I  Good Practice Encourages Student-Faculty Contact

A  Frequent student-faculty contact in and out of class is a most important factor in student motivation and involvement. Faculty concern helps students get through rough times and keep on working. Knowing a few faculty members well enhances students’ intellectual commitment and encourages them to think about their own values and plans.

B  Examples/Recommendations:
  1. Make effective use of e-mail
     a. E-mail can be used to send and receive messages regarding the class. These messages may be about the class or about the course content, for example, instructions about or help on a specific assignment.
     b. E-mail can also be used for file sharing or as a way for students to hand in assignments.
  2. Use Blackboard’s Announcements feature (among others) to keep students informed
     a. Use Bb’s announcement feature to keep the class informed. Announcements can inform students of changes in course logistics, for example, if class is canceled because the instructor has fallen ill.
     b. Announcements should not be used to make assignments. For example, if a faculty member gets into the habit of posting assignments in the announcements area, but fails to do so once, students will not complete the assignment—even if the assignment is posted in the course syllabus.
  3. Post details about how and when you can be reached and when you will communicate with students
     a. In Bb, faculty members can post his or her office hours and contact information.
     b. Another idea is to use Bb’s built-in Virtual Classroom for virtual office hours. The faculty member can schedule a time when s/he will be online for one-on-one or group consultation.
  4. Make the most of in-class time and, consequently, personal communications by moving the mechanics of course management outside of class, e.g., onto the Web/Blackboard
     a. Most courses have some number of handouts (e.g., syllabi) that need to be dispersed among the students enrolled in the course. Faculty members may distribute such documents via Bb by uploading them to the server so students may download them.
     b. Other items (e.g., software, assignments, lecture notes, PowerPoint presentations, etc.) also need to be distributed from time to time. Faculty may also upload these items to Bb in order that students enrolled in the course may download them at any time.

C  Additional information and resources:
  1. David Brown, ed. Teaching With Technology
  2. Interactive Learning
  4. Blackboard Instructor’s Manual

II  Good Practice Encourages Cooperation Among Students

A  Most of what happens in “the real world” of work requires close cooperation with others. It’s almost always about teamwork. That’s because of the synergistic affect of people working together—the whole is greater than the sum of its parts—and the fact that
many projects are simply too large to be completed by an individual worker. So, how do we demonstrate this synergistic affect to students and foster an understanding of working in team environments so as to best prepare students their future roles in business, industry, education, etc.?

B Examples/Recommendations:

1 A great place to start is by facilitating discussion; and not just superficial discussions but detailed discussions. Have each student read a different article about the day’s topic. This way, each student is coming at the discussion with a slightly different perspective. Consequently, they are compelled to reflect on their own understandings as well as those of others as the group works together to understand the issues. You’ll find a wide variety of support materials on the Internet and through the Oklahoma Christian Library electronic resources.
   a Search for scholarly articles on the day’s topic through the Oklahoma Christian Library’s Electronic Resources. Resources are listed by topic and by discipline/academic major.
   b Use a search engine like Hotbot to constrain searches to educational (.edu) institutions.
   c Create your own pathfinder or database of sites with diverse perspectives.

2 Cooperation can often be enhanced and extended when all voices are heard. Try using a discussion board or virtual classroom on occasion in order to encourage the quieter students in your class to make their thoughts known. Students who have problems organizing their thoughts on the fly or who are too shy to speak up in class may find it easier to communicate at the keyboard. Encourage a student who is too shy to lead a discussion in class to lead an on-line discussion. Keep groups small to ensure that everyone has a chance to participate and to facilitate cooperation. Blackboard and similar technologies help you divide a large class into smaller groups for this type of activity.
   a Helpful information on this topic can be found in the Bb Instructors’ Manual, available on-line as a pdf document, or you can contact the North Institute staff who will happily help you get a discussion board up and running.

3 Encourage students to participate by grading their involvement in class-work. Again, discussion boards and virtual classrooms are a great way to do this because you can “log” everyone’s participation and review their contributions to the discussion.
   a Blackboard also provides a variety of tools that can help you track student access to Bb pages.
   b Discussion boards require very little effort on your part. Read the Bb Instructors’ Manual or contact the North Institute staff to get one going.

