Ten Principles of Effective Teaching and Practical Examples for the Classroom and Blackboard

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Abstract

Bradley University has several immediate goals to improve the university, the first of which is to improve academic programs. Blackboard course management software is primarily used to supplement traditional classroom teaching at Bradley University. The actual use by individual faculty members varies widely. The majority of students would like to see Blackboard used more and used better, based on results of five years of surveying students about Blackboard. Research was conducted to identify effective teaching principles and how faculty can effectively teach in the classroom and with the aid of Blackboard.   The purpose of this document is to outline effective teaching principles, effective teaching practices, and examples of how effective teaching can utilize Blackboard to supplement traditional teaching. Ten principles of effective teaching are covered with examples of how these principles can be applied in the classroom, whether Blackboard is used or not. Further, each principle includes examples of how Blackboard can be used to enhance the teaching and learning process.

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Introduction

The Blackboard course management system has a significant adoption rate on Bradley University's campus. Currently about 80% of courses use Blackboard to some degree. This course management system is primarily used by the faculty to supplement face-to-face teaching, however actual use by individual faculty members varies widely. Some faculty members primarily use Blackboard to post a syllabus. Others may use it to send email to the class. While others post quizzes, grades, lectures, and discussion boards. Approximately two-percent of the courses at Bradley are offered in an exclusively online format. In each of the past five years of surveying the student body, students have indicated they would like to see Blackboard used more, and used more effectively and consistently by the faculty at Bradley. Student responses coupled with Bradley University's "Five Immediate Goals for 2004-2005" illustrate room for improvements. The number one goal of Bradley University is to strengthen academics. In order to achieve this goal, Broski (2004) challenged all to "identify opportunities to improve Bradley's undergraduate and graduate programs." One way to achieve this goal is by helping faculty effectively teach in the classroom and with the aid of Blackboard. This will in turn help students improve their academic achievement.

From the research, some universities have model courses and best practices for entirely online courses, however, there are no models or best practices for courses that meet traditionally and use Blackboard to supplement classroom teaching. The purpose of this document is to outline effective teaching principles for both inside and outside of the classroom and to expose faculty members to a variety of ways to effectively teach with Blackboard to enhance traditional classroom learning.

An interdisciplinary Bradley University faculty committee and staff from the Instructional Technology Assistance Center convened to research and examine effective teaching principles. From its research, this team produced recommendations to help other faculty at Bradley effectively teach with the aid of Blackboard. The team met bi-weekly for the 2004-2005 academic year researching published works on the subject of effective teaching techniques and examining personal teaching experience. With that, the team developed ten teaching principles they believed best matched the goals of Bradley University. Specific teaching methods utilizing Blackboard were then created to support the teaching principles.

Purpose of the Study

The purpose of this study was to identify best practices for using Blackboard in teaching and learning. The goal of the research was to develop recommendations for effective teaching using Blackboard as a course supplement. The ultimate goal was to increase student achievement and mastery of course material.

Methodology

A combination of two methods was used in this study - limited literature review and qualitative evaluation of teaching methods. A committee comprised of faculty from various academic disciplines, faculty from the Office of Teaching Excellence and Faculty Development, and staff from the Instructional Technology Assistance Center worked as a collaborative research team to create recommendations on the effective use of Blackboard in teaching. The Office of Teaching Excellence and Faculty Development recommended nine articles on best teaching practices for the committee to examine. The Instructional Technology Assistance Center provided literature on recommendations for the exemplary use of a course management system for online teaching. No known documents were available at the start of the research regarding the effective use of a course management system in support of traditional classroom teaching. Principles were culled from the research and tried in the classroom. The experience of the teaching faculty in applying the various principles led to the recommendation of the ten principles.

Review of Literature

The two largest competitors in the course management system market, Blackboard ("Quality on the Line" was partially sponsored by Blackboard) and WebCT, both created benchmarks or standards for the design of effective online teaching. Regardless of which course management system is used, courses that are taught exclusively online have greater need to be more comprehensive than a courses supplemented by Blackboard. The purpose of this research was to promote good teaching, whether it be face-to-face or online regardless of whether Blackboard was used or not. Literature that discussed good teaching was examined. Bruner (1987) and Bloom (1994) provided insights into the learning process. McKeachie (1978) and Chickering and Gamson (1987) provided a good background of best practices in college teaching, while Chickering and Ehrmann (1996) applied the practices to

technology. Cross and Angelo (1993) *Classroom Assessment Techniques* contained many tried-and-true practices the faculty team members have been using successfully for many years. Drummond (2002) provided several best practices in teaching. Lubawy (2003) provided a very broad view of developing best practices as well as several specific examples to apply to teaching. Rolheiser and Fullan (2002) validated a few best practices the Bradley research team was finding. Gardiner (1998) gave a broad picture of the higher education process, the shortcomings of student achievement outcomes, and what research indicates should be done to help students achieve. Angelo (1993) outlined several principles of effective teaching.

