing is objective when statements are supported by data or the published literature; assumptions and predictions are stated clearly; and conclusions follow logically from the evidence presented. Achieving precision requires inclusion of details and careful choice of words. Students may need help to determine how much detail is needed and why certain words are better than others. Use of quantitative rather than qualitative statements improve the precision of science writing and using the same noun for the same thing throughout a paper helps avoid confusion. Simpler words are preferred over complicated words or phrases because they are easier to understand. Parallel sentence construction improves clarity, thus helping to keep the reader on track.

A useful rule of thumb to offer science students is to write and revise with the reader in mind. For example, by placing information where the reader expects to find it, the writer can greatly improve the reader's ability to understand and interpret the paper as intended by the writer. Suggest that students read *The Science of Scientific Writing* by Gopen and Swan, available on-line at http://www.amstat.org/publications/jcgs/sci.pdf. These authors provide many helpful techniques to improve science writing, which tends to be harder to read than necessary.

If students are writing a long science paper, consider asking them first to prepare a topic sentence outline on which you will provide feedback. All paragraphs envisioned for the paper are written as a series of complete sentences, with citations, and organized under headings and subheadings as needed. Each sentence is the first sentence of the paragraph and reveals the topic of the paragraph, or more specifically, the point the student intends to make in the paragraph. Thus, student writers must think carefully before they write. The topic sentence outline can be marketed as a time-saving technique: once points are articulated and organized into a logical order, writing will flow quickly and the first complete draft will be a remarkably good one.

**In Conclusion**

Certainly, we all recognize the differences in our disciplinary communities. We all have a sense of the interests and worldviews in our disciplines, and we acknowledge that those elements produce writing that is adapted to fit particular audiences. However, we also believe that there are common threads that characterize good writing. Across our disciplines we agreed that writers need a sense of direction, and that ideas need to be expressed clearly and concisely so that readers easily understand our work. Further, arguments need evidence, even if sometimes evidence in one discipline is not favoured in another. We all thought that in the academy and in professional writing sources represent a shared background, a fount of information, a validating method, and that they always need to be attributed. We obviously agreed on the value of good writing.

Clearly, writing teachers in any discipline give their students a gift

if they help them learn to articulate the unarticulated, if they provide good writing models, if they provide clear direction in assignments, and if they comment extensively on drafts. When these teaching techniques are followed, students quickly adapt to a community's standards and begin to write like initiates. Students are often at a loss to understand "what this writing is all about" as they move between disciplines. It is our job as teachers of writing to make the job of producing writing that is "thinking on paper" as transparent as possible–a daunting, but rewarding task for instructors and students alike.

**Further Readings:**


Adams, K. & Keene, M. (2000). *Research and Writing across the Disciplines*. (2nd ed.) Toronto: Mayfield.

Crème, P. & Lea, M.R. (1997). *Writing at University: A Guide for Students*. (2nd ed.) Maidenhead: Open University Press.

Eppley, G. & Dixon Eppley, A. (1997). *Building Bridges to Academic Writing*. Toronto: Mayfield.

Gopen, G.D. & Swan, J.A. (1990). *The Science of Scientific Writing*. American Scientist 78 (6): 550-558.

Kennedy, Mary Lynch, and Hadley M. Smith, (1994) *Reading and Writing in the Academic Community* (2nd ed.). New Jersey: Prentice Hall.

Williams, J. M. (1994). *Style: Ten Lessons in Clarity and Grace* (4th ed.). New York: HarperCollins College Publishing.

The Writing Center, University of North Carolina at Chapel Hill. (1998-2005) *Writing in the Sciences*. http://www.unc.edu/depts/wcweb/handouts/sciences.html.

Zinsser, W. (1988). *Writing to Learn*. New York: Harper and Row.


## Writing Activities that Encourage Critical Thinking


Vivian Howard
*School of Information Management*


*"How do I know what I think until I see what I say?" – E.M. Forster*

The American Philosophical Association's *1990 Report on Critical Thinking for the Purposes of Educational Assessment and Instruction* defines critical thinking as the ability to interpret, analyze, evaluate, and infer based on evidence, facts, and concepts. [1] The connection between critical thinking and writing is clear. To paraphrase Forster, students can help to clarify what they think and what they know through regular writing activities that move them through increasingly challenging cognitive tasks.

