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From the Director

Most colleagues would agree that the assessment of our students' learning is the most challenging aspect of teaching. In this issue of *Focus*, contributing authors explore how the alignment of our learning goals, teaching and learning strategies, and assessment choices helps to resolve assessment tensions and foster student learning.



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Inspiring Minds

Aligning teaching for constructing learning

Dr. John B. Biggs



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Teaching and learning take place in a whole system, which embraces classroom, departmental and institutional levels. A poor system is one in which the components are not integrated, and are not tuned to support high-level learning. In such a system, only the 'academic' students use higher-order learning processes. In a good system, all aspects of teaching and assessment are tuned to support high level learning, so that all students are encouraged to use higher-order learning processes. 'Constructive alignment' (CA) is such a system. It is an approach to curriculum design that optimises the conditions for quality learning.

For an example of a poor system, here is what a psychology undergraduate said about his teaching:

'I hate to say it, but what you have got to do is to have a list of 'facts'; you write down ten

important points and memorize those, then you'll do all right in the test ... If you can give a bit of factual information - so and so did that, and concluded that - for two sides of writing, then you'll get a good mark.' Quoted in Ramsden (1984: 144)

The problem here was not the student. In fact, this student liked writing extended essays, and finally graduated with First Class Honours, but he was contemptuous of these quick and snappy assessments. So in psychology, he made a strategic decision to memorise, knowing that it was enough to get him through, saving his big guns for his major subject. The problem here was the assessment: it was not aligned with the aims of teaching.

So often the rhetoric in courses and programmes is all that it should be, stating for example that students will graduate with a deep

understanding of the discipline and the ability to solve problems creatively. Then they are told about creative problem solving in packed lecture halls and tested with multiple-choice tests. It's all out of kilter, but such a situation is not, I strongly suspect, all that uncommon.

What is constructive alignment?

'Constructive alignment' has two aspects. The 'constructive' aspect refers to the idea that students construct meaning through relevant learning activities. That is, meaning is not something imparted or transmitted from teacher to learner, but is something learners have to create for themselves. Teaching is simply a catalyst for learning:

'If students are to learn desired outcomes in a reasonably effective manner, then the teacher's fundamental task is to get students to engage in learning activities that are likely to result in their achieving those outcomes... It is helpful to remember that what the student does is actually more important in determining what is learned than what the teacher does.' (Shuell, 1986: 429)

The 'alignment' aspect refers to what the teacher does, which is to set up a learning environment that supports the learning activities appropriate to achieving the desired learning outcomes. The key is that the components in the teaching system, especially the teaching methods used and the assessment tasks, are aligned with the learning activities assumed in the intended outcomes. The learner is in a sense 'trapped', and finds it difficult to escape without learning what he or she is intended to learn.

In setting up an aligned system, we specify the desired outcomes of our teaching in terms not only of topic content, but in the level of understanding we want students to achieve. We then set up an environment that maximises the likelihood that students will engage in the activities designed to achieve the intended outcomes. Finally, we choose assessment tasks that will tell us how well individual students have attained these outcomes, in terms of graded levels of acceptability. These levels are the grades we award.

There are thus four major steps:

1. Defining the intended learning outcomes (ILOs);
2. Choosing teaching/learning activities likely to lead to the ILOs;
3. Assessing students' actual learning outcomes to see how well they match what was intended;
4. Arriving at a final grade.

Defining the ILOs

When we teach we should have a clear idea of what we want our students to learn. More specifically, on a topic by topic basis, we should be able to stipulate how well each topic needs to be understood. First, we need to distinguish between declarative knowledge and functioning knowledge.

Declarative knowledge is knowledge that can be 'declared': we tell people about it, orally or in writing. Declarative knowledge is usually second-hand knowledge; it is about what has been discovered. Knowledge of academic disciplines is declarative, and our students need to understand it selectively. Declarative knowledge is, however, only the first part of the story.

We don't acquire knowledge only so that we can tell other people

about it; more specifically, so that our students can tell us - in their own words of course - what we have recently been telling them. Our students need to put that knowledge to work, to make it function. Understanding makes you see the world differently, and behave differently towards that part of the world. We want lawyers to make good legal decisions, doctors to make accurate diagnoses, physicists to think and behave like physicists. After graduation, all our students, whatever their degree programmes, should see a section of their world differently, and to behave differently towards it, expertly and wisely. Thus, simply telling our students about that part of the world, and getting them to read about it, is not likely to achieve our ILOs with the majority of students. Good students will turn declarative into functioning knowledge in time, but most will not if they are not required to.

