Guide to Teaching for New Faculty at UBC

Jim Sibley
Luisa Canuto

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This guide has been prepared by Jim Sibley and Luisa Canuto and builds on the New Faculty Teaching Guide developed by the Centre for Teaching, Learning and Technology (CTLT).

Many thanks to all the people that took time to read and review this document. These kinds of resources are always a work in progress. If you have suggestions for improvement to this guide, please contact either of the authors.

Published 2010

Welcome to Teaching at UBC

The University of British Columbia, established in 1908, has a student population of 50,000, on campuses in two cities, Vancouver and Kelowna. UBC enrolls students in 7 faculties at the Okanagan campus (UBCO) and in 12 faculties at the larger Vancouver campus (UBC-V). UBC has a large population of international students; they come from over 143 countries and comprise 12.6% of the total student population.

The UBC Library is the 2nd-largest research library in Canada. Its collection includes 5.9 million volumes, 6.2 million microforms, more than 833,000 maps, audio, video and graphic materials and nearly 80,000 serial subscriptions. The library has more than 520,000 e-books, the largest biomedical collection in Western Canada, and the largest Asian-language collection in Canada.

UBC aspires to be one of the world's best universities, one that will prepare students to become exceptional global citizens, promote the values of a civil and sustainable society, and conduct outstanding research to serve the people of British Columbia, Canada, and the world.

To achieve these goals, the University has committed to the following mission:

> The University of British Columbia will provide its students, faculty, and staff with the best possible resources and conditions for learning and research, and create a working environment dedicated to excellence, equity, and mutual respect. It will cooperate with government, business, industry, and the professions, as well as with other educational institutions and the general community, to discover, disseminate, and apply new knowledge, prepare its students for fulfilling careers, and improve the quality of life through leading-edge research.

> The graduates of UBC will have developed strong analytical, problem-solving and critical thinking abilities; they will have excellent research and communication skills; they will be knowledgeable, flexible, and innovative. As responsible members of society, the graduates of UBC will value diversity, work with and for their communities, and be agents for positive change. They will acknowledge their obligations as global citizens, and strive to secure a sustainable and equitable future for all.

Those who teach at the University have the responsibility of helping to make this educational vision a reality.

As a new faculty member there are a number of support services to help with your transition into the UBC community. Some departments and schools support new faculty members with start-up funds, and mentoring for both teaching and research. Central units like Human Resources, the Faculty Association, Centre for Teaching, Learning and Technology* (CTLT) offer a range of seminars, workshops, and support services for both new and experienced faculty. It is important to find out how your local context works: who to ask for help, what services and supports are available locally and centrally, and what to do if you are having difficulties and just need to talk to someone. Your department head or school director should be able to direct you to the appropriate people and services.

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formerly the Centre for Teaching and Academic Growth (TAG)

Governance

UBC is a large research-focused institution with a well-developed central governance model:
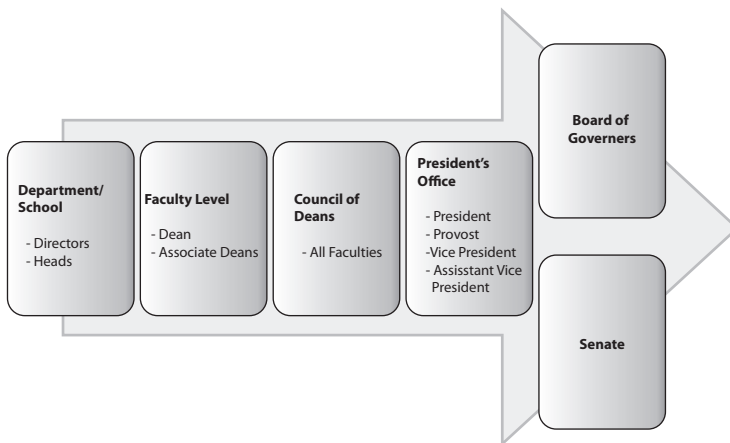
UBC Governance Model

Board of Governors

> Responsible for the management, administration and control of the property, revenue, business and affairs of the University. The BoG approves new faculty appointments. In day-to-day business the Provost approves appointments, then the BoG reviews and accepts these appointments.

Senate(s)

> Responsible for academic topics and issues that affect the University community. The Senates (UBC-V and UBCO) set policy for awarding of degrees, establishing new programs, curriculum changes, admission requirements, academic scheduling, appeal and adjudication processes and the overall mission, educational goals and objectives, and educational policy for UBC. The Senates can also review a variety of other issues as specified by the Board of Governors.

Office of President

- President
- Provost & V.P. Academic
- V.P. Development and Alumni Engagement
- V.P. External, Legal & and Community Relations
- V.P. Finance, Resources & Operations
- V.P. Research & International
- V.P. Students

President

The chief executive officer is responsible for the supervision and directs the academic work of the university. The president is also the chair of the Senate and Vice-Chancellor.

Provost

The Provost and Vice-President Academic is responsible for the academic mandate of the University at its Vancouver campus, and provides leadership in planning, policy development and management of resources to achieve strategic goals. The portfolio encompasses the Faculties and Colleges, as well as academic support units such as the Library, Information Technology, Continuing Studies, and units with responsibility for supporting teaching, learning and research.

Administration and Services

UBC		
Acadamic Units 12 Faculties (UBCVI), 7 Faculties (UBCO) & 2 Colleges: Applied Science Arts Dentistry Education Forestry Graduate Studies Land & Food Systems Medicine Pharmaceutical Sciences Sauder School of Business Science Applied Science Arts & Science Creative & Critical Studies Health & Social Development Education Graduate Studies Management College of Health Disciplines College for Interdisciplinary Studies	**Administrative Units** eg: Financial Services Human Resources Student Services	**Ancillary Units** eg: Land & Building Services Food Services Housing Bookstore

Most Units have Departments. For example:

Faculty of Applied Science * Office of the Dean * School of Architecture & Landscape Architecture * School of Nursing * Dept of Chemical & Biological Engineering * Dept of Civil Engineering * Dept of Electrical & Computer Engineering * Dept of Mechanical Engineering * Dept of Mining Engineering * Dept of Materials Engineering * UBC Okanagan School of Engineering * AMPEL (Advanced Materials Process Engineering Lab) * ICICS (Institute for Computing, Information, and Cognitive Systems) * CERC - Clean Energy Research Centre * Pulp & Paper Centre etc.	**Financial Services** eg: * Payroll * Accounts Payable * Research & Trust Accounting * Revenue Accounting * Reporting	**Land & Building Services** eg: * Plant Operations * Campus & Community Planning * Facilities Management * UBC Utilities

UBC Services and Structure

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It can be helpful to be aware of the governance structure and the required protocols applying to your work at the University. Generally, the Board of Governors is responsible for business operations and the Senate for the academic operations of the University. We will review a few common scenarios to highlight the typical processes and protocols at UBC.

Some Helpful Scenarios

Learning about your Teaching Context

It is important to recognize that your teaching takes place within an institutional and disciplinary context. As such, it is wise to familiarize yourself with the various levels of support available to you (within and across disciplines) in order to enhance scholarly approaches to teaching and learning, as well as to note the following important benchmarks for the quality of teaching and learning at UBC:

- Guide to Re-appointment, Promotion and Tenure Procedures at UBC (2009-10) - section 3.2, p13 Teaching;

- UBC's Place & Promise Visioning Document (e.g., priorities and goals for student learning);

- Your Discipline/Program Expectations with respect to the student learning experience and graduate attributes

- UBC Modules (6) for Student Evaluation of Teaching

Student requests a disability accommodation

UBC is committed to providing access for students with disabilities while maintaining academic standards. *Policy 73: Academic Accommodations for Students with Disabilities* governs UBC's decision-making in this regard. Because the provision of academic accommodations can be complex – given the range of possible instructional and exam formats – this goal is best accomplished through collaborations between you, the student, and a Diversity Advisor – Disability from Access & Diversity. You can contact Access & Diversity at www.students.ubc.ca/access/index.cfm

Each partner in this collaboration brings an important perspective: the student has a unique, personal knowledge of their disability, the instructor has content knowledge and an understanding of the required learning outcomes, and the advisor has a broad knowledge of disabilities and their impact on academic performance.

A student requesting an academic accommodation is required to present you with a letter from Access & Diversity that identifies the academic accommodations they are eligible for in an academic setting. Students need to present appropriate documentation to Access & Diversity in order to receive this letter, so it is not appropriate for you to request documentation of their disability.

After receiving an accommodation request, you should make plans to discuss the range of recommended accommodations with the student within 10 days and then work with the student to implement these in your course. For example, you may allow the recording of lectures for students requiring an audio record of the content. During exams, you should facilitate exam accommodations in accordance with the student's disability, for example, give the student additional time for exams.

Student misses Test, Exam, Deadline due to Medical Reasons/Family Emergency

Students may request academic concession in circumstances that may adversely affect their attendance or performance in a course or program. Generally, such circumstances fall into one of two categories, conflicting responsibilities and unforeseen events.

Students who, because of unforeseen events, are absent during the term and are unable to complete tests or other graded work, should normally discuss with their instructors how they can make up for missed work, according to written guidelines given to them at the start of the course (see *UBC Grading Practices* to help construct an appropriate policy for your syllabus). Instructors are not required to make allowance for any missed test or

incomplete work that is not satisfactorily accounted for. Students who, because of an unforeseen event, experience a prolonged absence during a term or who miss a final or term-end examination must report to their dean or director to request academic concession as close as possible to the time that attendance is adversely affected.

Students who feel that requests for consideration have not been dealt with fairly by their instructors may take their concerns to the office of their dean or director.

Student has cheated

Academic honesty is a reality in many courses, whether it is plagiarism on essays and reports, or cheating on tests and exams. Expectations for student conduct with respect to academic honesty is stipulated in *UBC Policy 85*. Typically, when academic honesty or scholarly misconduct is suspected, you should ensure that all records are preserved. Then you can make a decision on how to proceed, whether to address minor problems within the course and the confines of the instructor-student relationship or where a serious violation has occurred, to initiate a more formal response to the conduct.

To initiate a more formal response you should discuss the event with your department head or program-school chair and involve the Associate Dean of Student Services for your faculty.

Once the more formal process is initiated, records and allegations are forwarded to the Vice-President Students and may result in the appointment of a committee that conducts an investigation, and then forwards their findings back to the Vice-President. The UBC Senate ultimately decides penalties. During the process, the student has many opportunities to respond to the allegations and appeal the decisions through the Senate Committee on Student Appeals on Student Discipline.

You want to develop/offer a new course

New course ideas are typically first reviewed by the local curriculum committee, and then forwarded to the department head or school chair, the Dean, and ultimately to the UBC Senate for approval. All new course proposals must also be reviewed and approved by the Library. More information is available at **www.students.ubc.ca/facultystaff/curriculum.cfm**

Many new courses are first offered through existing directed study courses, and are later submitted, reviewed, and approved for incorporation into the UBC calendar.

You can get help with course design and course re-design from the Centre for Teaching, Learning and Technology (CTLT). CTLT offers a variety of free workshops and hosts a number of communities of practice – these are open to anyone in the UBC teaching community.

Alternately, if a student approaches you with a suggestion for a new course, you may wish to direct him/her to Student Directed Seminars. Modeled after a program at UC Berkeley, Student Directed Seminars provide an opportunity for senior undergraduates to initiate a small, collaborative, group learning experience on a topic of their interest. Each seminar is sponsored by a faculty-member, who provides advice and guidance to the student coordinator.

Getting Started in the Classroom

Designing and delivering your first university course can be a daunting task when many of us have had little formal training before being required to teach our first course. For your first course, keep it simple - a lucid, well-organized lecture course can both be well received and enjoyable to give (although might do little for enduring student understanding). Borrow someone's notes, use last year's syllabus, teach in a way that is consistent with your colleagues – students will appreciate that your course is "like" their other courses. As you become more familiar with teaching, your focus will likely shift away from what you are teaching to what your students are learning and you may want to explore a variety of different teaching approaches. At this point it is a good time to revisit course design and consider developing other instructional methods.