During my years working with ESL students at the University of British Columbia, I learned how to incorporate Bloom's taxonomy into my course planning: initial assignments test students' knowing/understanding of course material, but later in the term, students complete assignments that challenge their ability to apply and synthesize what they have learned as well as their ability to analyze and evaluate key concepts and theories.

Whenever possible, I design writing assignments that will encourage students to "learn by doing." Assignments that ask students to apply theoretical concepts in a creative and challenging way foster critical thinking skills and active learning. I use a wide range of writing activities, many of them ungraded, to enhance active learning and involve students in the course material. These exercises work well in a variety of class settings; I've used them with large classes of first-year students and with small graduate seminar classes, with both ESL students and native speakers of English. Here are a few suggestions for writing exercises that foster the development of critical thinking:

- For homework, ask students to compose three questions based on the assigned reading and bring them to class. During class, these questions can be used in a variety of ways: to focus group discussions, to stimulate whole class discussion, even for an impromptu Jeopardy match. Composing questions encourages students to engage more deeply with the class material, enables them to better understand content, structure, and argument, and to consider their own appreciation of or concerns with the author's position.
- Use journals, discussion boards, or a class blog to encourage students to write and reflect on their own learning. This metacognitive writing provides valuable insight into how students feel they are succeeding in the class and supports students in their critical reflection on their own progress.
- Incorporate regular think-write-pair-share activities. This is a four step process in which I pose a question and then give students time to think and write down their own ideas. Next, each student shares his or her ideas with a partner and, finally, with the class as a whole. This exercise encourages students to engage thoughtfully and actively with a key question and to share their ideas with their classmates in a supportive atmosphere.
- Give students one or two minutes to write a response to a question based on the assigned reading or recent lecture material. I often do this at the start of class to encourage students to get to class on time, ready to write. With weekly practice, students learn to be concise and efficient, and their writing really does improve. I collect these exercises and just grade them with a check mark. I rarely make comments on their writing, but I do "count" these exercises

towards the participation grade of large undergraduate classes. It's a much more effective strategy than taking attendance through roll call or by circulating an attendance sheet. These short pieces of writing are also a very useful ongoing assessment of students' understanding of course material and support students' ongoing and critical engagement with the ideas presented in class.

- Use peer review activities so that students have the opportunity to give each other constructive feedback. I usually begin the peer review process by asking the class to generate criteria for a successful assignment. From their suggestions I generate a rubric with a half a dozen key criteria; the rubric helps to keep students focused and on-task as they do their reviews. Students then exchange papers and write each other a memo which summarizes the strengths and makes specific suggestions for improving weaknesses in each other's work. This activity can be done during class time or outside of class through WebCT. During peer review exercises in which students learn to critique their own and their classmates' writing, they are actively involved in the learning process, and they learn important course content while assessing what others have written. Peer review also reinforces the importance of interpersonal communication skills.
- Exploit the communicative function of Blackboard Learning Space (BLS) as an extension of the classroom: integrate regular use of discussion boards, chat, posted sample student work, class blogs, and journals. BLS offers many opportunities to use technology to support the development of written communication skills.
- Sequence longer assignments so that term projects are broken down into smaller tasks with deadlines throughout the term. These assignments can be scaffolded so that each task builds on the previous one. For example, in my first-year written communications class, students complete term projects in collaborative work groups, and these large projects are broken down into a series of realistic interim assignments. These interim deliverables are designed to ensure that students are on task and also allow me to provide provisional feedback and to suggest improvements and refinements to the final product. In this particular class, students work collaboratively to research, organize, and write a formal report. Interim assignments include a formal proposal of their report topic, a complete outline, a midterm progress report, a first draft, a process log, and performance appraisals of their group members. I have found this process-oriented approach very effective: it helps me identify potential problems in approach or workload distribution, it ensures that groups are working to deadlines, and it has virtually eliminated plagiarism in the final draft of the report.