Accordingly, we have to state our objectives in terms that require students to demonstrate their understanding, not just simply tell us about it in invigilated exams. The first step in designing the curriculum objectives, then, is to make clear what levels of understanding we want from our students in what topics, and what performances of understanding would give us this knowledge.

It is helpful to think in terms of appropriate verbs. Generic high level verbs include: Reflect, hypothesise, solve unseen complex problems, generate new alternatives. Low level verbs include: Describe, identify, memorise, and so on. Each discipline and topic will of

course have its own appropriate verbs that reflect different levels of understanding, the topic content being the objects the verbs take.

Incorporating verbs in our intended learning outcomes gives us markers throughout the system. The same verbs need to be embedded in the teaching/learning activities, and in the assessment tasks. They keep us on track.

Choosing teaching/learning activities (TLAs)

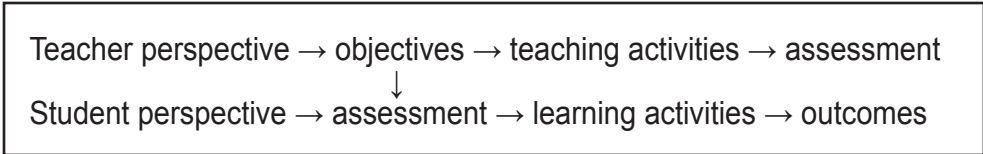
Teaching and learning activities in many courses are restricted to lecture and tutorial: lecture to expound and package, and tutorial to clarify and extend. However, these contexts do not necessarily elicit high level verbs. Students can get away with passive listening and selectively memorising.

There are many other ways of encouraging appropriate learning activities (Chapter 5, Biggs 2003), even in large classes (Chapter 6, op. cit.), while a range of activities can be scheduled outside the classroom, especially but not only using educational technology (Chapter 10, op cit.). In fact, problems of resourcing conventional on-campus teaching, and the changing nature of HE, are coming to be blessings in disguise, forcing learning to take place outside the class, with interactive group work, peer teaching,

independent learning and work-based learning, all of which are a rich source of relevant learning activities.

Assessing students' learning outcomes

Faulty assumptions about and practices of assessment do more damage by misaligning teaching than any other single factor. As Ramsden (1992) puts it, the assessment is the curriculum, as far as the students are concerned. They will learn what they think they will be assessed on, not what is in the curriculum, or even on what has been 'covered' in class. The trick is, then, to make sure the assessment tasks mirror the ILOs.



To the teacher, assessment is at the end of the teaching-learning sequence of events, but to the student it is at the beginning. If the curriculum is reflected in the assessment, as indicated by the downward arrow, the teaching activities of the teacher and the learning activities of the learner are both directed towards the same goal. In preparing for the assessments, students will be learning the curriculum. The cynical game-playing we saw in our psychology undergraduate

above, with his 'two pages of writing', is pre-empted.

Matching individual performances against the criteria is not a matter of counting marks but of making holistic judgments. This is a controversial issue, and is dealt with in more detail in Biggs (2003, Chapters 8 and 9). Just let me say here that the ILOs cannot sensibly be stated in terms of marks obtained. Intended outcomes refer to sought-for qualities of performance, and it is these that need to be stated clearly, so that the students' actual learning outcomes can be judged against those qualities. If this is not done, we are not aligning our objectives and our assessments.

Conclusion

Constructive alignment is more than criterion-reference assessment, which aligns assessment to the objectives. CA includes that, but it differs (a) in talking not so much about the assessment matching the objectives, but of first expressing the objectives in terms of intended learning outcomes (ILOs), which then in effect define the assessment task; and (b) in aligning the teaching methods, with the intended outcomes as well as aligning just the assessment tasks.

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What can we learn from surveys of our students?



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Jane Doe, first-year Dalhousie student, was in Honours classes in high school and graduated with marks in the 90s. She complains to an advisor that she is bored in her first-year classes and wonders if she can take six classes rather than five in the winter term.

John Doe, another first-year Dal student on an entrance scholarship, also took Honours classes in high school. John, however, failed all of his classes in his first year and was dismissed. John found the workload far more challenging than he was used to in high school and did not access any support services.