Many instructors start in lecture mode, progress to punctuated lectures where activities might help emphasize an important point, mark an important transition, or change pace to regain students' attention. Teaching approaches are on a continuum, with no ideal place to be: you balance your comfort, needs and responsibilities, with your students' needs. The goal is to find a mode of instruction that is most effective for both you and your students. Donald Finkel in his book *Teaching with your Mouth Shut* reminds us "good teaching is not telling" but "creating those circumstances that lead to significant learning in others."

Regardless of the instructional mode we may choose, we should always make sure to develop and communicate the objectives of the course to our students. The course objectives or learning outcomes specify the knowledge, skills, or attitudes that students should gain through the course. These objectives —or what we expect our students to be able to do by the end of our course— should also help inform how we design lesson plans and effective assessment strategies.

Suggested Reading

> Bain, Ken. *What the Best College Teachers Do*. Harvard University Press, April 2004.

> Brookfield, Stephen D. *The Skillful Teacher: On Technique, Trust, and Responsiveness in the Classroom*. Jossey-Bass Inc., 1990.

Lectures

The lecture has long been a mainstay of university teaching since we often teach the way we were taught. Although, the lecture can be effective, it has limitations. Arons (1998) captures the limitations of solely lectured-based instruction: "lucid lectures and demonstrations were depositing virtually nothing in the minds of the students".

Bligh (2000) contends that after 10-12 minutes in a typical lecture student's attention decreases and their ability to remember and retrieve recently presented material declines.

To avoid this pattern, other teaching activities need to be integrated with lectures to generate effective instruction. The take away message is that lecturing alone is not enough – lectures need to be integrated with other teaching activities to generate truly effective instruction. This does not mean that one should not lecture; rather one should choose to lecture only if it is the most effective form of instruction in a given circumstance.

Suggested Reading

> Bligh, Donald A. *What's The Use of Lectures?* Jossey-Bass, February 2000.

Tips for Lecturing Effectively

1. **Graphic Organizers** - organize lectures around the big picture - Giving students a graphic organizer or essential questions can help them to organize their learning into more meaningful structures that allow for better recall, more effective problem-solving, and an improvement in long-term retention. A common difficulty for novice learners has to do with the process of organizing the details presented into a coherent whole. This idea, with the importance of the 'big picture," is being used in the whole-part-whole curriculum. First,

explain the big picture, then explain the parts, and then re-integrate the parts into the original big picture. The integration of knowledge into a larger organizing structure is an essential step for students to become effective problem solvers.

2. **Lesson Planning** – organizing your lectures using lesson plans can benefit both you and your students. Creating a lesson plan can help you clarify what the students will be able to do by the end of the lecture or module. The shift of focus from content coverage to student understanding is an important one. The lesson plan also helps you to clarify the relative importance of particular course concepts. Novice learners tend to perceive all concepts to be of equal importance – since they will be on the final exam - but certain key concepts might need to be stressed to aid student understanding of the subject matter. See the Additional Resources section of this book for more specific information on lesson planning.

3. **Less is more** – limit the amount of content in any given lecture. There is always concern that if we don't "cover the content" this will leave gaps in students knowledge, but lectures containing too much content for students to process and understand will likely lead to gaps in their knowledge - even if you "cover the content". Choose the most important concepts students need to understand, engage them in authentic problem solving, and periodically highlight the importance and contextual relationship of the concepts to the "big picture".

4. **Punctuate the lecture with activities** – Since there is evidence for the decrease in lecture effectiveness after 10-12 minutes, this can be a good time to take the opportunity to regain student attention by utilizing note taking/processing breaks, using classroom assessment activities (Angelo and Cross, 1993), incorporating questioning or other techniques.

   One of the simplest methods of punctuating a lecture is a **note-taking break** – you simple ask the students to review their notes so far, maybe compare and discuss and revise their notes with a neighbour. This can give students important time to process the presented material.

The attention cliff at 10-12 minutes can also be a good time to engage in some Socratic **questioning**. A word of advice on the use of questions: practice your "dwell" time. Many of us ask a question, quickly become uncomfortable in the subsequent silence, and then answer our own question. If students recognize that the instructor will do this, they may be less likely to participate. The way you ask the very first question in a course may set this norm – if you ask and answer your own first question, the students may feel less inclined to participate later. It can also be helpful to allow students a short period of time to think about the question before answering. This can have a number of positive effects – introverted students who like to "think then talk" will be more likely to participate, and tasking ALL students to think about the question can get ALL students actually thinking about the question - not just the quick-to-answer extroverts.

Additionally, many instructors now use **clickers** when asking questions and have students answer in pairs or larger groups. Using clickers in an effective manner can be an easy way for the instructor to get a better understanding of the students' thinking, cue them to spend more time on areas where they are having difficulties, and give students feedback.

Another method for punctuating lectures is to incorporate **activities**. A well-planned activity can allow students to apply, integrate, and truly learn the information that you are presenting in your lecture segments. Activities can range from a few minutes in length to a whole class period. Angelo and Cross's *Classroom Assessment Techniques* provides many "recipes" for these kinds of activities. They vary in focus and duration, from short activities like *think-pair-share* and the *muddiest point* to longer activities like *pro and con grid, memory matrix, roleplays* and *invented dialogues*. These activities can give you the opportunity to assess the students' current understanding, as well as give the students time to work with the content to develop a more enduring understanding.

5. **Ending lectures effectively** – When you start your lecture you should let the students know the main three to five points you will be discussing; during the lecture you will discuss those points and then as you are closing your lecture, make sure to remind them what you told them. This is a good organizing metaphor for lectures and presentations. At the beginning of a lecture, you need to set the stage for what you will cover, why things are important, how they fit with the big picture, and what students should concentrate on. To

close a lecture effectively you need to revisit the big picture and how the presented information integrates with that big picture. Effective closure is a simple, yet often overlooked method for improving your lecturing.

Suggested Reading

> Angelo, Thomas A. and Patricia K. Cross. *Classroom Assessment Techniques: A Handbook for College Teachers*. Jossey-Bass, February 1993.

Using Discussion

The use of discussion has long been perceived as the way to get students to "really understand" the material. Socratic questioning and discussion has long been a mainstay of small group instruction, but in the larger classroom setting it is often replaced with lecturing and simple content transmission. With careful planning you can successfully use discussion in both large and small group settings. Careful planning can dramatically increase the instructional value of using discussions.

There are 4 major considerations for planning and facilitating a successful discussion; how to get students to prepare, how to ensure equality of participation, how to ensure overall discussion quality, and how to effectively close the discussion. As class size increases, planning becomes increasingly important, since in a small group discussion an instructor can more easily assess individual student preparation and ensure equality of participation. An often-overlooked part of effective discussion facilitation is the effective closing. We can miss the opportunity to refocus student attention on the most important concepts, highlight their relationship to the "big picture," and reinforce what we have learned along the way.

There are many useful models for planning discussions, including:

- Socratic questioning
- What, So What, Now What
- SWOT (strength, weakness, opportunity, threat)
- ORID (objective, reflective, interpretive, decisional)

Suggested Readings

> Brookfield, Stephen D. and Stephen Preskill. *Discussion as a Way of Teaching : Tools and Techniques for Democratic Classrooms (Jossey Bass Higher and Adult Education Series).* Jossey-Bass, August 2005.

> Stanfield, Brian. R. ed, *The Art of Focused Conversation: 100 Ways to Access Group Wisdom in the Workplace.* New Society Publishers, January 2000.

Student-Centred Instruction

Student-Centred Instruction (SCI) has enjoyed somewhat of a renaissance in recent years as the solution to our students "who just don't seem to get it." Many student–centred methodologies are currently used in the academy; problem-based learning (popularized by McMaster and Maastricht), team-based learning (developed at the University of Oklahoma Business School) and various forms of guided inquiry (that have been widely adopted in the Sciences as well as in other disciplines).

Mary Ellen Weimer (2002) in her book *Learner-Centered Teaching* eloquently explains both the opportunities and challenges in a student-centered classroom. The shift to learner-centred instruction is often preceded by the instructor's shift from a teaching focus to a learning focus, and from an instructor focus to a student focus. In a learner-centred classroom the instructor's role shifts from teacher/expert to designer and facilitator of instructional events. This transition can be uncomfortable for both student and instructor. The instructor sheds the role of sole expert and gives control and responsibility to students to mediate their own learning. Students do not always willingly embrace these new methods after years of teachers telling them what to know and when to know it. Student resistance can arise from a number of factors; the perception that student-centered instruction is more work for them, a lack of confidence in their own abilities as autonomous learners, and instructors and students adapting to new roles, dealing with mis-steps, and fine-tuning instruction on the fly. This flux in the classroom experience can be uncomfortable for everyone. Felder and Brent captured this well with "while the promised benefits are real, they are neither immediate nor automatic. The students, whose teachers have been telling them everything they need to know from the first grade on, don't necessarily appreciate having this support suddenly withdrawn." (Felder and Brent, 2005) Student resistance can be effectively mitigated if the instructor takes the time to explain to

the students why they are teaching the way they are teaching (e.g. that cognitive psychology studies show that people learn more with this type of instruction). This explanation needs to happen early (first day of class) and should be repeated several times during the course.

If you are interested in learning more about these and other learner-centred methods, you are encouraged to contact CTLT for resources, books, training opportunities, and connecting with local practitioners.

Suggested Reading

> Weimer, Maryellen. *Learner-Centered Teaching: Five Key Changes to Practice*. Jossey-Bass, July 2002.

> Michaelsen, Larry. K., Arletta Bauman Knight, L. Dee Fink. *Team-Based Learning: A Transformative Use of Small Groups in College Teaching*. Stylus Publishing, 2004.

Exams, Assignments and Effective Grading

In every course we need to develop assessment practices to both measure what our students have learned and to help them with their future learning. The measurement of student learning has long been the cornerstone of grading, but measuring student learning can also be used in a more formative way by student and instructor to focus a student's efforts, help assess ones progress towards a goal, and determine material, practices and skills that might need to be practiced or reviewed. Fink has developed a useful metaphor that describes assessment as **forward or backward looking**. Backward looking assessment corresponds to traditional testing and grading that typically quantitatively measures student mastery. In contrast, forward looking assessment focuses on measuring progress, identifying knowledge gaps and preparing students for future performance. When students are provided with timely feedback on their progress toward a course goal, it is hoped that they will incorporate that feedback and to be able to improve future performances. An effective assessment practice has three major characteristics and one major workload consideration; an effective assessment should be transparent, valid, and reliable and require reasonable effort (workload).

An assessment is considered **transparent** when students can easily understand both the task required and the criteria by which the assignment will be judged.

An assessment is considered **valid** when it measures important characteristics of student learning. There can be a tendency to measure things because they are easy to measure, not because they are important indicators of student learning.

An assessment is considered **reliable** when different assessors come to similar conclusions about the quality of a particular student's performance.

Different assessments have different marking **workload** implications; we are constantly balancing instructor effort with the quality of feedback to students. Clearly, some very effective assessment practices that are used in small group settings cannot be scaled to large classroom settings, while keeping instructor workloads reasonable.

When developing assignments one needs to consider what is to be assessed and how the students will respond and incorporate any marker feedback. If students are not required to reflect on feedback and incorporate it into future work, then there is less value in the instructor spending the time necessary to write detailed feedback. Assessment should be an integral part of the course with a combination of forward and backward looking assessment, timely feedback and the opportunity to incorporate the feedback into future performance. The traditional approach to assessment is to develop exams and assignments after designing your course. We recommend a backwards approach to course design that has instructors develop assessment material before developing instructional materials. This approach leads to better integration of the course goals, assessment materials and instruction experience (remember where you want your students to get to, how you will know when they get there, and what you need to do to help them get there).