All of these exercises are highly adaptable and can be used with almost any course content, not just in specialized writing classes. Critical thinking, like composition, can be integrated across the curriculum.

There are lots of sources of further ideas and practical tips for designing your own writing activities that foster critical thinking. Here are a few:

Writing as a Tool for Critical Thinking (University of Dayton), available at http://academic.udayton.edu/aep/TA/TA03.htm

In-Class Writing Exercises [that encourage critical thinking] (University of North Carolina), available at http://www.unc.edu/depts/wcweb/faculty_resources/critical_thinking_exercises.html

Articles on Critical Thinking, Campus Writing Center (University of Indiana), available at http://www.indiana.edu/~cwp/lib/thkgbib.shtml

Geraldine H. Van Gyn, Green Guide #6 *Teaching for Critical Thinking*, STLHE 2006.

[1] *1990 Delphi Report on Critical Thinking for the Purposes of Educational Assessment and Instruction*, available at http://www.insightassessment.com/pdf_files/DEXadobe.PDF#search=%22delphi%20report%20apa%2 2

## Thinking Critcally about Online Writing

Tim Currie
Online Journalism Instructor
*University of King's College*

Stand at the back of a computer lab and watch students as they surf the web.

If they're conducting research for an assignment, they're likely toggling back and forth between Google search results and various web pages.

They probably also have their e-mail open in another browser window. Chances are good, too, that they have a chat running in the background.

How do we engage online readers who have such short attention spans? How do we convey complex ideas in this medium?

We don't have that one figured out yet. But the research on online writing—by usability expert Jakob Nielsen and others—suggests we keep it short and keep it moving. Six hundred words maximum on a web page. Lots of hypertext. Lots of visuals.

Easily said. But not so easily done.

My primary job is to teach an Online Journalism workshop to senior students. We tell stories on our news site, NovaNewsNet: <http://novanewsnet.ukings.ca/>. We do a pretty good job of offering bite-sized, easily digestible chunks of information, while striving also for depth and thoroughness.

But you'll see at least a few 900-word stories on our site with some intimidating expanses of long, grey text. Covering a city council meeting poses some real challenges to this goal.

The same student who spends eight minutes dashing off 15 lively, focused instant messages in an online chat with a friend will sometimes turn in a dry, verbose 800-word story as an online journalism assignment. How does this happen?

In class I ask them if they would rather receive one 800-word e-mail message from a friend teaching in South Korea? Or four 200-word messages? Almost all opt for the latter. So write for the web like e-mail, I say. Just use proper grammar. And watch the spelling. And adhere to Canadian Press style. And attribute your sources fully.

No problem, right? Sigh.

The rigour, precision, and objectivity we've long associated with serious journalism can easily be unappealing to online consumers who expect their content served up with speed, flair, interactivity, and personality.

It's no wonder bloggers offering spontaneity, character, and zing have emerged as new competitors to mainstream journalists.

I tell students they need to constantly seek a balance between depth and movement. Many readers want to dig deep into an issue. But most want to graze. They don't want a lot of information on any given web page. But they want the option to click and find out more if they're interested.

So, as content authors we have to serve both audiences.

Students need to repeatedly ask themselves: What is my central point? And how does it relate to other available documents? Do I summarize information mentioned elsewhere, or can I just link to it?

One's argument need not be simplistic online; it simply has to be focused—with a core message on each page and a logical path to related information on other pages. So authors need to pursue an iterative process of editing: for focus, presentation, and structure.

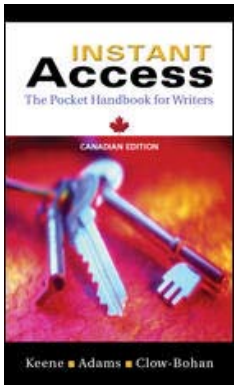
First, concentrate on the message: Does my lead effectively introduce my story? Does the evidence I've laid out support my version of events? Does my headline make sense even when it appears separately on a website front page, is e-mailed to a friend, or is served up as a syndicated feed (RSS)?

Then, make the content appealing to readers with short attention spans: Is my text broken into bullet lists? Are figures represented as graphs? Are place descriptions illustrated with maps? Is an audio clip appropriate?