These two profiles, obviously with changed names, are of real Dal students. They give a human face to the story told by two statistical surveys to which Dal subscribes. The **Canadian University Survey Consortium (CUSC)**, gives a profile of entering students compared to our peer group of Canadian universities. The 2007 CUSC survey tells us that last year's entering student body was higher-achieving in high school, more strongly motivated by Dal's academic reputation, and comparatively higher in financial need than our comparator group. The CUSC survey also measures student satisfaction with their experience. Dal's first-year students affirm overwhelmingly (84%) that Dal has exceeded or met their expectations.

Satisfaction surveys do not, however, tell the whole picture.

The **National Survey of Student Engagement (NSSE)**, pronounced "Nessie" was designed by George Kuh of Indiana University, Bloomington. NSSE measures what students actually do at university rather than asking them to rate their experience. (<http://www.nsse.iub.edu/index.cfm>)

NSSE includes five key benchmarks, each one measured by a series of detailed questions about what students did during the previous year:

- Level of academic challenge
- Active and collaborative learning
- Student-faculty interaction
- Enriching educational experiences
- Supportive campus environment

The underlying assumption, that increased student engagement leads to increased student success, derives from educational theory and research by such scholars as Astin (1991), Chickering and Gamson (1987), Kuh (1991, 2001, 2003, 2005), Pascarella and Terenzini (1991), and Tinto (1993).

2006 NSSE results for Dalhousie students

In February 2006, Dalhousie used NSSE to survey first-year and fourth-year students. (See the Dalhousie results at (<http://institutionalanalysis.dal.ca/nsse/index.html>.)

In the case of fourth-year students, NSSE results show that while Dal is more or less on a par with or ranking higher than our Canadian counterparts, we lag behind our American peer institutions on all benchmarks except for Level of Academic Challenge.

The results for first-year students are intriguing. We recall from the CUSC survey that entering Dal students were somewhat higher-achieving and more motivated by the academic reputation than were students entering other institutions in the Canadian G13 group of universities to which Dalhousie belongs. NSSE results tell us that they experienced a somewhat higher level of active and collaborative learning and of

2006 NSSE results for first-year students

<u>Benchmarks</u>	<u>Dal</u>	<u>G13*</u>	<u>USA Peers</u>	<u>NSSE Overall</u>
Level of academic challenge	48.8	50.6	51.4	51.5
Active and collaborative learning	35.1	33.2	39.2	40.2
Student-faculty interaction	23.4	20.5	30.5	30.3
Enriching educational experience	23.3	25.0	28.8	26.3
Supportive campus environment	50.9	54.0	56.4	58.3

* The G13 group of universities includes: University of Alberta, University of British Columbia, University of Calgary, Dalhousie University, Université Laval, McGill University, McMaster University, Université de Montréal, University of Ottawa, Queen's University, University of Toronto, University of Waterloo, and University of Western Ontario.

student-faculty interaction than their Canadian peers. However, they were less challenged academically during their first year, had less in the way of enriching educational experiences, and found the campus environment significantly less supportive. As our two student profiles showed, some high-achieving first-year students found first-year classes to be insufficiently demanding. Conversely, other students found their first-year classes highly challenging and these students did not avail themselves of the academic support services that are available.

Implications for practice

Faculty have a key role to play in improving the student experience and in enhancing student engagement. Some of the strategies used by Dalhousie colleagues include:

1. Help students understand the levels of critical thinking required in assignments and exams and build increasing expectations of your students from first to fourth year.
2. Explain to students what it means to compare and contrast, analyze, evaluate, etc. and provide examples, particularly in first-year and second-year classes. This helps students learn not only our academic expectations, but also our language.
3. Offer brief tips about how to study or approach an assignment.
4. Establish study groups within your class, to facilitate connections between students.
5. Have students get off to a strong start by giving a quiz or a short assignment in the first week of term, returning it quickly with

feedback. (Our residence system managers tell us that an assignment in the very first class is one of the best ways to turn students' attention from orientation week celebrations to serious academic study. This helps promote good study habits early and reduces the formation of social habits that inhibit academic success.)

6. In first-year classes, ensure that there is a significant academic challenge. At the same time, ensure that supports are available to those students who will need them. How?
 - Encourage (or even require) students to visit you during office hours.