4 Software like PowerPoint is fine for organizing and presenting your class lectures, but this type of tool becomes especially beneficial when used by students to organize their thoughts, findings, discussion points, etc. and present them to other class members. To the maximum extent possible, every course task ought to result in a product of some sort. If you break your class down into smaller groups for focused discussions, have each group summarize their findings as a PowerPoint presentation, Word document, Web page, etc. for sharing with other class members/groups.
   a OC students learn to use PowerPoint in COMM III, they are introduced to Word in COMM I, and many come to OC knowing how to build basic Web pages. Students can also learn to use these packages through NETg, OC’s software
training application. When used with the smart classroom technologies found in every college on campus, the applications make it easy for students to work collaboratively and share ideas with others.

5 Organize “study groups” to facilitate cooperation and deeper learning. With information so readily available via the Web and electronic resources through OC’s Library, you’ll often find that your job as an instructor has less to do with information delivery and more to do with facilitating the learning process through management of study groups, creation of collaborative learning experiences, development of case studies, organization of discussions, clarification of concepts, and on-going communications.
   a Study groups can take place in real or “virtual” space.
   b Groups can be structured by the instructor or simply encouraged to form ad hoc.
   c Groups can be moderated by an instructor or class member, or they can exist without much supervision at all.

6 How often do workers turn in a completed assignment to a supervisor without an opportunity to discuss it with others (to include their supervisor)? “One worker-one shot” scenarios are not especially common in business and industry. So, replicate common business practices by having students review one-another’s work. After you’ve graded an assignment, give it back to students to improve upon, and re-grade their subsequent work, too. Break assignments down into phases and have students prepare for each phase as a group (set parameters, establish essential elements, etc.) but then turn in work at the end of each phase for individual grades.
   a Tools like Outlook’s Public Folders and Word’s collaborative/review tools make it easier to have students support one another. They make it easier for students to revise their work and for your to review and comment on each revision.

7 Other suggestions:
   a Use discussion boards and virtual classrooms to log participation.
   b Keep discussion groups small.
   c Discussions should be focused on a task.
   d Tasks should always result in a product.
   e Tasks should engage learners in the content.
   f Make diversity and critical analysis cornerstones of course experiences.
   g Compel students to compare and contrast.
   h Learners should receive feedback on their discussions.
   i Evaluation should be based on the quality of postings (and not the length or number).
   j Instructors should post expectations for discussions.
   k Make aggressive use of e-mail, discussion boards, FAQ lists, etc. to encourage cooperation and communication.

8 Additional information and resources:
   a Blackboard Instructor’s Manual
   b Teaching With Technology, David Brown (Ed.)

III Good Practice Uses Active Learning Techniques

A Learning is not a spectator sport. Students do not learn much just sitting in classes listening to teachers, memorizing prepackaged assignments, and spitting out answers. They must talk about what they are learning, write reflectively about it, relate it to past experiences, and apply it to their daily lives. They must make what they learn part of themselves. In the traditional approach to college teaching, most class time is spent
with the professor lecturing and the students watching and listening. The students work individually on assignments, and cooperation is discouraged. Such teacher-centered instructional methods have repeatedly been found inferior to instruction that involves active learning, in which students solve problems, answer questions, formulate questions of their own, discuss, explain, debate, or brainstorm during class, and cooperative learning, in which students work in teams on problems and projects under conditions that assure both positive interdependence and individual accountability. This conclusion applies whether the assessment measure is short-term mastery, long-term retention, or depth of understanding of course material, acquisition of critical thinking or creative problem-solving skills, formation of positive attitudes toward the subject being taught, or level of confidence in knowledge or skills.

B Examples/Recommendations:

1 First, move the students' first exposure of material outside the classroom to the student alone time. Make assignments that allow your students to search and discover on their own. Not only will this foster active learning, it will allow for discussion and processing--actual learning--to take place in the classroom. Moreover, this adjustment can limit the amount of response time required by the teacher and thereby will increase time for reflection and self-assessment. See Figure 1.