Following that, look at the structure of the information beyond the page at hand: Do my links show a logical structure to other pages? Can readers find what they're looking for easily? Do they have a path to follow their interest to other sites?

But watch out. With all of this editing, one can easily lose sight of the actual story we're trying to tell. In journalism, especially, the narrative is important. Effectively telling the story of the disabled dad on welfare means describing his home and his daily routine. So, a story often requires a further revision to put some life back into the phrasing. That often means using stronger verbs and more descriptive nouns.

So, in class we do a number of exercises—mainly low tech—to help students think about ways to summarize information into bite-size chunks, link it together, and package it with panache:




### INSTANT Access: The Pocket Handbook for Writers

a review by Suzanne Le-May Sheffield, *Centre for Learning and Teaching*

Margie Clow-Bohan, Director of the Dalhousie Writing Centre, is the author of the Canadian edition of *Instant Access: The Pocket Handbook for Writers* (McGraw-Hill Ryerson, 2007) with Michael L. Keene and Katherine H. Adams. Students will find the tabbed and cross-referenced work easy to use, even without knowledge of correct grammar terminology. This handbook is not just about grammar; it is about the writing process. The authors aim to be descriptive, rather than prescriptive, offering writers flexibility and choice as they write. This most recent edition is a guide for students who wish to write using a Canadian model of English language writing and reflects contemporary Canadian culture in its use of examples and its discussions. Of particular interest is that this guide pays attention throughout to the distinct challenges English-as-a-second-language writers face.

1. We produce a digest of news every morning by 10 a.m. and we send it to about 400 e-mail subscribers. The goal is for student editors to take about 25 full-length stories from mainstream news outlets—such as the *Chronicle Herald* and the *Globe and Mail*—and edit them down to 75 words or less. Remember to include who, what, why, where, and when. Oh, and keep it lively.
2. One student each day also produces a backgrounder. She takes a current news story from the web and finds five reputable websites that examine a central issue raised in that story—hopefully using surprising and interesting approaches. The aim is to think about topics in unconventional ways. And to see how web pages relate to others. The exercise also challenges the student to slow down her web surfing and ask some important questions: Who wrote this web page? Where does he live? What is the goal of his organization? Where does this organization get its money? What interests does it represent?

Many instructors are familiar with New York-based educator Marc Prensky. His popular six-page 2001 essay "Digital Natives, Digital Immigrants – A New Way To Look At Ourselves and Our Kids"[1] is a plea for educators to change the way they teach a generation raised on computer games and the Internet. He argues that students (digital natives) today speak a different language and require a new approach to teaching. They are used to receiving information quickly. They like to do many things at once. They prefer graphics to text. They thrive on instant gratification and rewards.

Prensky is focused on education not online content. But his message for online authors is a useful one: We don't have this medium figured out yet. So, think about the way your audience consumes and deliver your content in that format. His further message to educators is that we should let students provide guidance to us digital immigrants. We should be open to new forms of expression and we should avoid applying too many strictures from the past. Oh, and have some fun with it too.

[1] <http://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf>

# Writing Their Way to Critical Thought


(Cantley Photo)

Sandra K. Znajda
*Interdisciplinary Ph.D. Candidate*

Critical thinking is an important student learning goal that instructors frequently build into their course plans. Yet, critical thinking is one of those elusive goals that is difficult to nail down: when do students 'have' it, and how we can encourage its development? Fink (2003, p.40) argues that students must not only gain "relevant conceptual understanding" in a course but also learn the "criteria for assessing the quality of interpretations, explanations and predictions" in order to analyze and evaluate course material. In essence critical thinking consists of the ability to not just retain information, but to examine this information, analyze its parts and arguments, form conclusions, and apply this knowledge to other situations. In addition to in-class activities and questioning to develop this skill, most courses use written assignments to help students develop critical thinking and writing skills simultaneously. When grading these written assignments, what approaches to providing feedback can we as TAs or instructors use to help students further develop these essential skills to write and think critically?