Dalhousie University's Early Alert is an online system that provides instructors with an easy to use system for referring students in academic difficulty. (<http://earlyalert.dal.ca>)

- Contact students who are under-performing and work with them to develop a plan that will get them back on track. This could include referring them to a number of support services on campus, depending on the challenges the student is facing (consult the Faculty and TA Referral Guide, available from Student Services). Use the online Early Alert system (<http://earlyalert.dal.ca>).
- Make arrangements for a Studying for Success (study skills) coach to work with your students in small groups

or individually. Coaches are not tutors, but can help students learn how to learn effectively – how to approach an assignment, how to study effectively. When you embed this support in your class, you are communicating to students both the importance of the work and the value of the coaches.

- Encourage your students to visit the Writing Centre in person or on the website (<http://writingcentre.dal.ca/>) for help in researching and writing papers.
- Introduce students to the services provided by Dalhousie Libraries, including consultations with the reference librarians.

8. Encourage your students to get involved in campus activities. Refer students to the webpage <http://campusconnections.dal.ca>, where they can find links to student societies and other groups of various kinds.

9. Consider asking colleagues to make presentations about their research that are geared to first-year students; while there is a plethora of seminars and lectures for honours and graduate students, what opportunities of this kind do we offer first- and second-year students?

These measures, though small, can make a big difference in enhancing student engagement, especially when reinforced by a number of teachers across a student's program. In the coming months, each Faculty will be invited to explore further how they can best respond to the NSSE results.

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From Mine Field to Mind Field: Making our assessments matter



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While driving to work one morning, I was full of “great thoughts” on how to write this article—what to emphasize, how to make it flow. Of course, as I navigated through traffic I was in no position to put pen to paper in order to capture these great ideas so that when I did start to write, I could recall few of the details of my “great thoughts.” What I did clearly remember was the feeling of excitement as things made sense in my brain. As I struggled to recapture that “Ah Hah!” moment when everything was crystal clear, it dawned on me that this experience was likely not all that unfamiliar to some of our students as they work through their various assignments and exams.

All too often the feeling of satisfaction (even joy) in learning is snatched away as we (and our students) are required to complete a task (write an

article, a quiz, or an exam) either prematurely (before the learning has “solidified”) or in a manner that doesn’t allow us to demonstrate the depth of that learning. Is it any wonder then, that assessment is routinely fraught with anxiety, both for the students and ourselves. What might alleviate the anxiety, free the learning for the students, and ensure our assessment is aligned or congruent with our learning objectives and our teaching strategies?

As I struggled with this question a number of years ago, I decided to try a flexible grading scheme, also sometimes referred to as contract grading. In essence, a student may select, from within a range of marks, how he or she would like these distributed. A simple example might look something like this:

(see Table 1)

Students select their preference at the beginning of term, and have the option once later in the term to change their option, after a number of components are completed. This option to change the distribution of marks gives students the opportunity to alleviate the impact of poor grades while gaining a better understanding of themselves as learners and receiving some feedback on their strengths and weaknesses.

I learned a number of things when I first introduced this approach. The idea that students could select how they would like to be graded, albeit within a restricted range of values, was a great challenge for them. What was particularly surprising to me was how many struggled with the

Table 1	Range	Student A	Student B
Assignments	20-30	30	20
Project	0-20	20	0
Quizzes	20-30	20	30
Exam	20-40	20	40
Professionalism / engagement / participation	5-10	10	10

idea that they had to choose their own best option; many wanted me to pick the best possible for them. This was perturbing, as it suggested to me that many students were so used to having things done **to** them, that when given the opportunity and responsibility to be co-authors of their own destiny, they were paralyzed.

The second time I did this, I gave a wider range of values, recognizing that both the maximum and minimum values for assessed work had to reflect both the learning objectives and the teaching strategies for the particular course. For example, if I deemed it particularly important that students do an independent or group “research” project, then I needed to require that they allot some of their overall grade to this aspect (not the case in the above marking scheme).

On the purely practical side, I also learned a couple of things. I quickly found that I needed to

add a “default” grading scheme, as there was always at least one student for whom I would not have a grading scheme in the end, especially in larger classes. I now clearly indicate that default scheme as the criteria I will use if I do not get a signed sheet of their selected marking scheme, or if their total does not add to 100% (and this does happen on occasion). Some colleagues have questioned the increased time it must take to compile data, but I have not found this onerous. I have wondered if there is a potential psychological study of the fact that students tend to select multiples of 10 in their final grading schemes! As well, there tend to be two clusters of students: those who maximize their on-going work, and those who maximize their exam and quiz marks. The end result is that there typically are few variations on the allotted grades, and using Excel© makes this task very manageable, even with large classes.