Suggested Readings

Fenwick, Tara and Parsons, Jim. *The Art of Evaluation: Handbook for Educators and Trainers.* Thompson Educational Publishing, 2000.

Huba, Mary E. and Jann E. Freed. *Learner-Centered Assessment on College Campuses: Shifting the Focus from Teaching to Learning*. Allyn & Bacon, December 1999.

Walvoord, Barbara E. and Virginia J. Anderson. *Effective Grading: A Tool for Learning and Assessment*. Jossey Bass Higher and Adult Education Series. Jossey-Bass, February 1998.

Supporting Undergraduate Student Success

Understanding, supporting, and helping our students succeed is at the core of the University educational mission. We need to strive to understand the diverse range of skills, attitude and experiences that your students may bring to the classroom and the learning experience. Responding well to this diversity takes care and attention on the part of the instructor. Meaningful instruction needs to begin with understanding the learners - who they are, where they are at, and where they hope to go.

Starting at UBC can be a disorienting experience for many new students. Sometimes for the first time, students have limited access to the teacher, and are separated from their traditional support network of family and friends. Many new students arrive at UBC with the expectation that they will not only succeed, but they will get an "A". Many students struggle with this transition and are devastated by their first failures (the failure might just be "I didn't get an A").
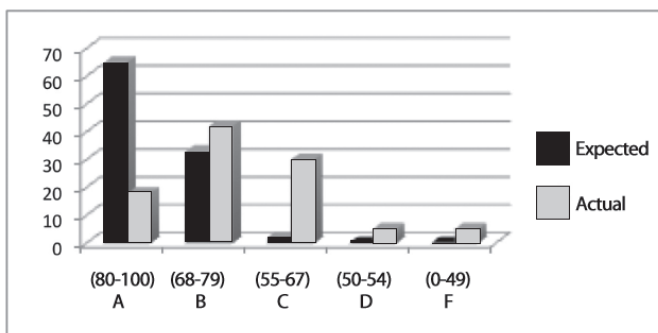
1st Year Grade Expectation and Actual Performance

There is clearly a mismatch between expectation and reality. How students respond to setbacks varies, and a study by Mueller and Dweck (1998) may provide some useful answers. They examined two groups of students, one that had been praised for "being smart" and one that had been praised for being "hard workers" in high school. Interestingly, the "hard worker" cohort failed in a more productive way, and the "being smart" group failed in a more counter-productive way. The "hard worker" group perceived the failure as a feedback on the quality of their effort. The "being smart" group perceived the failure as passing judgment on their intelligence. Following the failure, in subsequent tasks, the "hard worker" group continued to improve and the "being smart" group became unmotivated and performed more poorly. This might explain the difficulties some students encounter after a lifetime of teachers and parents praising them for being special or smart. As instructors we can set the stage by discussing these difficulties and highlighting the value of hard work as the greatest predictor of success.

UBC "provides the opportunity for transformative student learning through outstanding teaching and research, enriched educational experiences and rewarding campus life…Together, faculty, staff and students share the responsibility for bringing learning to life" *(Place and Promise: The UBC Plan, 2009).*

As a faculty member, you have tremendous influence on the learning experience of students. In your teaching role, in addition to engaging students in the curriculum of your discipline, you are an important source of advice and guidance to students.

Enriching educational opportunities

Students who participate in enriching educational opportunities, such as research with a faculty member, study abroad, or community service learning, report deeper learning and greater gains in personal learning and development. UBC has set a goal that all undergraduate students will have the opportunity to participate in two enriching educational opportunities before they graduate.

You can help students to take advantage of these opportunities. Encouragement from a faculty member is one of the strongest influences in a student's decision to participate.

NSSE 2008 UBC-V *NSSE - National Survey of Student Engagement**		First Year	Senior Year
In your experience at your institution during the current school year, about how often have you done each of the following?		%	%
Asked questions in class or contributed to class discussions	Never	18%	10%
	Sometimes	55%	45%
	Often	18%	27%
	Very often	9%	18%
Prepared two or more drafts of a paper or assignment before turning it in	Never	29%	33%
	Sometimes	38%	36%
	Often	24%	19%
	Very often	9%	12%
Come to class without completing readings or assignments	Never	11%	10%
	Sometimes	53%	50%
	Often	26%	26%
	Very often	11%	14%
Discussed grades or assignments with an instructor	Never	30%	15%
	Sometimes	48%	53%
	Often	17%	22%
	Very often	5%	11%
Talked about career plans with a faculty member or advisor	Never	57%	37%
	Sometimes	31%	45%
	Often	9%	13%
	Very often	3%	5%

* NSSE annually collects information at hundreds of four-year colleges and universities about student participation in programs and activities that institutions provide for students learning and personal development.

Some scenarios that you may encounter as you support student learning:

You need information about how to direct your students to study help and resources

The sheer size of UBC can make it difficult for students to find academic resources and they often look to faculty members for help finding the right place to start. **LEAP** is UBC's online hub of study and research support. You can access LEAP at: **www.leap.ubc.ca**. Through LEAP, students can access interactive tutorials, study guides, academic coaching, tech tools, advising, and more. LEAP pulls student success information together across disciplines and campus units into one integrated resource.

To make referrals easy, there are short blurbs on LEAP that you can copy and add to your course syllabus and a PowerPoint slide that you can download to use at the beginning of a lecture. Some faculty members find it helpful to have these resources on hand when giving back a first midterm or essay, particularly for new students who may still be adjusting to university learning.

Additionally, IT Services operates a student **IT Help Desk** to assist students with IT issues. Whether needing a Campus Wide Login ID (CWL) or help with Blackboard Vista, a student's first stop should be the IT Services Help Desk. More information is available at **www.it.ubc.ca/contact/helpdesk. html**

You would like to hire a student to assist with your research

By the time they graduate, 21.5% of UBCV undergraduate students report that they have worked on a research project with a faculty member outside of course or program requirements (NSSE, 2008). Students who work on a research project with a faculty member make greater intellectual gains than their peers, in part because they are exposed to the complex thinking and problem solving approaches inherent in research.

If you want to hire a student to work with you on a research project, UBCV has several initiatives that can help. Work Study (domestic students) and Work Learn (international students) are wage subsidy programs, managed by Career Services, which cover a portion of a student employee's wage ($9/hour in 2009-10). Career Services can also assist you with posting your position (paid or volunteer) and in accessing NSERC Undergraduate Student Research Awards and Canada Summer Jobs grants. Arts

Undergraduate Research Awards (AURA) are available through the Dean of Arts office. Talk with your Department Head or Dean to find out if discipline specific initiatives exist in your area.

You have concerns about a student who may be feeling overwhelmed, anxious, or depressed

In a 2008 study of UBCV students, 44% of undergraduates and 23% of graduates reported that stress contributed to academic difficulties (received an incomplete, dropped a course, or received a low grade in a class or on an exam/project). This was the top health and wellness-related reason for academic difficulty cited by both undergraduates and graduates and was significantly higher than the Canadian average (UBC NCHA 2008 data).

Faculty members are often in a position to identify students who are "at risk." Recognizing the signs of emotional distress and responding with interest and concern in a timely manner may be critical factors in helping students resolve problems that are interfering with academic achievement.

There are two pathways to choose from once you have identified a student in distress: speaking directly with the student or referring the student to the appropriate resource or services. If you have a rapport with the student, speaking directly to the student may be the best option. Begin the conversation by expressing your concerns about specific behaviors you have observed.

If you do not really know the student, you may prefer to refer the student to Counseling Services or Student Health Services, which can be contacted at **www.students.ubc.ca/counselling**/ and **www.students.ubc.ca/health/service.cfm** respectively.

Your decision about which path to choose also may be influenced by:

- Familiarity with student
- Your level of experience
- The nature or severity of the problem
- Your ability to give time to the situation
- A variety of other personal factors

As well as Counseling Services and Student Health Services, the Alma Mater Society (AMS) provides a wide range of student **support and advocacy services**. Visit their website at **www.ams.ubc.ca**

You want to arrange for a group of students to travel for an international learning experience

Group Study Programs (GSP) are faculty-led international learning programs initiated by faculty members interested in taking students abroad as part of an existing UBC course. Essentially, Group Study Programs offer faculty members a chance to "move the classroom" to a location that expands students' learning opportunities.

The Go Global International Learning Programs office oversees the development and implementation of GSPs at UBC. To learn more about developing a GSP, contact the Group Study Program Coordinator at **www. students.ubc.ca/global/about-us/contact-us/**

Supervising Graduate Students

In your role as supervisor, you are the key person in your students' graduate degree program and have considerable influence in helping them achieve their full potential academically, intellectually, and professionally. To be an effective graduate supervisor, you must first recognize the responsibilities that come with this role, and ensure that these are met to the best of your abilities with each graduate student.

Effective Graduate Student-Supervisor Relationship

Graduate student relationships with faculty members are regarded by students as the most important aspect of their graduate education. Good student-supervisor relationships are also associated with higher completion rates and faster times to completion.

Some fundamental elements of successful graduate supervision are:

- Clear and frequent communication
- Agreement on mutual expectations
- Mentoring tailored to the needs, attributes and aspirations of each student

These elements should be established as soon as the student begins his/her program, and continue for its duration. Clear communication of expectations and responsibilities is especially important for graduate students and supervisors from different cultures, for whom there may be unspoken assumptions about responsibilities which are not shared.

Ground rules

The best way to initiate an effective relationship with your graduate student is through early meetings in which you discuss and clearly define your roles and expectations. Here is a list of "ground rules" that should be clarified in initial meetings between a graduate student and his/her supervisor:

- How frequently you will meet and for what purposes (progress updates, literature reviews, etc.)
- Who will initiate the meetings and prepare meeting summaries
- The student's role with regard to the data collection and analysis
- The supervisor's role with regard to the student's data collection and analysis
- Who will train the student to do technical work, and what is the role of the program technician
- Standard hours for office space, weekend work or labs
- A timeline for the research program, which may include experiments, data analysis, manuscript writing, and thesis writing
- Safety considerations which may need to be completed before working, such as training programs, standard office or laboratory etiquette, or laboratory attire
- The use of university computers and accounts for research, net surfing, games, personal work, etc
- Applicable funding sources and the duration of such funding
- Presentations at conferences and meetings: how many, how often and who pays

In addition, *University Policy 85* requires that research conditions for all involved in a research team be outlined in a letter from the principal investigator before team members become engaged.

Letters are to cover issues such as compensation, supervision, authorship practices, records of data, ownership and/or use of data, publication rights, and commercialization. The templates provided here should be adapted with information specific to the program.

Communicate Early and Often

Clear and frequent communication with graduate students throughout their program is key to building the trust and mutual respect that form the foundation of the most effective supervisory relationships.

Meetings with graduate students are also good opportunities to discuss any particular needs or deficiencies of the student, as well as their career aspirations. You can then explore with them useful avenues for their development.

The best mentors lead in part by example, and including students as appropriate in your professional life is an effective way to share your knowledge and experience. Openness about the challenges you face or the excitement you feel, and involvement of students in broader dialogues with your peers all help assimilate students into the professional culture and broaden their learning experience.

Maintaining Momentum

Another key role you play as a supervisor is in helping your students maintain good progress through to successful completion of their program. Students can lose momentum at any stage of their program and for a variety of reasons. Frequent and open communication will help you to identify when this occurs and what you can do to help the student get back on track. Clearly defining expected progress and assessing the student's progress during supervisory committee meetings or your more frequent meetings with the student can help you identify when students are becoming sidetracked or losing momentum. Recognition of a concern should be followed by discussions between you and the student (and perhaps the supervisory committee) to determine the best approach to help the student get back on track.