The first response that I usually think of is 'constructive criticism.' We've all heard about it, we're all encouraged to do it, but what exactly does it mean to provide feedback that will emphasize areas of improvement as opposed to harping on mistakes and failures? How can we help students learn from their mistakes, and progress in their writing and thinking? These questions made me think long and hard over my past experiences in marking essays, assignments, term papers, case studies, and exams, from both TAing and instructing courses. Some of the approaches I've used are basic approaches to assessing student learning, and some are geared more towards encouraging critical thinking in writing. Although these points are by no means exhaustive, here are a few strategies I find useful to help students develop and link their critical thinking and writing skills.

*Positive Reinforcement*

- Provide praise when an idea is over and above what was expected for the answer/assignment. Everyone needs encouragement to continue the development of essential skills.
- Help students build on the ideas they raise in the papers/ assignments by providing comments that engage them in further discussion.

*Effective Feedback on Mistakes*

- If a simple answer is blatantly wrong (from a simple concept to the way a word was used) explain why, define what is right, and give an example of how it can be used. Even better, ask the student to correct errors and resubmit these corrections as an 'addendum' to their marked assignment.
- Pick one thing to focus on in a paper rather than tearing it completely apart; students are here to learn! Work on one major problem area, and once the student has improved in that area, move to working on another. Learning writing and critical thinking skills is a long term process, and students may not get everything 'perfect' in one paper.
- Provide comments throughout a paper, but also provide an overall summary of strengths, weaknesses, and areas of improvement at the end of each paper/ assignment.
- In addition to pointing out why you took marks away, explain what the student can do next time to ensure these marks are not lost again.

*Challenging Students to a Higher Level*

- Ask questions. If a complex concept is not fully explained or supported, write down questions for students to think about that will lead them towards a more complete answer, rather than providing the answer outright. Invite students to come and talk to you in person if they are still not able to grasp the concept.
- Some students are at a level where you can push them farther using questions and comments that challenge them to reach a higher level of understanding or critical analysis. Some students are struggling just to get the concept. As markers we need to judge what level students are at and where help is needed on their individual learning journey. This is important so that we are always challenging students beyond their current abilities, without setting unrealistic expectations.
- Everyone can improve, whether it is in writing style, explaining concepts, or providing sufficient support for arguments. But it is important to evaluate and provide feedback to students based on what is expected at their level of study, and not discount marks because they did not write a graduate paper in their first year of studies. Too much discouragement can achieve the opposite of the learning goals we are trying to achieve.

*Collective Strengths and Weaknesses*

- When handing something back to students, provide an overall summary to the class of key strengths and weaknesses that were common across all submitted assignments. This helps build camaraderie and the feeling that "I wasn't the only one." Such an approach also provides an important opportunity for students to learn from each other. Make sure to also point out areas of improvement for future assignments.

In summary, I like to keep in mind three things for providing effective feedback that helps students develop

critical thinking and writing skills: 1) critical thinking is a skill that is developed over the long-term, throughout a student's undergraduate career; 2) we need to continually praise students for the level they have reached while simultaneously challenging students beyond their current abilities; and 3) although everyone can improve, we need to balance pointing out weaknesses with pointing out the strengths of student work.

By providing effective feedback on writing that is constructive, considerate, and challenging, we can all help students link their writing and critical thinking skills and achieve this important learning goal together.

**References**

Fink, L. Dee. 2003. *Creating Significant Learning Experiences*. San Francisco: Jossey-Bass.


## Rainbow Climate Survey of Dalhousie University: An initiative of Allies at Dalhousie

Are you a member or ally of the LGBTTI (Lesbian, Gay, Bisexual, Transgender, Two-spirit, Intersex) or *Rainbow Community* at Dalhousie University? Would you like to participate in an anonymous, on-line survey about life at Dalhousie (e.g. your experiences, thoughts and feelings) as a member or ally of the *Rainbow Community*? The survey is available online at:

www.dal.ca/rainbowclimate

until the end of April. We want to hear from you so we can better understand and create a safe learning and living environment for all students at Dalhousie. For more information please e-mail us at:

Rainbow.Survey@Dal.ca


**Inspire the Minds of Tomorrow!**

**Enroll Today**

The Center for Learning and Teaching (CLT) at Dalhousie University invites doctoral students to enroll in the **Certificate in University Teaching and Learning** (CUTL).