I took a hiatus from using flexible grades last year, but returned to their use this term because I see that helping students learn how to take responsibility for their learning is a critical component of what we aim for in higher education. With increased ownership of their evaluation, the level of engagement and commitment of students has the potential to be increased, as they work to achieve the goal they have helped create for themselves. Mezeske (2007) concludes that variable grading does indeed increase student engagement, and offers, as an alternate to the model above, a whole series of activities with points allotted to each, from which the student selects their options for grading. Whichever variant we may choose when giving students a range of grading options, the outcome is similar: students take greater ownership of their learning and the reduced level of anxiety over grades frees them to engage in the learning process more completely.

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Assessing the Masses: Notes from the frontlines of first year biology



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How does one assess 800 students and provide frequent and useful feedback over the course of a semester without spending all your time or resources grading exams? In Biology 1010 and 1011,

we do it using a combination of multiple choice exams, face-to-face interactions, and written lab reports.

I know; everyone hates multiple choice exams. Students hate them because they are convinced they can't do well in them. Faculty often think they can only be used to test trivial knowledge. However, well-written multiple choice questions can test far more than the recall of facts; a well crafted exam can provide the means for students to demonstrate higher-order thinking skills and can usually expose student weaknesses in

understanding.

By its very nature, first year biology is content laden. Like a language course, it is full of vocabulary whose definitions must be learned, and the vocabulary must be used in the correct context. Such material is readily tested using multiple choice exams, but the faculty teaching Biology 1010 and 1011 also want their students to be able to apply information and understand the conceptual framework and theory in which the vocabulary is embedded.

Biology is full of wild and fascinating narratives about the workings of nature which are, in essence, the concepts of the science. To gain a successful understanding of biology, students must understand and be able to explain these concepts. Many of the fundamental concepts of biology involve processes such as that whereby DNA is first replicated, then transcribed into RNA, and then translated into protein. Or the impact that population increase or decrease may have on the birth rate of that population. Students' understanding of these processes is readily assessed through multiple choice questions. For example, most students understand that plants both consume carbon dioxide and release oxygen through photosynthesis; however, fewer students understand that plants also produce carbon dioxide and consume oxygen through cellular respiration. A simple multiple choice question where the choices involved list whether carbon dioxide and oxygen are consumed or produced often uncovers students' failure to associate the cellular respiration process with plants.

In addition, it is possible to test students' ability to apply concepts through multiple choice questions in which students must perform calculations and select the correct answer. A benefit of testing calculation through multiple choice is that students are usually able to identify simple errors in calculation since their incorrect answer won't be in the list of possible choices—giving them a chance to redo the

calculations and demonstrate their skill at application. Other higher order cognitive skills can also be assessed through multiple choice exams. Interpretive or analytical skills can be assessed by asking students to select from a series of different interpretations of data (graphs, tables, pictures, scenarios).

Further feedback and assessment occurs in the laboratory, where we are able to meet with all 800 students for 2 hours once a week. To accomplish this, we run 36 two-hour lab sessions throughout the week. Each lab holds 24 students, who are taught by a Teaching Assistant and supervised by a Lab

“Biology is full of wild and fascinating narratives about the workings of nature which are, in essence, the concepts of the science.”

Instructor, resulting in a 12:1 student to teacher ratio. This ratio provides the opportunity for face-to-face interaction between the teacher and individual students, thus providing one of the best ways to really assess what

a student has learned. Such close interpersonal interaction makes it clearly obvious who understands and who doesn't. Students have access to individualized support in a small group setting and teachers get to know their students and can better identify and help those who may be struggling.

Students' lab reports are a great window into the world of student knowledge. These reports consist of a series of questions pertaining to the material being examined in lab. The questions focus the student on the material we want them to understand, its application, and how it relates to biological concepts. Often, students

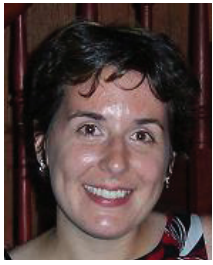
are required to write hypotheses and predictions as part of their lab reports, providing another way to assess more than simple recall and observation.