Preparing for the Future

As supervisor, you have an important role to play in helping your students prepare for their future careers. You can assist your students by discussing their career goals with them early in their program and as they evolve, and working with them to identify potential career-related experiences and professional development opportunities. Oral and written communication are key competencies for which you are well-placed to mentor students by providing thoughtful responses and advice with respect to their written work and oral presentations. Many opportunities for students to gain

additional competencies are available through the Graduate Pathways to Success Program offered by the Faculty of Graduate Studies, the Centre for Teaching, Learning and Technology and other organizations at UBC.

You also have a role to play in helping your students to become established in their early careers by writing effective reference letters, identifying additional mentors to advise them on non-academic professions, and helping them network with prospective colleagues, advisors or employers. Effective mentors of graduate students do not consider their job done until students are successfully launched in the career of their choice.

Constructively Ending the Relationship

Changing circumstances and life events may lead either you or your student to consider ending the working relationship. There are several reasons why a change of supervisors may be the best option for both the graduate student and supervisor:

- Supervisor leaves the university: The supervisor retires, leaves the university to work somewhere else or is on sick leave for more than a year. If the student has almost completed his or her thesis this may not be an issue, as long as the supervisor is still available for support. However there must still be someone in place with a formal link to UBC who can look after the academic and administrative aspects of completion of the student's degree program.

- Incompatibility of graduate student and supervisor: Sometimes two individuals simply don't get along, even after honest efforts to do so, and it interferes with their academic activities.

- Funding: Sometimes funds designated for a student's stipend do not materialize and other funds are not available. Sometimes research funds run out.

- Student changes area of interest: Sometimes, a student's research focus changes or shifts to such an extent that the supervisor feels he or she no longer has the appropriate background to supervise the research. Also, a student may lose interest completely in his or her research and wish to change fields entirely.

These situations require you and the student, in conjunction with the Graduate Advisor for the program or Department Head, to make every effort to identify a suitable supervisor and project for the student.

The Supervisory Committee

The supervisory committee will generally consist of yourself and two or three other faculty members. Its role is to provide support to you and your student by broadening and deepening the range of expertise and experience available, and by offering advice about, and assessment of, your student's work.

The supervisory committee is responsible for guiding the student in selecting any required courses, planning the research, and preparing the thesis.

Graduate students who establish their supervisory committees early in their programs, and who meet with their committees regularly, tend to complete their degree programs successfully, and sooner than students who wait to establish their committees or meet with them infrequently. The student's progress since the last committee meeting and expectations for progress by the time of the next meeting should be clearly identified during the committee meeting and in the meeting report. This will assist you in determining the degree of intervention needed to ensure that the student makes good progress through completion of their program.

Assembling the Committee

In general, a supervisory committee should be established as soon as you and the student agree on a thesis topic. Generally, the graduate student and supervisor together decide on an appropriate committee structure, based largely on the research interests and areas of expertise of individual professors. You should check UBC Policies and Procedures to ensure that potential members meet all UBC requirements.

The student, supervisor, or graduate advisor approach potential committee members to determine if they are available and interested in serving on a supervisory committee.

Administrative Decisions

Both students and supervisors need to know which individuals and University bodies are responsible for different administrative decisions, since confusion about who does what can lead to missed deadlines and missed opportunities.

Each person or administrative body in the following list has responsibilities in specific areas.

The graduate student, supervisor and supervisory committee:

- The student's degree program, including required and elective courses or labs
- The scope and topics of comprehensive exams or comprehensive research papers
- Master's thesis and doctoral dissertation topic
- Master's thesis and doctoral dissertation research methodology
- Format to be used for thesis dissertation

The graduate program, department or school:

- Recommendations to the Faculty of Graduate Studies for merit-based awards
- Delegation of graduate program teaching assistantships
- Nature of the comprehensive exam
- Final Master's exam or defense

The Faculty of Graduate Studies:

- Admission to graduate school
- Administration of fees
- Selection of merit-based UBC awards and fellowships
- Final doctoral defense scheduling and standing
- Changes in students' academic programs
- Confirmation of the eligibility of supervisory committee members (doctoral only)
- Leaves of absence, extensions and transfers
- Student withdrawal from graduate program

The UBC Board of Governors:

- Fees assessment

The UBC Senate:

- Approval of academic policies of the University
- Approval of requirements of all graduate programs and degrees
- Approval of students for graduation

The UBC Senate Committee on Student Appeals on Academic Standing:

- Academic appeals
- Disciplinary appeals

The President's Advisory Committee on Student Discipline:

- Recommendations to the president regarding suspension or other disciplinary action

Enrolment Services:

- Tuition fee payment

The Office of Awards and Financial Aid:

- Recipients of need-based awards and bursaries

Supervisor Responsibilities

Supervisors should be available to help their graduate students at every stage, from formulation of their research projects through establishing methodologies and discussing results, to presentation and possible publication of dissertations. Graduate supervisors must also ensure that their students' work meets the standards of the University and the academic discipline.

Specific responsibilities of a graduate supervisor:

- Assists the student with the **research topic selection,** ensuring that it is suitable and manageable

- Is **sufficiently familiar with the field of research** to provide guidance and/or has a willingness to gain that familiarity before agreeing to act as a supervisor.

- Is **accessible for consultation** and discussion of the student's academic progress and research. The frequency of meetings will vary according to the discipline, stage of work, nature of the project, independence of the student, full- or part-time status, etc. For many, weekly meetings are essential; for others, monthly meetings are satisfactory. In no case should interaction be less frequent than once per term.

- **Establishes a supervisory committee** (with input from the student and colleagues where appropriate), and convenes a meeting, at least annually, to evaluate the student's progress, and provides a written report of the meeting.

- **Responds to written work** submitted by the student, with constructive suggestions for improvement and continuation. The turnaround time for comments on written work should not normally exceed three weeks.

- Makes arrangements to **ensure continuity of supervision** when the supervisor will be absent for extended periods, e.g. a month or longer.

- When necessary, assists the student in **gaining access to facilities** or research materials.

- **Ensures safety of the research environment**, and that it is healthy and free from harassment, discrimination and conflict. When there is a conflict in advice or when there are different expectations on the part of co-supervisors or members of the supervisory committee, the

supervisor is expected to endeavor to achieve consensus and resolve the differences.

- Assists the student in being aware of current graduate program requirements, deadlines, sources of funding, etc.

- Encourages the student to make presentations of research results within the University and to outside scholarly or professional bodies as appropriate.

- Encourages the student to finish up when it would not be in the student's best interests to extend the program of studies.

- Acknowledges appropriately the contributions of the student in presentations and in published material, in many cases via joint authorship.

- Ensures that recommendations for external examiners of doctoral dissertations are made to the graduate program advisor and forwarded to the Faculty of Graduate Studies in a timely manner.

- Assists the student to comply with any changes that need to be made to the thesis after the thesis or dissertation defense.

Graduate Student Responsibilities

As a supervisor, you have a right to expect substantial effort, initiative, respect and receptiveness to suggestions and criticisms from your graduate student.

Graduate students are expected to:

- Make a commitment and show dedicated efforts to gain the background knowledge and skills needed to pursue their research project successfully.

- In conjunction with their supervisor, develop a plan and timetable for completion of all stages of their thesis project, adhere to a schedule and meet appropriate deadlines.

- Meet with their supervisor when requested and report fully and regularly on progress and results.

- Maintain registration throughout the program and (for international students) ensure that study permits and (where applicable) employment authorization documents are kept up to date.

- Keep their supervisor, graduate program and Enrolment Services informed about their contact information and respond in a timely manner to queries from them.

- Give serious consideration to the advice and criticisms received from their supervisor and other members of their supervisory committee.

- Keep their work space tidy, safe and healthy; show tolerance and respect for the rights of others.

- Be thoughtful and frugal in using resources provided by their supervisor and the University, and assist in obtaining additional resources for their research.

- Conform to University, Faculty and graduate program requirements, including those related to deadlines, dissertation or thesis style, conflict of interest.

- Terminate their work and clean up their work space when their degree program requirements have been met.

- Return borrowed materials to their supervisor, graduate program, library or reading room, etc. when their project has been finished or when return is requested.

Resources for Graduate Supervisors

- Committee on Science, Engineering, and Public Policy. (1997). *Adviser, Teacher, Role Model, Friend: On Being a Mentor to Students in Science and Engineering.* National Academy of Sciences, National Academy of Engineering, and Institute of Medicine. Retrieved from **www.nap.edu/readingroom/books/mentor/index.html**

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- James, R. & Baldwin, G. (1999). *Eleven practices of effective postgraduate supervisors.* The Centre for the Study of Higher Education and the School of Graduate Studies, University of Melbourne. Retrieved from **www.cshe.unimelb.edu.au/pdfs/11practices.pdf.**

- King, M.F. (2003). *On the Right Track: A Manual for Research Mentors.* Council of Graduate Schools, Washington, D.C.*

- Lee, A., Dennis, C., & Campbell, P. (2007). *Nature's guide for mentors.* Nature, 447 (7146), 791-797.

- University of Washington. *Mentoring: How to Mentor Graduate Students – A Faculty Guide.* (2005). The Graduate School: University of Washington. Retrieved from **www.grad.washington.edu/mentoring/**

- Rackham Graduate School (2006). *How to Mentor Graduate Students: A Guide for Faculty at a Diverse University.* Rackham Graduate School, University of Michigan. Retrieved from **www.rackham.umich.edu/downloads/publications/Fmentoring.pdf**

- Ricks, F., Kadlec, H., Corner, S. & Paul, R. (2003, November) *Research on critical aspects of graduate education at the University of Victoria: Graduate student experiences, timely completion, supervision.* University of Victoria. Retrieved from **http://web.uvic.ca/gradstudies/research/**

- Skarakis-Doyle, E, & McIntyre, G. (2008) *Western guide to graduate supervision.* University of Western Ontario Teaching Support Centre: 360° Graduate Student Development Initiative. Retrieved from **http://grad.uwo.ca/documentation/purple_guide_supervision.pdf**

- University of British Columbia. *Handbook of Graduate Supervision.*

Hardcopies available from UBC Faculty of Graduate Studies

Retrieved from **www.grad.ubc.ca/students/supervision/**

- University of California at Berkeley. (2006). *Best practices for faculty mentoring of graduate students.* Retrieved from **http://academic-senate.berkeley.edu/committees/pdf_docs_consolidate/mentoring%20gdelines-FINAL.pdf**

Evaluation of Teaching at UBC

In this section we will examine the standard methods for the evaluation of teaching at UBC. There are a variety of required and optional forms of feedback that you can receive on your teaching.

There are two required forms of evaluation that are used at UBC: your department teaching evaluation form, which also includes the university-wide 6 question student evaluation of teaching (known as the "University Module"), and a peer review process (involving classroom visits by a colleague). The results of these evaluations can be used for your teaching dossier and to support tenure and promotion.

Standardized UBC Course Evaluation

A **standardized 6 question student evaluation of teaching** is now used in all courses at UBC. The purpose of these evaluations and this new policy (May 2008) is to provide the Provost's office with a more consistent view of teaching and learning at UBC. The evaluation can also provide you with important feedback on your teaching (see "Using Course Evaluation Data Wisely"). The results of these evaluations are eventually incorporated into your teaching dossier and can optionally be shared with your students.

These evaluations are organized by the Provost's office working in conjunction with your department (there is no instructor involvement in planning, delivery, and compilation of results). The University evaluation system allows questions to be added at a Faculty, department and individual course level. If you would like to incorporate your own questions in these evaluations, contact your departmental administrator.

Formative and Summative Peer Review of Teaching Process

Contact CTLT or your Faculty representative for Peer-review of Teaching.

Ask about the formative (from informal classroom visits to scholarly approaches) peer-review of teaching opportunities within your Department/Faculty.

In the summative peer evaluation of classroom teaching process, a senior departmental colleague **visits your classroom and completes a report.** This report is shared with you and your department head. These evaluations are eventually incorporated into your teaching dossier.