The Certificate provides a flexible framework for integrating and recognizing a comprehensive range of teaching development programing including:

- Basic teaching workshops
- An annual series of professional development opportunities
- A course in university teaching and learning (CNLT 5000—Learning and Teaching in Higher Education)
- Opportunities to reflect on and synthesize learning about teaching
- Formal recognition of efforts to develop teaching

CLT also offers a range of professional development opportunities which doctoral and graduate students may participate in without being enrolled in the full Certificate. Go to www.learningandteaching.dal.ca/cutl.html for more information or call CLT at 494-1622.

# Popular Reading Can Lead to Critical Thinking

Gwendolyn MacNairn
*Computer Science Librarian*
*Killam Library*

Every day in classes at Dalhousie University, teachers and students practice the fundamental exercise of reading the same item and discussing it within the context of a particular course. Is reading a popular activity? With acknowledgement and apologies to Abraham Lincoln, let's be honest: some students read all the required readings and some students read none; but not all students, read all of the readings, all of the time. Does this matter, and if so, what can we do to improve participation? Selecting what should be read, in a shared reading and discussion activity is a critical thinking exercise that can also contribute to determining what is currently "popular." There are a number of ways we can engage students in selecting reading material, in analyzing both its content and the context in which it was written and "popularized", and in learning about the ways in which we communicate ideas through the written word.

In the book world we are familiar with best seller lists and various award winners. More dynamic in its presentation is the CBC-sponsored Canada Reads. This literature debate has become an annual event. At the beginning of the week there are five books, with one being eliminated each day, until the panel of well-known Canadian personalities has chosen a "winner." There have also been city-based reading events such as "One Book, One Vancouver." This is sponsored by the Vancouver Public Library and has been successful in using the shared interests of reading and discussing as a basis for bringing people together. The University of Washington launched a similar event in the Fall of 2006, when each incoming freshmen student was given the same book. Throughout the 06/07 academic cycle, extra-curricular events have been scheduled to feature this shared reading experience: guest lectures, discussions, classes, films, and a campus blog. This UW event is called the "Common Book."

How does one pick a book that would be of interest to all incoming students? You look for something intellectual with universal themes which will connect to some shared interest and stimulate discussion; you also want a work that demonstrates good writing style. And who should make the selection? At UW, the selection committee included representation from the Student Union, Housing & Food Services, First Year Programs, the Writing Center, the President's Office, the Center for the Humanities, the Office of Undergraduate Education, the Undergraduate Library, the Alumni Association, Freshman Interest Groups, and the University Book Store. In case you're curious, the book selected at UW was Tracy Kidder's *Mountains beyond Mountains: The Quest of Dr. Paul Farmer, a Man Who Would Cure the World*. Themes associated with this book include: Haiti, Global Health, Human Rights, a Pulitzer Prize winning Author, and how one individual can make a difference in the world.

Although the concept of "popularity" is rarely associated with "scholarly," it certainly could be. Enter the age of internet-based searching, electronic databases, and data mining. When you conduct an internet search using Google, the results displayed on your computer are generated using an algorithm. This algorithm is proprietary but one factor is popularity. Google tracks what each searcher is looking for and clicking on – in such a way that picks made by previous people will influence your results.

Web 2.0[1] is a networked community that offers the ability to socialize and to make interpersonal connections where none previously existed. Offering access to library resources and services in a manner which supports the underlying principles of Web 2.0, is called Library 2.0. The Dalhousie University Libraries enable you to connect, search, and retrieve articles from large online collections of journals. Using the 24/7 access model, many students and faculty members are performing similar activities at other universities. Usage statistics which previously tracked how many times a particular database was used are now reporting how many times individual articles are downloaded. Tracking this information generates a list of popular articles, for specific subject categories during a particular period of time.