Findings

Based on the literature and the experience of the teaching faculty, ten principles of effective teaching were recommended: 1) create an active learning environment, 2) focus attention, 3) connect knowledge, 4) help students organize their knowledge, 5) provide timely feedback, 6) demand quality, 7) balance high expectations with student support, 8) enhance motivation to learn, 9) encourage faculty-student and student-student interaction and communication, and 10) help students to productively manage their time.

For example, an instructor can post problems or homework online (create an active learning environment) to be submitted prior to a traditional or online class session (help students manage their time). The answers can be derived from reading course materials and studying narrated PowerPoint slides (focus attention *and* connect knowledge). During a virtual classroom session an instructor can call on various students to give their answers (enhance motivation to learn). Immediate feedback (provide timely feedback *and* faculty-student interaction) can be given. If correction is needed, a private message asking "are you in need of additional help" can be sent to the student (balance high expectations with necessary support). The instructor could ask the student to explain how the answer was derived (connect knowledge). Further the instructor could pose to all "why is the information relevant" (help students organize their knowledge).

The following outline describes each teaching principle with examples of how the principle is applied in the classroom and with Blackboard.

I.   *Create An Active Learning Environment*

In order for students to gain knowledge from the presentation of information, they should actively participate in their learning. "Active learning provides opportunities for students to talk and listen, read, write, and reflect as they approach course content through problem-solving exercises, informal small groups, simulations, case studies, role playing, in class questions and other activities, all of which require students to apply what they are learning and/or think about what they are learning as they are learning" (Lubawy, 2003).

A. Examples of Blackboard use:
1. Provide case studies, quizzes, and problems for students to study, reflect upon and answer to their best ability.
2. Have students prepare a "minute paper" to answer "what was the most important thing you learned in this class?" and "what important question remains unanswered?" (Cross & Angelo, 1993, pp. 148-153). Have the students submit this paper to the Digital DropBox.
3. Design electronic slide presentations 7 to 10 minute segments. Post the slides in Course Documents. Then link students to a short Blackboard quiz or Discussion Board forum with questions about the materials they just studied.
4. Provide links to useful resources on the web.
5. Consider using the glossary to encourage students to expand their knowledge of the vocabulary of the discipline.
6. Post weekly learning achievements.
7. Use the Discussion Board to promote active participation outside of class. Include topics that require some research. Discussions can be used for course content or open content of student interest.
8. Consider holding virtual classroom sessions to deliver problems or questions. Consider having students compete to respond first. If quantitative, have them show their work.

9. Assign students to develop a lesson/unit for the rest of the class to do. The student can send it through the Digital DropBox, and the instructor can then post it as a Course Document or Assignment.

B. General best practices of active learning from current educational models:

1. Create situations in which students become actively involved, physically and mentally, in order to learn more and learn more effectively and make it meaningful. Have them talk about it, write about it, relate it to past experiences, and apply it to their lives (Chickering & Ehrmann, 1996, p. 3).

2. Deliver lecture material in 7 to 10 minute segments, then pause to ask pre-planned rhetorical questions. Have the students record their answers in their notes (Drummond, 2002, p. 1).

3. Have students rehearse and prepare a lesson ahead of time, deliver it to a group (classmates) and receive feedback (Angelo, 1993, p. 4).

4. Have students paraphrase a main idea or concept in a couple of sentences to a specific audience. Then have the students paraphrase the same explanation to a completely different audience (parents, children, professionals, novices, experts, etc.) Assess the paraphrases for accuracy and appropriateness (p. 4).

5. Provide opportunities for students to perform apprentice-like activities (Chickering & Ehrmann, 1996, p. 3).

6. Have students research concepts relating to specific subjects on the Internet or in the Library. Make them aware of and accountable for the proper procedure for reporting and annotating correctly.

7. Have students simulate techniques using or producing computer activities.

8. Promote the development of insight by designing models.

II. *Focus Attention*

"Students in introductory courses often cannot tell what is central from what is peripheral, foreground from background, superordinate from subordinate" (Angelo, 1993, p. 4). Focus the attention of students on the aspects that matter most.