![Figure 1: Moving First Exposure Outside the Classroom](http://www.merlot.org)

2 Use interactive technologies to get your students involved in the class.
   a Create Discussion Forums in Blackboard where students come to ask and answer questions.
   b If you need to lecture in class, allow the students to use the Virtual Classroom to chat with each other about your lecture. Then show the transcripts of the chat session on the projector and answer any questions that may have been asked in the chat or comment on any of the student comments as necessary.
   c Find (or have the North Institute for Educational Technology create them for you) web-based or video simulations to show in class. Also, post them to Blackboard for continued use by your students. A good repository exists online at [http://www.merlot.org](http://www.merlot.org).

3 Get your students involved in teaching the class or giving class presentations.
   a Have your students prepare presentations on an assigned topic or concept. Have them create a PowerPoint presentation to deliver in class to the other students.
   b Have your students create interactive web sites (using Microsoft FrontPage if
necessary) that explain in detail a topic or concept.

4 Use any of the following techniques for engaging the student in active learning. When possible, use Blackboard or some other technology to accomplish the task; suggestions have been made after each possibility.

a “1-minute paper” (use Blackboard’s assessment tools)
b Role playing (share the scripts for all students via Blackboard)
c Formal debates (share transcripts or audio recordings of the debates via Blackboard)
d Writing groups (capture or share the writings with students via Blackboard for peer review)
e Case studies—be sure to use real-life cases (post the case studies online in Blackboard and have the students do research at Oklahoma Christian’s Online Library Databases and on the Internet [http://www.ilor.com is a great search engine] solve the case studies)
f Have students work with a local business or institution to help solve some problem or complete some research (use the Internet, Blackboard, PowerPoint, web pages, e-mail, Instant Messenger)
g Group projects (use Blackboard’s built-in groups feature)

5 Have in-class brainstorming sessions related to the topic or concept under discussion.

a Use Microsoft Word to capture and sort all ideas. Post this document to Blackboard for continued use by the students.
b Use the discussion board feature in Blackboard to discuss and ultimately decide which ideas should or should not be kept.

6 Use "Virtual Experiments" or hold "Virtual Labs" if they apply to your course.

a Statistics Lab: http://www.ruf.rice.edu/~lane/rvls.html
b Virtual Immunology Lab: http://www.hhmi.org/grants/lectures/1996/vlab/

C Additional information and resources:
1 David Brown, ed. Teaching With Technology
2 ________. Interactive Learning
5 The TLT Group (http://www.tltgroup.org)
6 The Kaneb Center for Teaching and Learning at Notre Dame University (http://www.nd.edu/~kaneb)
7 Drake University (http://www.educ.drake.edu/romig/activelng.html)
8 State University at Buffalo (http://ublib.buffalo.edu/libraries/projects/tlr/active.html)
9 Blackboard Instructor’s Manual

IV Good Practice Gives Prompt Feedback

A Most teachers understand the value of frequently measuring student learning and providing each student with prompt feedback and direction. Unfortunately, time and other resource limitations often restrict the teacher’s ability to detect problems and provide effective correction when it is needed. While technology may not give the teacher more time, it does provide means to address some of the logistical problems that hinder the ability to give timely feedback.

B Examples/Recommendations:
1 Use Blackboard’s on-line quizzes for more opportunities to evaluate the student’s progress without requiring additional grading time.
   a On-line quizzes require an initial investment of instructor time to set up the quizzes. However, once the quizzes are created, the computer will automatically grade objective questions and store the result in Blackboard’s gradebook without requiring instructor intervention. Students immediately see their score on the quiz.
   b Instructors can control the time period during which quizzes are visible to students, create pools of questions to automatically generate unique quizzes for every student, and control how much information students see following a quiz (e.g., whether incorrect questions are identified, whether correct answers are shown, etc.).
   c Quizzes can be used in or out of class, although grading policies must be considered when quizzesing students outside of a controlled environment. Also, care must be taken not overwhelm the student or unreasonably increase student workload.