Do your course reading lists include current articles from 2005 and 2006? If not, these "top articles" can be viewed online and used for selecting "new" articles you might want to read, require, or recommend. Here are some sample articles from ScienceDirect, a multi-disciplinary collection of journal articles, which are both popular and scholarly:

**Internet function and Internet addictive behavior.**
Li, S.M. & Chung, T.M. (Nov 2006). *Computers in Human Behavior,* 22 (6), 1067-1071.

**Alzheimer's disease.**
Blennow, K., de Leon, M.J. & Zetterberg, H. (Jul 2006). *The Lancet*, 368 (9533), 387-403.

**The nature of music from a biological perspective.**
Peretz, I. (May 2006). *Cognition*, 100 (1), 1-32.

**The mediation of technology in ESL writing and its implications for writing assessment.**
Li, J. (Jan 2006). *Assessing Writing*, 11 (1), 5-21.

**The rebuilt marketing machine.**
Crittenden, V.L. (Sep 2005). *Business Horizons*, 48 (5), 409-420.

ScienceDirect <http://top25.sciencedirect.com> lists the top twenty-five articles for a three-month period in an extensive range of subject categories including the various sciences, math, arts, humanities, social sciences, business, economics, engineering, medicine, dentistry, health professions, and psychology, among others.

Another activity could have your students examine the Top 25 Articles in your discipline. Most are very recent and can be discussed, rated, and ranked. You and/or your students can rate individual articles using the 5-star rating system (like Amazon

and movie reviews). Discrepancies in ratings could be the basis for a critical discussion. Consider ranking these articles based on different criteria, such as most relevant to the course, or easiest to understand for a first year undergraduate student.

If you want to go one step further, not only by reading what is currently popular but sharing what you have read with others, consider setting up an account with websites such as CiteULike and Connotea. These are web-based applications where you become part of a "reading community" and can see what other articles are being read and recommended. Whatever you decide, the concept of popularity is being re-defined by the web, producing new options for finding and sharing information in the true spirit of Web 2.0.

1. According to Tim O'Reilly, who coined the term, Web 2.0 is the business revolution in the computer industry caused by the move to the internet as platform, and an attempt to understand the rules for success on that new platform. Chief among those rules is this: Build applications that harness network effects to get better the more people use them. (This is what he's elsewhere called "harnessing collective intelligence.") http://radar.oreilly.com/archives/2006/12/web_20_compact.html. Retrieved February 8, 2007.

**Web 2.0 ... The Machine is Us/ing Us**


Michael Wesch, professor of Cultural Anthropology at Kansas State University, created a short video called "Web 2.0 ... The Machine is Us/ing Us."

This video is an excellent synopsis of Web 2.0, and all in under 5 minutes!

See for yourself at

http://www.youtube.com/watch?v=6gmP4nk0EOE

**TAPD**
TEACHING ASSISTANT PROFESSIONAL DEVELOPMENT

September 12 and 13, 2007

**Teaching Assistant Professional Development Days**

Are you a teaching assistant at Dalhousie or a graduate student interested in a teaching career? Sign up for CLT's TA Professional Development Days. Through a series of workshops we'll help you learn how to grade lab reports, help students in crisis, lead discussion groups, mark academic papers, run labs, and much more.

For more information and to register call CLT at 494-1622 or visit our web site at

http://learningandteaching.dal.ca/tapdd.html

# CALL FOR PROPOSALS
# LEARNING ENHANCEMENT GRANTS

## PURPOSE

To promote enhanced student learning through high impact course and curriculum redesign projects that feature the integration of technology to address significant learning issues.

## AMOUNT

Up to two grants of $10,000 each will be awarded in 2007-2008.

## ELIGIBILITY

Each funded project will be led by a motivated, problem-solving team. Each project team must include one full-time Dalhousie faculty member and may include part-time or sessional faculty as well as non-academic staff. Because of the scope of the intended projects, LE Grants are not available to individuals.

## DEADLINE

4:00 pm
August 31,
2007

## CONTACT

Centre for Learning and Teaching
Killam Memorial Library, Suite G90
tel: 494-1622 • fax: 494-3767 • email: clt@dal.ca
web: learningandteaching.dal.ca

**Centre for Learning and Teaching**
Dalhousie University
Halifax, N.S. B3H 4H8