A. Examples of Blackboard use:

1. Post the syllabus, potentially updating goals and objectives on a unit-by-unit basis. Include learning objectives, course goals, course requirements, deadlines, tasks, expectations, etc.

2. Consider using the Discussion Board or a Survey to allow students to provide input into the goals and objectives, projects, etc. for the course.

3. Provide a course outline/schedule or post deadlines to the calendar.

4. Post information about the course that is clear and complete.

5. Post learning objectives within the unit in Course Documents and in the syllabus.

6. Post documents to support required tasks in a timely manner.

7. Post quizzes to assess student progress.

8. Set up Tasks in Blackboard for students to focus on the work to be done and to track their progress.

9. Get students in the habit of checking Blackboard regularly. Routine posting of announcements, perhaps with hints, tips, comments, etc. motivate students to check back frequently.

10. Use an Assignment, Discussion Board forum, or Quiz to ask students something about the task at hand. For example: What does a particular item accomplish? What is the usefulness of the topic? What input is needed for solving a long-range decision?

11. Consider posting old exams online in order to let students see how learning objectives are evaluated.

12. Show how questions on exams map to objectives.

B. General best practices for focusing attention from current educational models:

1. Provide very specific course goals.
2. Ask the students "what do you hope to get from the class?" Angelo (1993, p. 4) recommended having students write a few specific learning goals early in the term that they hope to achieve through the course. Have them compare their learning goals with others in the class and with the goals of the course. "Look for and build upon areas of congruence, but don't gloss over potential conflicts or disconnects. Refer back to and assess progress toward shared goals throughout the semester" (p. 4).
3. Provide the students with a calendar of the entire semester's work to be completed by student. Provide the grading scale/point value for each facet of the course.
4. Before a lecture, provide the students with an advance organizer - learning objectives, agenda, or a list of the key points for each unit or lesson (Rolheiser & Fullan, 2002, p. 3).
5. Perform pre-assessments to let students test their knowledge of the subject to determine what they already know.

III. *Connect Knowledge*

"The more meaningful and appropriate connections students make between what they know and what they are learning, the more permanently they will anchor new information in long-term memory and the easier it will be for them to access that information when it's needed" (Angelo, 1993, p. 5).

A. Examples of Blackboard use:
1. Post examples of how covered material relates to prior knowledge.
2. Design quizzes that tie prior knowledge to current knowledge.
3. Provide links to resources dealing with prior knowledge.
4. Include links to related sites or video clips related to the new material.
5. Utilize a variety of materials (audio clips, video files, images, animations, etc.) to help students relate new material to their past experience. Check with the textbook publisher for materials designed for Blackboard.
6. Develop a visual map for each course module and show how topics relate to one another.
7. Have students "paraphrase part of a lesson for a specific audience and purpose," an assessment technique Cross and Angelo (1993) called "Directed Paraphrasing" (pp. 213-235). They can post this in the Discussion Board for all students to review and comment.

B. General best practices of connecting knowledge from current educational models:
1. Plan presentations of materials carefully. "Habits, preconceptions, and misconceptions can be formidable barriers to new learning because this prior learning is usually 90 percent hidden from view" (Angelo, 1993, p. 5).
2. Create opportunities for students to integrate material learned in the current course with knowledge gained from previous courses (Lubawy, 2003, p. 2).
3. "Provide many and varied examples, illustrations/descriptions, drawings, images, metaphors, and analogies. But ask students to provide them, as well, then give the students feedback on their usefulness and appropriateness. For instance, two simple ways to help students make connections, and to assess the connections they are making, are to ask them to compose a metaphor ('Learning is _____') or to complete an analogy ('Teaching is to learning as _____ is to _____')" (p. 5).
4. "Before you present new material, find out what students already believe and know and what they can do about it" (p. 5). Use a quick diagnostic "probe" or "pre-test". It will help you determine misconceptions or whether the students are already familiar with the material.
5. Help students understand their thoughts and factors that influence how they think. "Teach students multiple learning strategies that promote metacognition by providing modeling, guided practice and application" (Rolheiser & Fullan, 2002, p. 3).
6. Bring different perspectives to each idea.

7. Give students opportunities to show their talents and learn in ways that work for them. "Different students bring different talents and styles. Brilliant students in a seminar may not excel in a lab or studio, students rich in hands-on experience may not do so well with theory" (Chickering & Ehrmann, 1996, 5).

8. Consider different learning styles (visual, aural, kinesthetic, etc).

9. Provide resources for different methods of learning through powerful visuals and well-organized print; through direct, vicarious and virtual experiences; and through tasks requiring analysis, synthesis and evaluation, with applications to real-life situations. Encourage student self-reflection and self-evaluation. Allow students to drive collaboration and group problem solving.