Each department/Faculty has a unique set of criteria that is used in these summative peer evaluations. Contact your department to get the criteria. You should review the criteria prior to any classroom visit and if possible discuss the criteria, your teaching philosophy, and your teaching plans with the reviewer before the classroom visit. Although this evaluation process is designed to be summative in nature, with appropriate discussions before and after the classroom observation it can become a useful formative opportunity. Since it can be disconcerting at first to have an observer in your classroom, it may be a good idea to invite a friend or near-peer to sit in on a class session to get some informal feedback on your teaching prior to a formal classroom visit.

Informal, Concurrent Evaluations by Students

These optional, instructor-arranged evaluations are done at various points of your choosing in a course and are designed to give the instructor feedback on **how things are going**. These evaluations can also be used to give students an important voice, especially when student-suggested changes are incorporated in the course.

A few words of caution and a few situations worth mentioning: you should discuss the results of these evaluations with your students, as nothing is worse than being asked for feedback and not having it acknowledged in a meaningful way. Try Incorporating at least some small change in your course in response to student suggestions, reinforcing the students' perception that they are being heard. There will always be suggestions that you don't incorporate, you need to acknowledge them, and then explain your rationale for not incorporating them. You need to manage student expectations on when and how you will give them feedback on their suggestions. For example, telling students that you will talk broadly to the major themes you/they have indentified in the evaluations, and then invite individual students to office hours if they feel their feedback has not been adequately acknowledged.

Brookfield (1990) has suggested the use of a "Critical Incident Questionnaire" for informal classroom feedback. These evaluations can be as simple asking what should I keep doing and what should I stop doing.

Contact the Centre for Teaching, Learning and Technology (CTLT) if you would like to get examples of these and other kinds of concurrent evaluations.

The data gathered in all these processes should be retained year to year, so that Scholarship of Teaching and Learning (SoTL) work may be possible in the future.

Using Teaching Evaluation Data Wisely

Teaching Evaluation data from peers and students are a valuable source of feedback to improve and enhance your classroom teaching and learning practice. These data can also help you to set strategic teaching and learning goals (developmental) and monitor the effectiveness of your educational practice within your teaching context. It is usually most helpful to interpret teaching evaluation data with an experienced colleague.

For example, it is worth noting that reading your first student evaluation of teaching data can be incredibly satisfying, humbling and ego-bruising all at once. Students sometimes don't provide constructive, helpful feedback. Some have little experience in providing this kind of feedback and sometimes they have little understanding of the teaching and learning process. Some student comments can verge on being hurtful. The evaluations might just be an opportunity for students to vent on issues important to them (that may extend beyond your classroom). We have a tendency to dwell on a few negative comments in a sea of positive comments (it's human nature).

Following my first course, I was devastated by a few negative comments. A few months later, I bumped into the colleague I that co-taught the course with, and she commented that the course "had been great…it went so well." It became apparent that I had been unfairly dwelling on the negative.

An example might be helpful here:
The course was really hard, I learned so much...thanks
The course was totally unfair...you ruined my life (real comment!)
There was too much homework...you suck!
Thanks for having such high expectations of us
I never got a C before...you're a lousy teacher

These all might describe the same instructional event and represent a wide variety of students' perspectives. Some students might expect a B for showing up, some don't want to take the responsibility for their own learning, some want to be challenged, some perceive you personally as the source of all their troubles. The message here is to read your evaluations with "a grain of salt." Try to find the comments and themes that will let you improve your practice and don't dwell on the negative.

Dossier, SoTL and Professional Development

The Teaching Dossier

As a faculty member at UBC, you will need to maintain a CV as well as a well-documented teaching dossier. Your dossier should contain:

- A statement of teaching philosophy
- A record of teaching duties
- Sample teaching materials
- Summary of student evaluations
- Peer observations

Your dossier and CV are used for merit considerations and ultimately may be used in the tenure and promotion process. The most important step in dossier development is just to begin collecting everything (save ALL materials at the start). When you begin to assemble your dossier, you should consult your department head to better understand the process, expectations and deadlines. It can be helpful to review a colleague's dossier to better understand both what is required and what has been deemed adequate in the past. When developing your dossier you can contact CTLT for help with dossier development .

SoTL Research

The Scholarship of Teaching and Learning (SoTL) brings the rigour of academic research to examining teaching and learning. You may have a

burning question about the educational process and what is happening in your own classroom - this is often the beginning of one's interest in SoTL. UBC has a number of supports and resources available through CTLT to assist you in SoTL research. CTLT and the ISoTL Community of Practice (Institute for the Scholarship of Teaching and Learning) can give you guidance and support if you would like to conduct this kind of research into your teaching.

There are two important points about SoTL research: collect and save everything related to your teaching so that you can look back more clearly if you decide to do SoTL research in the future. A concern in any SoTL work is obtaining the appropriate ethical approvals, but UBC has stated that course information collected, as part of the normal routine of a course offering, is useable in SoTL research and publication. This does not mean you can add your SoTL questions to your evaluations, but it does mean you can use and publish the compilation of student evaluation data that has been collected as the normal operation of a course.

Your Professional Development

The best teachers have been described by Stephen Brookfield in his book *The Skillful Teacher* (2006) as "reflective practitioners." They reflect deeply on the educational process, their role in the process, and the possibilities for improvement. Brookfield also suggests that critically reflective teachers must view their practice through 4 different lenses: our personal perspective, the perspective of the student, the perspective of our colleagues, and the literature. The critically reflective teacher strives for more mindful practice.

Your first stop for the professional development of your teaching should be the Centre for Teaching, Learning and Technology (CTLT). CTLT offers many resources, workshops and mentorship opportunities to learn more about the educational process and assist you in becoming a "reflective practitioner". The CTLT Centre is located on the second floor of the Irving K. Barber Learning Centre. It houses a number of workshop and meeting rooms, faculty consultants, and a well-stocked reading room. You are invited to drop by and tour the facilities, and spend time in the reading room reviewing the many books and publications on teaching. CTLT offers an ongoing series of workshop opportunities including Instructional Skills, Course Design, Diversity Training, New Faculty Orientation, Development for Heads and Directors, the annual CTLT Institute, and many others (visit the website for current offerings **www.ctlt.ubc.ca**). The annual CTLT

Institute deserves special mention; the institute happens for one week in late May of each year and it is your chance to really concentrate on your professional development. The Institute has a wide range of training opportunities, from how to make your classroom more inclusive to how to write multiple-choice questions.

CTLT also hosts a number of Communities of Practice that bring together faculty with similar interests. The current communities include:

- Problem-Based Learning
- Course Design
- Institute of Scholarship of Teaching and Learning
- Community Service Learning
- Global Citizenship
- Graduate Student Teaching
- Portfolio Community
- Qualitative Data Analysis
- Sustainability Across the Curriculum
- Teaching and Learning for the Heart and Mind
- Facilitation Community
- Undergraduate Research
- Peer Review

Many Faculties at UBC also offer professional development opportunities around teaching and learning. Talk to your colleagues and department head about the opportunities in your particular Faculty. In some faculties these opportunities are associated with the Instructional Support Centres (Arts, Applied Science, Business, Land and Food Systems) or with special program like the Carl Wieman Science Education Initiative in the Faculty of Science In other Faculties there are units in the deans office that oversee faculty development (Medicine).

Finally, education has a rich and very deep literature. If something interests you, there is probably a book or article that would be of use. Contact your local Instructional Support Unit, or CTLT, and we can try to recommend some helpful reading for you.

Useful Resources

Resource 1: How People Learn

Education is, not a preparation for life; education is life itself.

Dewey

In this section, we will look at how people learn and some important concepts that will help you better understand the educational process, and then we will consider the implications of this for teaching.

Most instructors dream of imparting important, enduring knowledge to their learners, and hope that their students become self-motivated, expert problem-solvers with a sophisticated world-view. We often fall short of these dreams in courses crammed with content, classrooms designed for lecturing, and contexts that sometime quietly and sometimes overtly support the status quo. At the beginning of our teaching careers, we often dwell on our role as instructor with little regard for what is going on in students' heads. It is important to remind ourselves that a high quality learning experience depends on a change in student thinking, and not necessarily on the instructor believing s/he "taught well."

One of the most elegant explanations of "How People Learn" is provided by Bransford (editor) in the recent book: How People Learn: Brain, Mind, Experience, and School. "How People Learn" is both a simple summary of some recent research in the cognitive sciences and an argument for how teaching should be done (Edelmean, 2003). The book provides educators with an excellent framework for understanding the science of learning. We have provided some highlights from the book for your convenience.

Knowledge Constructed not Transmitted

The current popular view of instruction has adopted many of the tenets of **constructivism**. Constructivism is an educational theory that espouses that learners construct knowledge and meaning from their experiences.

> *One of the hallmarks of the new science of learning is its emphasis on learning with understanding.*
>
> *(Bransford, 2003, p.8)*

Social constructivism further espouses that learners needs to arrive at their version of the truth, influenced by their background, culture or embedded worldview. "This doesn't mean that students are encouraged to believe what ever they want, rather that their truths need to be co-developed with their social community by respecting, incorporating, modifying, adopting, and discarding information as appropriate. " (Wikipedia)

The guiding principles of constructivism are:

- Knowledge is constructed, not transmitted
- Prior knowledge impacts learning
- Building knowledge requires effort and purposeful activity

Implications for Teaching

"If there is one thing I would like to go back and change about my teaching it would be that I did not take enough time to find out what my students knew about a topic before launching into it. To assume that they had no knowledge or beliefs about the topic was, frankly, absurd." — Gary Poole, Former Director of UBC Centre for Teaching, Learning and Technology .

We must access and leverage students' prior knowledge

Students bring their understanding of the world around them to the educational process. As teachers, we need to understand the mental models that our students use to perceive the world. Understanding our learners is the typical starting point for meaningful instruction.

Sometimes new information can be neatly "assimilated" into students' existing understanding of the world, and sometimes their worldview

needs to shift or "accommodate" the new information. The Swiss educational theorist **Jean Piaget** (1896-1980) first espoused the idea that learners either **assimilate** new information or shift their way of thinking to **accommodate** the new information. The process of shifting one's framework of thinking can be a difficult and uncomfortable one for learners. They may need to abandon their previously held worldviews to accommodate the new information.

However, there is a considerable amount of literature in education that reports that students will often revert to their original misconceptions after instruction, even when the new information is clearly in conflict with their existing understanding, and the new information has been successfully retrieved for testing purposes.

We must give students opportunities to actively construct their own meaning

Many educators believe that knowledge cannot be transmitted; only information can be transmitted. When we instructors transmit information to our students we must also create opportunities for our students to individually create meaning from the information. The students need opportunities to actively work with the new information in meaningful ways to turn it into knowledge. Real, authentic problem solving can give students the opportunities to use new information and fine-tune their understanding. When students problem solve with their peers they can often progress more quickly than when they work alone or interact with an expert. Working with peers who are at a similar or slightly higher level of understanding can speed a student's progress.

The positive effect of a task that is slightly more challenging than one's current abilities, and progress that is hastened by the support of fellow learners has been described by **Lev Vygotsky** as the **Zone of Proximal Development**. Vygotsky also describes a process known as **scaffolding**, where the instructor can provide appropriate levels of instruction and guidance to maximize students' progress on a particular learning task, and fade from the instructional process as student mastery increases.