We abandoned the standard written lab report a few years ago because student work tended to be unfocused and because of the variation in grading among the over twenty TA markers. By limiting the reports to a certain number of questions and space for responses, students have to focus their answers, making it easier to provide them with feedback. Variation among graders is reduced by asking a limited number of set questions to which a range of points can be assigned based on completeness and correctness.

It is, indeed, challenging to provide meaningful, timely, and accurate assessment of over 800 students in first year biology. By using a combination of methods, we firmly believe we are providing the students with the necessary background that they require for their programs and with a valuable picture of how much they are truly learning as they complete the course.



Designing an Assessment Rubric with Students



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Introduction

I will always consider my Information Behaviour class (INFO 6682) a grand experiment. Although I had gained teaching experience as a teaching assistant and an academic librarian, this was my first opportunity to instruct an entire course. The course began as a hypothetical project for CNLT 5000, Teaching and Learning in Higher Education, the theory component of the Certificate in University Teaching and Learning (CUTL) program offered by Dalhousie's Centre for Learning and Teaching. However, the Director of the School of Information Management (SIM) liked the premise of the course and I was asked to instruct it during the winter term of 2007. And thus began my exploration into learning and teaching.

While I was confident in the content, I knew from the CUTL program that knowing what to teach is only half the battle. The bigger challenges are delivering that content in an engaging way and in assessing students' learning. As my students assembled for our first evening class, little did they know that they were participants in a teaching experiment that would involve me putting to the test some of the theories I had learned in CNLT 5000; I would be seeing what active learning and assessment looked like in practice.

The Course

The course focused on information behaviour, a topic pertaining to how people articulate their information needs and how they locate, evaluate, organize, and use information in their daily lives. Graduates of the SIM work in diverse settings, including academic, public, and special libraries. In these capacities they will require an awareness of the information-seeking behaviours of a range of people: children, seniors, scholars, health consumers and practitioners, and professionals such as lawyers, architects, journalists, etc. Each week in the course we focused on a particular group of information seekers or on a facet of information behaviour, such as evaluating information or making decisions about what is 'sufficient' or 'good' information.

The Learners

My students were budding information professionals enrolled in the two-year Master of Library and Information Science program; one student was from the Master of Health Informatics program. The small number of students (14), and the fact that they were graduate students, made it feel more like a seminar course.

My goal was that they would make connections between the worlds of scholars and practitioners, and between theory and practice. For students, the research done by others can seem far removed from "real-world" applications. In their undergraduate years, these students may have had few opportunities to apply their knowledge and understanding in real world settings. My students

wanted tangible, experiential learning. I wanted to make them critical thinkers: to learn how to analyse, evaluate, and apply theory in information management practice. In particular, I wanted them to have the opportunity to play the roles of both purveyors and recipients of information in a classroom setting and to have them reflect upon these experiences within the framework of the theories we were studying.

Seminar Assignment

To achieve these goals the students were asked to select two to three pertinent research articles on a subject of interest to them, integrate the ideas from these papers with their own views, share this with the class, and produce a handout summarizing the references and "take home message" of the seminar. The intent was for students to demonstrate the ability to select and critique pertinent research, identify the most salient aspects of the papers, and gain experience presenting to their peers.

I made peer evaluation a component of this assignment with half of each student's mark derived from the average of the grades assigned by their peers. Part of my rationale was to encourage students to pay attention: having to assess the presenter would keep students actively listening. Students earned a small portion of the grade for class participation from their work as peer evaluators. This both encouraged students to take the assignment seriously and gave those students not comfortable speaking in class an alternative way to earn participation marks.

In addition, since SIM emphasizes professional application, by assessing each other, students had the opportunity to practice giving and receiving feedback. This gave everyone a chance to be in the shoes of the presenter and the evaluator, and (I hoped) to develop compassion for the challenges associated with both of these roles.

The Rubric

In order to incorporate peer evaluation into the seminar assignment, students needed guidance about how to apply assessment criteria for fairness and consistency. I decided that creating a rubric would assist us in this. Grading rubrics define the criteria by which learners will be assessed on a specific task.

There is a plethora of rubrics for assessing presentations. However, I wanted the rubric to be meaningful to my students and felt that, if they had a hand in its creation, the assessment would better reflect their ideas about what made for an effective seminar presentation. Working together in class, we considered the question, “What makes a good or a poor presentation?” and identified the qualities of an effective presenter and presentation. From their suggestions I created the criteria for the assessment rubric.