2 Where possible, make use of simulation software so that students can “test” their own answers rather than waiting on your analysis of their work. Use of such software is common, for example, in engineering disciplines where students may test operation of a simulated circuit they have designed. Other examples include business simulation software and software that provides for virtual laboratory experiments in the natural sciences.

3 In some cases, allowing students to submit their work on-line and get instructor comments/grades on-line may reduce turn around time. E-mail or Blackboard’s digital drop box are common tools for sending assignments between students and instructors. However, electronic submittal is a double-edged sword.
   a Some of the advantages of allowing students to submit their work electronically include:
      (1) the assignment is time stamped
      (2) it reduces the broken-printer-the-doors-were-locked-my-roommate-ate-it sort of excuses. It also reduces lost assignments (by the student and the teacher)
      (3) Having an electronic copy of a group’s assignment makes it easier for the instructor to distribute on-line comments to all members of a group simultaneously
      (4) Assignments can be returned outside of class so that students have a chance to digest instructor feedback prior to the class in which the assignment is discussed
      (5) Most students enjoy the convenience of submitting assignments electronically
   b There are disadvantages to on-line grading:
      (1) Large numbers of assignments will easily overwhelm your ability to read your normal e-mail unless you set up rules in Microsoft Outlook to automatically distribute assignments to personal folders. This is not difficult to configure, but some students will have trouble conforming to the naming conventions that these rules require. Blackboard’s digital drop box is cumbersome; you have to individually download each file, then individually upload the graded version or e-mail it to the student. Also, students are easily confused by the SEND versus ADD button when putting things in Blackboard’s drop box.
(2) While Microsoft Word Comment capabilities make it easy to add comments to Word-based assignments, files in other formats (e.g., Web page, database file, etc.) are not as easily annotated on-line.

(3) For the same reasons that reading large amounts of text on-line is uncomfortable, on-line grading of many documents can be difficult.

c The bottom line: On-line grading can work well for small classes or group assignments in Word-compatible formats, but care must be taken to ensure that the costs of on-line grading do not outweigh the benefits for a given situation.

4 Use Blackboard features to get feedback from your students prior to the formal course evaluation:
   a You can include free-form comment boxes in on-line quizzes to allow for student comments about question wording, etc. Such comments may be useful for understanding why a large group of students performed poorly on certain quiz questions.
   b Blackboard allows the instructor to create "surveys" for anonymous feedback. A survey is similar to a quiz, except the results are not recorded in each student’s gradebook.

C Additional information and resources:
   a Blackboard Instructors’ Manual
   b Teaching With Technology; David Brown (Ed.)

V Good Practice Emphasizes Time on Task

A Learning is difficult. There is no substitute for the hard work, concentration, and amount of time required in the process of learning. The axiom "time plus energy equals learning" is not only timeless, it is true (Chickering and Ehrmann, 1996). Thus, it is imperative for faculty members to entice their students to the challenge of spending adequate time on task.

B Examples/Recommendations:
   1 Emphasize time on task by providing more action in the classroom.
      a Take advantage of each student having a laptop computer by requiring their use for in-class research.
      b Use Blackboard's online assessment features for in-class practice quizzes and/or surveys on the subject at hand, in order to gauge whether or not students are understanding the concept or topic. A good idea here is to get the students to write a "1-minute paper" about their understanding of the topic or concept.
      c Allow students to use Blackboard's chat feature to chat with each other during lectures or discussions, so they can ask questions or make comments regarding the topic at hand. Then, perhaps, show the chat session transcripts on a projector in order to prompt or facilitate in-class discussion.

   2 Provide more interactivity in the course.
      a Make assignments requiring students to interact with each other or, perhaps, to work in groups. Use Blackboard's group features to allow groups to work together on a project no matter where they may be physically located.
      b Have the students prepare and deliver the class presentations/lectures (in groups) for the first 20-30 minutes of the class. Then, facilitate a 20-30 minute discussion of the presentation content, filling in gaps, correcting misinformation, etc.