The concepts of **scaffolding** and **fading** are cornerstones of many Guided Inquiry styles of learning (POGIL-Process Oriented Guided Inquiry Learning; PBL-Problem Based Learning). Fading is the concept that instructors may need to provide more guidance early in the student learning process and then fade as the students' abilities increase. However, Guided Inquiry learning has received some bad press from Kirschner, Sweller and

Clark and others. They took the provocative view that educators were suggesting inquiry without any guidance and not surprisingly, found that this approach is ineffective. Most reasonable educators promote guided inquiry learning, where the amount of guidance varies on the task and learner development.
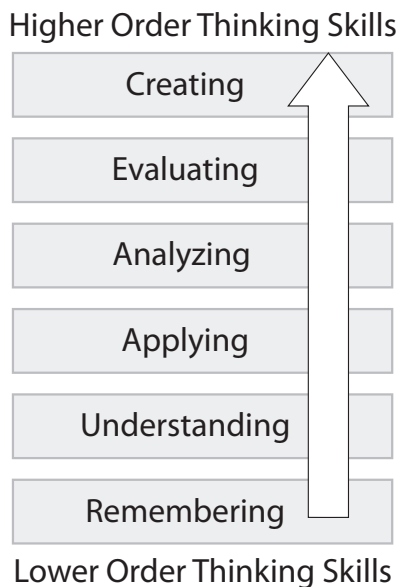
Suggested Reading

Bransford, John, D., Ann L. Brown, Rodney R. Cocking (eds.) *How People Learn: Brain, Mind, Experience, and School: Expanded Edition.* National Academies Press, 2000.

Some Other Educational Ideas Worth Knowing

Bloom's Taxonomy

In 1956, Benjamin Bloom developed an important taxonomy of educational objectives in three domains (Cognitive, Affective and Psychomotor) to help with preparation of comprehensive examinations at the University of Chicago. The taxonomy has since become one of the cornerstones of North American education, as it helps educators use common language around learning goals, and helps individual practitioners articulate the educational possibilities within a particular piece of instruction, course, or program.

Higher Order Thinking Skills

Creating
Evaluating
Analyzing
Applying
Understanding
Remembering

Lower Order Thinking Skills

Bloom's Taxonomy of Educational Objectives
Cognitive Domain

In the **cognitive domain** there are six Bloom's levels; the lowest being **Remembering**, moving through **Understanding**, to **Applying,** to **Analyzing,** to **Evaluating,** and finally to **Creating**. When designing

learning experiences, it can be helpful to use Bloom's levels to help you visualize and plan students cognitive progress as they move through your course. The Bloom's levels can be mapped to various verbs and these verbs can be used to generate learning objectives and create test questions that correspond to different Bloom's levels.

Remembering	Understanding	Applying	Analyzing	Creating/Evaluating	
know	restate	use	distinguish	compose	judge
define	discuss	translate	analyze	plan	appraise
memorize	describe	interpret	differentiate	propose	evaluate
list	recognize	apply	calculate	design	compare
recall	explain	employ	experiment	assemble	value
name	identify	demonstrate	compare	construct	select
relate	locate	dramatize	contrast	create	choose
write	summarize	practice	criticize	design	assess
label	paraphrase	illustrate	solve	organize	estimate
state	illustrate	operate	examine	manage	measure
		compute	categorize	recommend	hypothesize
		construct			

Bloom's Taxonomy of Educational Objectives - Cognitive Domain Verbs

Learning Styles: "A Useful Fiction"?

We have all likely heard someone describe him/herself as a "visual" learner – someone who learns best from pictures, diagrams etc. Learning styles and thinking about them evolved when educators noticed that different forms of instruction seemed to work better for different learners. You may have a "preferred" learning style, but we all need to learn in a variety of ways (not just our preferred) to acquire deep, enduring understandings. The literature about learning styles has found that the they are not a valid construct, and do not provide reliable information on learners preferences, strengths and weaknesses. As a result, many educators find learning styles a contentious subject. The power of learning styles may be in the thinking/ reflecting/ understanding they can bring to your planning as you design instructional activities.

There are more than 80 types of learning styles inventories (inventories are typically questionnaires or structured tasks that can be used to categorize the learner as a certain style). In 1993 Howard Gardner, who developed the "multiple intelligences" learning styles inventory, described his inventory as a "useful fiction."
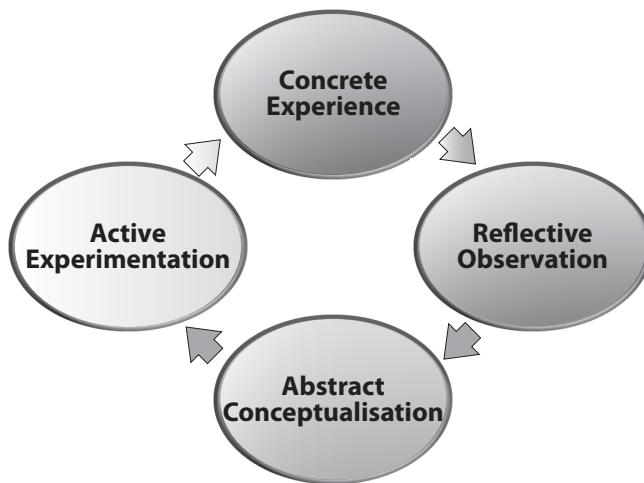
Kolb's Cycle of Learning

Kolb's Learning Cycle

One of the most popular and useful learning styles inventories was developed by David Kolb (1983). His model, the Kolb's Learning Cycle,

arranges learners on two continuums; the first categorizes a learner's preferred approach to a task, and the second, how a learner prefers to engage in the task. The first continuum on task approach ranges from learners who prefer "doing" (active experimentation label) to learners who prefer "watching" (reflective observation label). The second continuum on experience preference ranges from learners who prefer the "concrete" (concrete experience label) to learners who prefer "thinking" (abstract conceptualization label). Depending on your aggregate placement on these continuums, you can be described as a Converging or Diverging learner or an Assimilating or Accommodating learner.

Kolb's Learning Cycle provides an instructional frame showing how instructors and learners need to "cycle" through a variety of approaches to a given learning task to develop a deep, enduring understanding. If you were to design a learning experience using the Kolb Cycle, you might give your learners the opportunity to gain some "concrete experience", then do some "reflection" on the experience, followed by a chance to "abstract" meaning from the experience, and finally the occasion to "actively test" and refine their new understandings.

Resource 2: Designing Courses

There are many models for designing courses and most contain the following elements: consideration of situational factors; identification of learning goals; construction of evaluation activities and feedback; construction of learning activities. The following two course design approaches provide a good starting place for course design.

Backwards Design

Grant Wiggins and Jay McTighe popularized **backwards design** in their book *Understanding by Design* (1998). When designing a course, they advocate considering: where you want to get the students to, how you will know when the students get there, and what you will have to do to help them achieve these goals. Knowing what you want your student to achieve lets you establish overall course goals. Considering what evidence you will collect to "know that your students have got there" lets you establish your evaluation and feedback practices. As a result, you can design teaching and learning activities that help your students achieve these goals.

Fink's Course Design Model

In his book, *Designing Significant Learning Experiences* (2003), Dee Fink outlines a course model that incorporates the important aspects of backwards design and helps you design logical links between all the pieces.
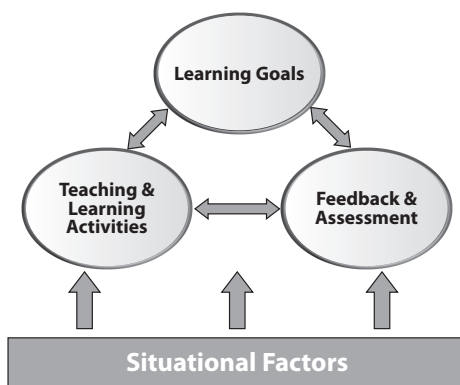
Fink's Course Design Model

The model establishes **course or learning goals, assessment practices (evaluation) and feedback** and **teaching and learning activities** as an

inter-dependent triad that can generate synergy when course activities and goals are properly integrated. The Fink model incorporates steps to help instructors consider their audience and establish appropriate course practices that promote student learning, honour institutional context, and respect instructor autonomy.

Essential Questions for Course Design

Consider situational factors. Start by gathering information about the course: the number of students, pre/co-requisites, the students' prior knowledge and experience, the nature of the course, how it fits into the curriculum or program, the nature of the subject, the culture of the discipline, and expectations of the department and institution.

Identify Learning Goals. Once you understand your context then you can identify what you want the students to learn. The learning goals may be constrained by departmental and institutional expectations.

Design Feedback and Assessment Activities. You first need to determine what is worth assessing. You must identify strategies to provide feedback to students to help them learn, and decide what evidence you will collect to determine whether students are achieving the course goals.

Design Learning Activities. Once you have clear course goals and understand the required assessment and feedback practices you will incorporate in your course, you can then create activities and learning opportunities to help your students achieve these goals.

When designing a series of course activities, it can be helpful to use Fink's *Castletop diagram*. The diagram charts the sequence of in- and - out-of-class activities as you progress through the course and helps you more fully integrate these class activities.
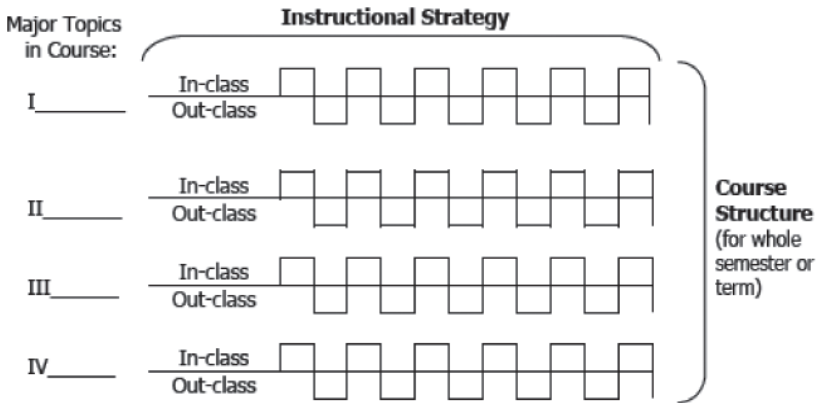
Fink's Course Castle Top Diagram – Lesson Planning

Next Steps

There are many resources to aid you in course design and the development of your teaching practice at UBC. You might consider attending one of the Centre for Teaching, Learning and Technology (CTLT) Course Design Intensives (3 day workshop typically offered 3 times per year), or attending some of the periodic teaching and learning workshops at CTLT, including their one week CTLT Institute in May of each year, or completing the UBC Faculty Teaching Certificate program (more information on these opportunities is available on the CTLT website at **www.ctlt.ubc.ca**
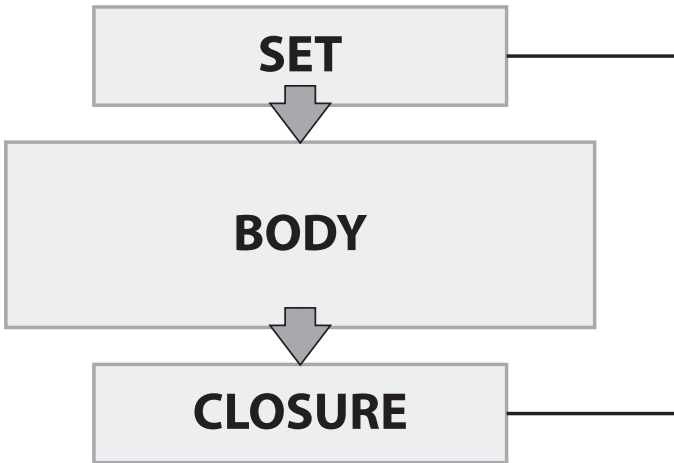
Suggested Readings

Fink, L. Dee. *Creating Significant Learning Experiences, An Integrated Approach to Designing College Courses.* Jossey-Bass, 2003.

Wiggins, Grant and Jay Mctighe. *Understanding by Design*. Prentice Hall, 1998.

Resource 3: Lesson Planning

There are many lesson planning models that you can use. For the most part they have the same pieces and different organizational schemes. The important thing is to find one that works for you.

The Instructional Skills Workshops that are offered through the Centre for Teaching, Learning and Technology uses a models known as BOPPPS. BOPPPS stand for Bridge, Objectives, Pre-Test, Participatory Learning, Post-Test, and Summary. We have presented a different model known as Set-Body-Close - this model incorporates the BOPPPS components into a slightly different framework.