Responses to the Rubric

Some students were not comfortable with the peer evaluation component or the notion of rubrics. I must admit I did not expect these reservations, but I took the opportunity to discuss these

issues with the group. For some, the idea of judging one’s peers was upsetting. Given the close-knit nature of SIM, classmates are also friends. What if I give my honest opinion and someone feels hurt? What if that someone is me? In addition, some students who had rubrics applied in other levels of their education felt they were too rigid. As a result of these concerns, I ensured that the feedback was anonymous. I compiled the peer evaluations for each speaker and typed up the comments, handing them over to the presenter with my own. This enabled me to “filter” any critique that was not framed in a constructive manner. The rubric (see p.11) used a simple three-point scale to rate whether the presenter/presentation met the criteria “completely,” “partially,” or “not at all.” Space was provided for the evaluator to comment on

the “highlight” of the presentation and to assign a mark out of 10.

My own reflections

Incorporating peer review was aimed in part at encouraging attendance and attention, but more importantly at developing empathy for being a presenter and an

audience member. Speakers also benefited from viewing multiple perspectives on their work because it gave them a better understanding of how others take in and process information—a key idea of the course content. Through the peer evaluation and the seminar itself, I was able to incorporate elements of active learning. Succinctly defined, active learning is “anything that involves students in doing things and thinking about the things they

are doing” (Bonwell & Eison, 1991, p. 2). Active learning has three components: information and ideas; experiences; and reflection (Fink, 2003). Through the seminars, students shared information and ideas with others and gained experience in the roles of speaking and critiquing. In addition, evaluating others and viewing feedback from the instructor and classmates, students had an opportunity to reflect on what makes an effective presentation, and thus to better understand how to apply this learning to their own practice as information management specialists. According to Fink, incorporating the three elements of active learning into this assignment provided a foundation for holistic learning that contributed to the growth of learners.

Conclusion

In summary, despite students’ initial concerns over peer evaluation and rubrics, the seminar assignments were successful—both for the students and for me, their teacher. Students demonstrated that they could give praise and focus on the positive elements of classmates’ seminars, but could also suggest improvements and alternative ways of approaching the presentation or topic. I think that giving students a say in how they were evaluated goes a long way towards empowering them. It gives the learners some control over the assessment process by enabling them to communicate what they believe are valuable and appropriate evaluation criteria. But it also enhances students’ understanding of why they have been given a particular assignment

“I think that giving students a say in how they were evaluated goes a long way towards empowering them.”

and of the intended learning outcomes and the expectations of their teacher and classmates. The success of this experiment is due in large part to the maturity and open-mindedness of the participants; it may prove more difficult to

implement with larger classes or with less experienced students.

This experience also helped me to grow as a teacher. I gained more insight into students' feelings around assessment and the assignments we give them. I

also gained more confidence in my role as an experimenter. Not everything went as planned, but I accomplished what I set out to and learned more in the unexpected. Isn't that what teaching is about?

References

Bonwell, C.C., & Eison, J.A. (1991). *Active learning: Creating excitement in the classroom*. ASHE-ERIC Higher Education Report No. 1. Washington, DC: The George Washington University, School of Education and Human Development.

Fink, L.D. (2003). *Creating significant learning experiences: An integrated approach to designing college courses*. San Francisco: Jossey Bass.

INFO 6682 Information Behaviour
Evaluation Criteria for Seminar Presentations

Title of presentation: _____

Name of presenter(s): _____

Date: _____

The Presentation:

- was organized logically	Yes	Partially	No	Comments:
- engaged my interest	Yes	Partially	No	Comments:
- contained substantial content	Yes	Partially	No	Comments:
- included questions to stimulate class discussion	Yes	Partially	No	Comments:
- included a handout with the presenter(s)' references and "take home message"	Yes	Partially	No	Comments:

The Presenter(s):

- facilitated class discussion effectively	Yes	Partially	No	Comments:
- demonstrated enthusiasm and knowledge of the topic	Yes	Partially	No	Comments:
- interacted with the audience through body language, humour, or other learning activities	Yes	Partially	No	Comments:
- brought their own perspective, ideas, and opinions to the topic	Yes	Partially	No	Comments:
- expressed their ideas clearly	Yes	Partially	No	Comments:

The highlights of this seminar for me were: _____

My assessment of this presentation is: _____ /10



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