   3 Use the library's resources and electronic databases.
      a Assign group research projects that make use of library materials and online
databases.

b Make use of the library's reserve desk: find articles pertinent to the course topics/concepts and put them on reserve. In fact, if you choose articles, those articles can be put on an e-Reserve which can be accessed by students via the Internet.

4 Use technology that allows students to study or find information about the course no matter what time it is or where they may be physically located.

a Use Blackboard as a means of disseminating course documents and research materials. Since Blackboard is web-based, students can access it from anywhere they have an Internet connection and web browser.

b Post your PowerPoint presentations to Blackboard so students can view the slides as many times as they need to.

c Invite a guest "content expert" to record a 10-15 minute lecture on a concept/topic. Load that video into Blackboard for students to view and use as research.

d Use Blackboard's features to handle course mechanics outside the classroom. Post all information about assignments, exams, quizzes, due dates, etc. on Blackboard so students will be able to access these items whenever necessary (keep them up-to-date!!).

C Additional Information and Resources:

1 David Brown, ed.  Teaching With Technology
2 __________.  Interactive Learning
5 The TLT Group (<http://www.tltgroup.org>)
6 The Kaneb Center for Teaching and Learning at Notre Dame University (<http://www.nd.edu/~kaneb>)

VI Good Practice Communicates High Expectations

A It has always been good practice to create challenging assignments and clearly communicate expectations for completion of the assignments. While unfortunately, high expectations do not guarantee high quality results, we are assured that students will not submit satisfactory work unless they have a clear idea of what is expected of them. Technology provides several tools for clarifying expectations and raising the standard of performance we want from our students.

B Examples/Recommendations:

1 Communicate expectations by posting instructor examples and "school book solutions" on-line
   a Examples in Word, PowerPoint or Excel can be posted easily on Blackboard without requiring any format conversion.
   b Post examples or solutions prior to the class period in which you plan to discuss them in order to encourage interaction during class. Blackboard allows the instructor to specify a limited time range during which documents are accessible on-line, so you can easily control when solutions are visible to the students.

2 Post examples of student work
   a Use Blackboard to post both good and bad examples of student work from prior semesters with comments explaining how the students’ work did or did not meet
expectations. Use the comment feature of Word to add notes to textual examples without corrupting the original structure of the text.

b Make portfolios more accessible by encouraging students to build web or CD-based collections of their work. A freshman who is exposed to an exemplary senior’s four (or five...) year collection of work gets a better understanding of where they are headed and what is expected of them.

c Some instructors are evaluating student participation in on-line discussions as part of the student’s grade. Since this may be a new experience for many students, it is particularly important to post examples of what you consider substantive input in an on-line discussion. Without clear guidelines governing the quality of their contributions, most students will assume that the quantity of messages they post is more important than the quality.

3 Many disciplines have standards or style guides that describe expectations for proper organization and formatting of text in reports and documents (e.g., English grammar style guides, computer programming coding conventions). Some of these references are available on line. Encourage student use of these resources by adding links to the references in your Blackboard course or class web page.

4 Incorporate outside “experts” for review of student work
   a Use industry contacts and alumni to find volunteers in the “real world” to help review student work. Additional reviewers provide new perspectives and push students toward a higher level of performance.
   b E-mail and Word features (comments, change tracking) facilitate collaboration between off-campus reviewers and students

5 Use Blackboard’s features to work together towards a “right” answer.
   a Students often have trouble understanding what you will consider a “good” answer for open-ended or subjective questions. One technique for clarifying expectations and reinforcing learning is to have students provide responses on-line to a question during class. You can then project selected responses and lead a class discussion to work together toward an “A” answer for the question.
   b Blackboard’s chat or discussion board features facilitate in-class discussion of student responses

C Additional information and resources:
   a Blackboard Instructors’ Manual
   b Teaching With Technology, David Brown (Ed.)