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┌─────────────────────────────┐
│            SET              │──┐
└─────────────────────────────┘  │
          ▼                       │
┌─────────────────────────────┐  │
│           BODY              │  │
└─────────────────────────────┘  │
          ▼                       │
┌─────────────────────────────┐  │
│          CLOSURE            │──┘
└─────────────────────────────┘
```

Set

The "set" of your lecture really sets the stage for the learning that is to follow. It consists of six elements: establishing the **mood**, **motivating** the students, usually by describing **utility** of the information being presented, providing an overview of the **content** that will be covered, finding out what students already know about the content (**knowledge base**) and finally establishing clear **objectives** for the lesson.

Body

In the body you will present and work with the content you are hoping the students will begin mastering. It is important to **limit the amount of content** you cover so you do not overload the students. It is generally a good plan to move from the big picture to the details and finally back to the big picture (known as the **whole-part-whole** approach). You should be **distinguishing** the **need to know** from the **nice to know**, and finally **vary the stimuli** using activities, questioning, voice, eye contact, silence and audio-visual aids.

Close

The closure has four main elements: you should **summarize** what has been covered, **relate back to the set**, either finishing the story or reviewing the objectives, give students a **sense of achievement,** and most importantly present **NO new information.**

Resource 4: Syllabus Checklist

The syllabus is your opportunity to inform your students about your vision for the course ahead; what the course will focus on, why things are important, where you will take them during the course, what you hope they will learn along the way, and what you will do to help them learn.

There are two schools of thought on what represents the "perfect" syllabus. Some instructors advocate a one-pager that highlights and sells the course, and provides a conceptual framework to aid student learning, while others advocate a multi-page "contract" that describes in detail schedules and topics, goals and objectives, pre/co-requisites, assignments, grading criteria, applicable institutional policy, teaching philosophy/ instructional approaches and your own course policies (late penalties, attendance, etc.).

Both approaches work, so you are welcome to pick the one that is right for you. If you select the shorter syllabus style, you will need to present the additional material in supporting documents.

The following is typically contained in a syllabus and/or supporting documents:

General Course Information

- Course Description
- Goals and objectives
- Schedule
- Course requirements (pre/co-requisites)
- Instructor contact information
  - Office hours (location/time)
  - Additional availability
- TA contact information
- Textbook information/list of readings/websites/additional resources

Classroom Information

- Instructional strategy/teaching philosophy
- List of topics and events
- Ground rules/expectations

Evaluation Information

- Assignments and due dates

- Examination dates

- Grading procedures, criteria and rubrics

- Policies (attendance, late work, academic integrity, sickness, disabilities, drop dates)

Additional Information

- What you expect of your students (time and effort)

- What the students can expect of the instructor: here you could mention how you intend to manage expectations for 24-7 availability

- Ways to succeed in the course

- Campus support services

One great idea is to include two empty contact information blocks at the end of the syllabus and give the students the opportunity in the first class to turn to a neighbour, introduce themselves and trade contact information.

Suggested Readings

O'Brien Judith. G., Millis, B.J., Cohen, M.W. *The Course Syllabus – A Learning-Centered Approach*. Jossey-Bass, 2008.

Nilson, Linda B. *The Graphic Syllabus and the Outcomes Map: Communicating Your Course*. Jossey-Bass, 2007.

Resource 5: First Day of Class Recommendations

Set the Environment

The first day of class can have a large influence on students' perception of the entire course.

By the end of the first class, you want students to have a good sense of why the course is interesting and worthwhile, what kind of classroom environment you want, how the course will be conducted, why the particular teaching methods are being used, and what the students need to do (generally) to learn material and succeed in the course. It is also important to give students the sense that you respect them and would like all of them to succeed.

Establish Motivation

Provide an entry-level preview of the course material and explain why the course material is important & interesting.

Avoid jargon as much possible. Where applicable, make connections to:

- Real world/everyday life
- What students already know
- What they will need to be successful in future studies or career
- What students are interested in, link to current events

Personalize the learning experience

Welcome students to your class and make it clear that you are looking forward to working with them.

Introduce yourself, including describing your background and interests in connection to the subject:

- Why you find it interesting and exciting for them to hear about the subject
- How it applies to other things you do (research, consulting, every day life)

  Note: Students—especially those majoring in the subject—say it is

inspiring to hear about the instructor's background (such as the kind of research they do) and how it is relevant to the course.

Introduce teaching team: If applicable, introduce TA's and anyone else involved that students will be interacting with (could show pictures or have them come to class).

Find out who your learners are: Make an effort to find out who the students are and their expectations, motivations, and interests.

- Ask them a series of questions about their majors, goals, and backgrounds (perhaps use clickers or a survey)

- If appropriate, ask them to introduce themselves to other students they will be working with

  Note: use introductions with caution. Some students say introductions make them uncomfortable if used as a general "icebreaker", but it is appropriate to introduce themselves to group members with whom they will be working

Establish Expectations

Best if also handed out and/or online, not just spoken

Describe overarching (course-level) learning goals; the big picture view emphasizing that you want them to learn and what your role is in supporting their learning

Explain how the course will be conducted, what will happen in the class, your expectations for out-of-class work, and give an overview of the schedule and marking scheme. Describe (generally) how to succeed in your course. Express that you feel they can succeed if they put in the effort. Give advice on how to study.

Explain why you're teaching the way you are teaching, and how the different components support their learning (especially important if you are teaching differently than most other courses are taught: Teaching methods based on what is known about how people learn and the students need to construct their own understanding.

Give a general description of how assessments are used for both feedback and marks, leaving the details to be read on the course website or syllabus.

Highlight the important details (not all of the syllabus, detailed schedule, detailed learning goals, academic conduct, deadlines, rules). Don't go into all the details during first class; give links to more details on the course if the syllabus is posted online.

Good Practices	Avoid - Bad Practices
Visit classroom before first class to avoid technical problems	
Start class on time - sending the message that you expect them to be on time	
Tell students **you think they can all succeed** if they put in the effort (fine to say the course is challenging as long as you also express that it is interesting/worthwhile and do-able with appropriate effort)	Don't speak about threatening things: Telling students you expect some to fail Telling students that lots of students don't like the course and/or have found it extremely difficult
Try to **give them an authentic experience** as to what the classes will be like	Using teaching practices that are inconsistent with the way you will be teaching the rest of the time
Address academic conduct rather then academic misconduct in context throughout course (e.g. talk about plagiarism when you are giving a writing assignment)	Emphasizing rules and penalties first day (sends message of distrust, and they're not listening anyway)
Involve students during class (**activities**)	Talking the entire class time
End class on time with slide containing pertinent info - your name, office hours, contact info, website, homework, etc.	Ending class early

Thank you to the Carl Wieman Science Initiative for sharing this resource.

Resource 6: Getting Started at UBC Library

1. Obtain Your UBCcard

Available at the UBC Bookstore, your UBCcard is your library card. Turn it over to locate your library barcode (29424…), which provides you with access to the library's licensed digital resources from anywhere on or off campus.
If you don't yet have your UBCcard, visit: **www.ubccard.ubc.ca**

2. Contact Your Subject Librarian

The subject librarians possess vital subject expertise. As your personal link to the Library, your subject librarian can work with you to ensure that the Library supports your research and teaching priorities. They can provide personalized help with your research via one-on-one consultations. To find your subject specialist, visit: **www.library.ubc.ca/subjectlibrarians**

3. Visit the Faculty and Instructors' Page

For more detailed information about what UBC Library can do for you, visit: **www.library.ubc.ca/faculty**

Supporting your Research

Collections

The library supports research across many disciplines with more than 5.9 million volumes (including over 520,000 e-books), over 80,000 serial titles, 608,000 electronic resources, 1.6 million digital collection pages, 5.2 million microforms, and more than 833,000 maps, audio, video and graphic materials. To request an item not available at UBC Library, visit the Interlibrary Loan website at:
www.library.ubc.ca/home/orderdel.html

To suggest new material for purchase, visit:
www.library.ubc.ca/home/forms/bookreq.html

Online Access

Electronic resources and collections, including e-journals and e-books, are available to you 24 hours a day, seven days a week. For off-campus access instructions,
visit: **www.library.ubc.ca/remote**

Current Awareness & Research Management

UBC Library offers a number of current awareness tools and technologies that help you manage and stay up-to-date with your research. To learn more about resources such as RefWorks, Table of Contents notifications and database alerts, ask your librarian, or visit: **www.library.ubc.ca/ currentawareness**

cIRcle

cIRcle is the University of British Columbia's digital repository for research and teaching materials created by the UBC community and its partners. Materials in cIRcle are openly accessible to anyone on the web, and will be preserved for future generations. To learn more, and to deposit your research into cIRcle, visit:
www.library.ubc.ca/circle/about.html

Supporting Your Teaching

Subject Librarians

Your subject librarian can provide customized research workshops and online guides for undergraduate and graduate level courses. They can work with you to create effective research assignments and online tutorials. To contact your subject librarian,
visit: **www.library.ubc.ca/subjectlibrarians**

Online Course Pages & WebCT Vista

The library can help integrate online course readings into your Blaclkboard/WebCT Vista module or develop customized course pages. To learn more, contact your subject librarian.

Course Reserve

To place materials such as books, articles, and videos on short-term loan for your course, **visit: www.library.ubc.ca/home/reserve.html**

Media Bookings

If you are interested in booking videos, films or DVDs for your own use or for a classroom presentation on a specific date, we can help. Book videos to be shown in your class online at: **mediabooking.library.ubc.ca**

Innovative Learning Spaces

The Irving K. Barber Learning Centre offers collaborative and innovative learning, classroom and lecture space, as well as videoconferencing technology, for educational and community programming. For more information, visit:
www.ikebarberlearningcentre.ubc.ca

Resource 7: Copyright

The Canadian Copyright Act protects authors' works in order to enable them to earn a living from their publications. The following terms will give you an idea of what you are allowed to copy and how copyright is managed. However, **it is very important that you read over the Access Copyright guidelines** in further detail on their website at **www.accesscopyright.ca**

Public Domain