VII Good Practice Respects Diverse Talents and Ways of Learning

A The first thing that comes to mind when I think about “diverse talents and ways of learning,” is the work of Howard Gardner. Gardner’s theory of “Multiple Intelligences” suggests that different students may reach an understanding of some concept differently. That is, each student may uncover information, mentally organize that information, and repackage that information for transmission to others in a way that can be clearly differentiated from the processes applied by peers. This is much more than simply a preferred learning style. For example, it’s not just that Johnnie likes learning in a “hands-on fashion;” Johnnie is “wired” such that he actually processes information best when he can deal with it kinesthetically. So, if we, as instructors, truly value the learning experiences of our students, we need to alter our methods of presentation such that all students have an opportunity to learn in a way that best suits them. Also, wherever possible, we need to allow students to demonstrate their mastery of information in the way they prefer.
All of that said, it is probably important to consider diverse approaches to learning for other reasons, too. If you use a single avenue for delivery of educational content, let’s say textbooks and lectures which would be considered “verbal/linguistic,” and have students respond in the same fashion, for instance written work and paper-based quizzes and tests, you can only be certain that students have learned and can apply their understanding along that single channel. More often than not, you’d like to know that they have an understanding of information that is more flexible, allowing for application in a variety of settings and under varied circumstances. Embracing an approach to teaching and learning built on diversity may encourage this type of flexibility.

Examples/Recommendations:

1. Start by considering the varied ways that information can be taught, learned, and applied. Gardner initially identified seven intelligences:
   a. Verbal/linguistic – historically, the most common approach to teaching and learning in higher education; persuasive speaking and writing, written communications and compositions, etc.
   b. Logical/mathematical – inductive and deductive reasoning, abstract pattern recognition, performing calculations, scientific reasoning and analysis, etc.
   c. Visual/spatial – spatial organization and ordering, graphic representations, mental manipulation of objects, pattern recognition, etc.
   d. Intrapersonal – higher-order thinking and reasoning, expression of feelings, metacognition, self-reflection and self-awareness, etc.
   e. Interpersonal – sensitivity to the feeling and views of others, cooperative learning, synergy, teamwork, relationship building, etc.
   f. Bodily/kinesthetic – tactile approach to learning, hands-on approach, manipulation of concrete objects, etc.
   g. Musical/rhythmic – sensitivity to sound and rhythm,

   Note, Gardner is just one of many researchers who have categorized learning styles and preferences. See the list of resources below for other ways of thinking about this important issue. After all, if we are going to embrace diversity, we probably ought to embrace diverse approaches to thinking about it!

2. Some specific suggestions would include:
   a. To the extent possible, allow students to turn in work in varied forms
      (1) as a PowerPoint presentation
      (2) as a paper
      (3) as a constructed model
      (4) in the form of a dramatization
   b. To the extend possible, vary your approach to presenting material
      (1) have students work in groups, Blackboard can help with this
      (2) have students work alone
      (3) have students express their thoughts, use Word to journal
      (4) have student express their feelings
      (5) use PowerPoint for highly visual presentations
      (6) have students read texts and articles, the Internet has a lot to offer
      (7) use a videotape, OC is increasing its investment in smart classrooms
      (8) add music to the mix (for instance, if you are teaching on Civil War history, include music from that era), there are lots of MP3 and wav files available via the Internet
(9) let the students lecture for a change
(10) have students consider a situation from an alternate point of view
(11) vary the setting from lab, to studio, to classroom

3 Additional information and resources:
   a  Felder, R. M. & Soloman, B. A., *Learning Styles and Strategies*, North Carolina State University:
      [http://www2.ncsu.edu/unity/lockers/users/f/felder/public/ILSdir/styles.htm](http://www2.ncsu.edu/unity/lockers/users/f/felder/public/ILSdir/styles.htm)
   b  Whitefield, D., *Learning Styles - Great Minds Don't Think Alike!*, Victoria University of Technology:
   c  Student Learning Styles and Their
   d  Montgomery, S. M. & Groat, L. N., *Student Learning Styles and Their Implications for Teaching*, University of Michigan:
      [http://www.crlt.umich.edu/occ10.html](http://www.crlt.umich.edu/occ10.html)