A work becomes public domain if the author has been dead for over 50 years, and it can be used without permission because it is no longer protected by copyright.

Fair Dealing

UBC's Access Copyright license allows some copying in certain circumstances, including private study, review, or criticism.

The Creative Commons

This new online system allows copyright owners to decide what constitutes fair dealing for their particular work. They may only request attribution in the use of their work, or they may restrict commercial use of their work.
Find out more at **www.creativecommons.org**

Open Access Journals

This online system allows you to "use, read, download, copy, distribute, print, search, or link to the full texts" of the articles they contain. Through this directory, you have access to a range of research to help you in preparing your courses. Find out more at **www.doaj.org**

FAQs

1. What if I want to prepare a package of reading material for each student in my class?

UBC has a comprehensive license with Access Copyright allowing the copying of a broad range of material without seeking permission. But there are limits imposed by the license.

For coursepack material from non-textbook sources, you are allowed to copy 15% of a work or whichever is greater of the following:

- An entire newspaper article or page

- An entire chapter, if it is not more than 20% of the book

- An entire single short story, play, poem, essay or article from a book or periodical issue containing other works

- An entire entry from an encyclopedia, dictionary or similar reference book

- An entire reproduction of an artistic work from a book or periodical issue containing other works. Artistic works include drawings, sculptures, paintings, prints, architectural works of art or works of artistic craftsmanship.

- Coursepack material from textbook sources must not contain more than:

- Five percent of a textbook, or more than one chapter

- Two extracts from textbooks written by the same author and published by the same publisher within any five year period

- Fifty percent textbook material

2. What if I want to copy more than the license allows?

Permission is required from Access Copyright or the copyright owner if copies exceed the license limits or if Access Copyright does not cover the work, such as an unpublished work, a musical score, or an original artistic work.

3. What if I only want to distribute a handout?

You may make enough copies for the number of students in the class and two for the instructor of the following:

- Up to 10% of a published work or whichever is greater:

- A maximum of one chapter of a book, provided it is no more than 20% of the book

- An entire short story, play, essay, article or poem

- An entire newspaper or periodical article

- An entire entry from a reference work

- An entire artistic work reproduced in a book or periodical

- Copies to replace damaged or missing pages of up to 20% of the work

4. What is the protocol for selling coursepacks to cover the copying costs?

A record must be kept when photocopied material is sold. Access Copyright will be paid a pre-set amount--currently 4.5 cents for most works--for each page copied in order to cover royalty payments to the copyright holder. This amount is included in the price of the course pack when it is sold to students.

When made for sale, all copies must bear the following copyright credit to show they were produced under license: ©; publisher name; and (where known) artist, illustrator or author name(s). They must also prominently display this notice: This material has been copied under license from Access Copyright. Resale or further copying of this material is strictly prohibited.

5. Do I need to keep a record if I am not selling the material I copy?

Yes. UBC pays an annual fee to Access Copyright to cover royalties for copyright holders, but an eLog (found on the Access Copyright website) must be completed for all materials used and submitted through the University.

6. Can I include an e-journal article in my coursepack?

UBC's license only covers print-to-print use of material, so you will need to obtain a pay-per-use digital print license from Access Copyright by sending them an email, or contacting the copyright owner directly in order to obtain permission to include the material in your coursepack.

7. Do I need permission to use an e-journal article in class if it is not part of a coursepack?

No. Downloading an article from an online journal for private study or research is considered "fair dealing" under the Copyright Act.

8. What if I am the author of an article I want to include in my coursepack?

If you have signed a contract with a journal's publisher, then the publisher has ownership of copyright, and it must be logged.

9. Can I show a video to my class?

Videos and DVDs borrowed from video stores or public libraries, or purchased from a store, are for home use only. Unless the titles are covered in the Feature Film License, they may not be shown in a classroom. All videos, films and DVDs in the UBC Library and ELN media collections have Public Performance Rights, meaning you may show them in your classroom.

10. What is the Feature Film License?

UBC has a special institutional Feature Film Public Performance License that allows thousands of feature films to be shown at the University for educational purposes without any further payment. The license does not cover the use of documentary programs. Any legal copy of a feature film covered by the License can be shown at UBC, including videos and DVDs from a video store, public library or personal collection. To determine if a feature film is covered by the License, search the online catalogues of the two distributors covered by the License:

- Audio-Cine: **www.acf-film.com**
- Criterion Pictures: **www.criterionpic.com**

Resource 8: Instructional Technology at UBC

A variety of instructional and information technologies are available at UBC that may assist you in your teaching. The most important step in selecting educational technology is clearly defining your instructional goals. It is important to select technology that supports your instructional goals and not the reverse. Selecting technologies then trying to figure out how to use them in your course often leads to poor outcomes.

Campus Wide Login

UBC has a centralized authentication system so that you only need one ID to access multiple systems (Vista, Faculty Service Centre, HR, Finance, Library, and others). You can set-up your own CWL at www.cwl.ubc.ca (you need your employee number to complete the application).

Faculty Service Centre

The Faculty Service Centre (FSC) lets instructors view current class lists, upload marks at semester end and send emails to either individual students or the whole class.

Course Management System (Vista)

UBC has a central web-based course management system. We are currently using Blackboard Vista (formerly WebCT Vista). A course management system allows you to easily post course documents, communicate with your students in a variety of ways, create online quizzes and assignment dropboxes, and incorporate many other online tools in your course. A faculty member can request a Vista course shell and request that students be allowed access to the course shell. The students are allowed access to the course by a Vista administrator establishing a connection to the Student Information System. This ensures that the student list in Vista is always up to date. The process for making Vista service requests varies from Faculty to Faculty. Ask a colleague or your department head about the process in your particular area. The Centre for Teaching, Learning and Technology (CTLT) offers a wide range of Vista training opportunities. To find out more about eLearning and training opportunities visit
www.elearning.ubc.ca and **www.ctlt.ubc.ca**

Classroom Response Systems (iClickers)

Clickers are wireless personal response systems that can be used in a classroom to anonymously and rapidly collect an answer to a question from every student; an answer for which they are individually accountable. This allows rapid reliable feedback to both the instructor and the students, even in large classrooms. Clickers are not a magic bullet – they are not necessarily useful as an end in themselves. They become useful when the instructor has a clear idea as to what they want to achieve with them, and the questions are designed to improve student engagement, student-student interaction (on-topic), and instructor-student interaction. (CWSEI Website)

Blogs and Wiki's

Blogs and Wikis let you and your student easily build and maintain private or community websites. Blogs and wikis have been applied in hundreds of instances for a wide array of teaching and learning applications. Professors use blogs to make big classes feel smaller by sharing resources and news, and allow students a quick means of offering feedback or questions. Course blogs give students a unique, personalized platform for finding their own voice and sharing it. (blogs.ubc.ca website)

Turn-It-In Anti-plagiarism software

TurnItIn is a web site that checks for the originality of material. Students upload the text of their assignment to TurnItIn or can submit assignments via Vista if instructors have added and configured the Turnitin Vista PowerLink. The software scans the assignment and reports on originality (on a scale from 1 to 5). Using a variety of algorithms, the program compares the assignment to material on the web and in its database of student reports. (It will detect copying even if a student replaces up to 50% of the words in a paragraph). Instances of copying are flagged in a report. More extensive reports for assignments with low originality scores can then be studied in more detail, including the sources of any text that is matched in the student's assignment. Faculty members decide, with help from the report, whether this is or is not a case of plagiarism. Privacy and security are high at this password-protected site. UBC has subscribed to Turnitin's service (**http://www.turnitin.com**) since 2001. For more information, see Turnitin at UBC **http://www.vpacademic.ubc.ca/ integrity/turnitin/**

If your Faculty has an Instructional Support Unit, it should be your first stop for finding out more about the technologies available at UBC and how to incorporate them in your teaching.

The Centre for Teaching, Learning and Technology CTLT produces a Faculty directory to campus technology each year. Please contact the Centre for Teaching, Learning and Technology CTLT for your own copy.

A number of other technologies are available to support your teaching at UBC, including anti-plagiarism software, clickers, blogs, wiki's and webcasting. For more information on these and others, visit **www.elearning.ubc.ca**

Resource 9: Classroom Services

Classroom Services oversees scheduling and maintenance for all UBC classrooms. Your classroom for a given course is assigned by Classroom Services. A scheduling secretary in your departmental office works with Classroom Services to schedule all the courses.

You should visit your assigned classroom before the course starts and familiarize yourself with the layout and technology. Most buildings and classrooms have a dedicated classroom technician who can provide orientation, training, and ongoing support. Ensure that you have the Classroom Services trouble desk phone number handy, so you can call them if you are having difficulties in the classroom (the phone number is posted in each classroom).

Most of the larger classrooms have overhead projectors, LCD projectors, a sound system, a DVD player, and sometimes document cameras. The technology is normally controlled by a touchpad system that allows you to:

- Raise/lower projection screens
- Turn LCD projectors on/off
- Adjust sound system controls
- Switch projector inputs – podium PC/laptop/DVD player/document camera

If you have any difficulties you can contact the *AV Help Desk at 822-7956 or av.helpdesk@ubc.ca*

You can find out more about your assigned classroom at **www.students.ubc.ca/facultystaff/buildings.cfm**. *Here you can find a listing of classrooms and the equipment they have available.*

References

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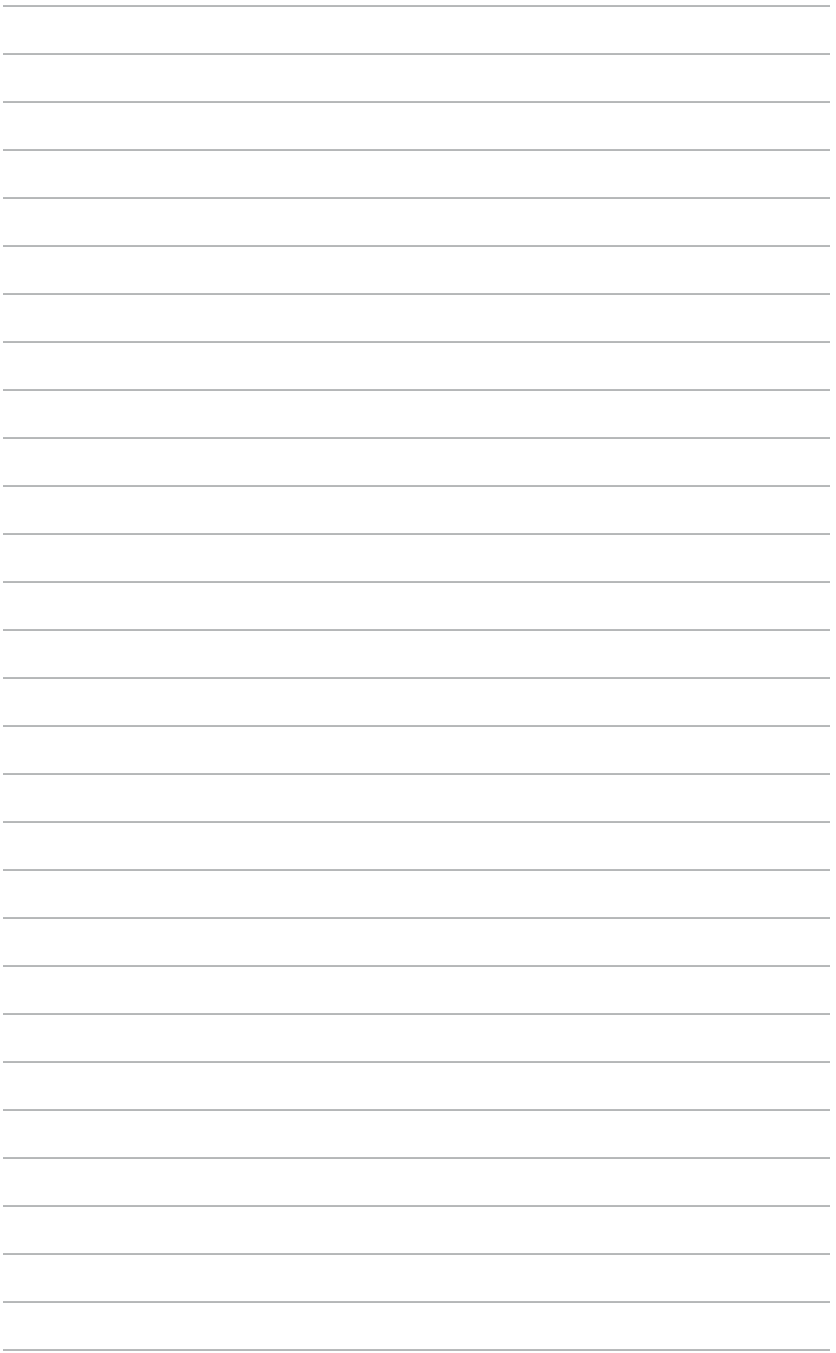Wiggins, Grant and Jay McTighe. *Understanding by Design*. Prentice Hall, 2000.

This book gives you a succinct introduction to teaching and highlights strategies, resources and support services that will help you succeed in your role as an educator at UBC . Tips on how to teach well, support your students and maintain a reasonable work-life balance are discussed. The advice applies to all disciplines and is helpful for both the new and experienced teacher.

Jim Sibley
is the Director of the Centre for Instructional Support in the Faculty of Applied Science at the University of British Columbia, and an international Team-Based Learning consultant. He lives in Vancouver, Canada.

Luisa Canuto
from the Centre for Teaching, Learning and Technology" (formerly TAG)"and a faculty member in the Department of French, Hispanic and Italian Studies at the University of British Columbia.

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