10. Create a common resources site with documents from basic courses (knowledge base).

11. Have students check their facts.

IV.   *Help Students Organize Their Knowledge*

Information without organization and context does not promote learning. "Information organized in personally meaningful ways is more likely to be retained, learned, and used" (Angelo, 1993, p. 5).

A. Examples of Blackboard use:

1. Have students construct time lines that illustrate sequential events.

2. Have students contribute news items or other information that relates the information to their major or career.

3. Organize posted course documents in a meaningful way.

4. Have students create a "Concept Map" (Cross & Angelo, 1993, pp. 197-202) using the White Board during a Virtual Classroom session or using PowerPoint and posting it in a Discussion Board forum on the topic at hand. Students are to diagram major concepts and how they relate to each other. For example, direct students to write "Democracy" in the center of the screen, then around it, add related terms, people, or concepts that come to mind.

5. Provide external links to recognized expert information on the topic.

B. General best practices of for helping students organize their knowledge from current educational models:

1. "[People] seek regularity and meaning constantly, and we create them when they are not apparent….To be most useful, the ways learners organize knowledge is a given domain need to become ever more similar to the ways experts in that field organize knowledge" (Angelo, 1993, p. 5). Make what is implicit, explicit. "Show students a number of different, useful, and acceptable ways to organize the same information. Use prose, outlines, graphs, drawings, and models. Assess students' organizing schemas and skills by getting them to show you their 'mental models' in a similar variety of ways" (p. 5).

2. Provide meaningful organization to the content.

3. Encourage students to inquire further and explore external resources.

4. List references to other resources.

5. Relate student activities and organizations to students' overall college experience.

V.   *Provide Timely Feedback*

"Regular feedback helps learners efficiently direct their attention and energies, helps them avoid major errors and dead ends, and keeps them from learning things they later will have to unlearn at great cost. It also can serve as a motivating form of interaction between teacher and learner, and among learners. When students learn to internalize the voice of the 'coach,' they can begin to give themselves corrective feedback" (Angelo, 1993, p. 6).

A. Examples of Blackboard use:

1. Post a Discussion Board forum about homework assignments, quizzes and tests.

2. Regularly post announcements highlighting key points of any quality student discussions or submitted work for that period.

3. Use quizzes with feedback that clarify correct answers when an incorrect response is entered. Consider using frequent short quizzes.

4. Use anonymous surveys to allow students to express questions about course content or concerns about how the class is being conducted.

5. Use the grade book to provide timely dissemination of grades.

B. General best practices of providing timely feedback from current educational models:

1. Establish a time period within which all assignments or tests will be graded and returned to the students (Institute for Higher Education Policy, 2000, p. 24).

2. Link feedback with assessment and vice versa.

3. Define how quickly students will receive feedback (on questions they ask, emails sent, projects submitted, and tests taken).

4. Give students help in assessing their existing knowledge and competence. "Knowing what you know and don't know focuses your learning….students need frequent opportunities to perform and receive feedback on their performance" (Chickering & Ehrmann, 1996, p. 5).

5. "Don't assume students understand; ask. Try asking them to jot down what the "muddiest point" was in a particular reading, lab, or lecture, then respond to the most common "muddy points" in your next class. Find out what students are doing with the feedback you're already giving them. Do they read and use the comments you write on papers and exams? If so, how? If not, why not? Explicitly demonstrate how you get feedback on your work and what you do with it" (Angelo, 1993, p. 6).

6. Give students chances to reflect on what they have learned, what they still need to know and how they might assess themselves (Chickering & Ehrmann, 1996, p. 4).

7. Use email to support person-person feedback.

8. Videotape the student to allow the student to critique his or her own performance (Chickering & Ehrmann, 1996, p. 4).

9. Use the "hidden text" option available in word processors to react to students' drafts.

10. Encourage the use of student portfolios for storing all student work so that instructors and students can compare early efforts and evaluate growth in knowledge, competence, or other valued outcomes.

11. Make sure test questions require the kind of thinking and learning we wish to promote, and that students know in a general sense what those questions will be (Angelo, 1993, p. 6). "For generations uncounted students have annoyed their teachers with the question, 'Will this be on the final?' One reason they persist is that most genuinely want to get good grades. But a second reason is that knowing what will be on the final, or on any upcoming test or quiz, helps students figure out where to focus their attention. In other words, they are looking for a roadmap" (p. 6).

12. "Once you're sure your questions are testing what you want students to learn, give them a sample exam or list of study questions from which the exam questions will be selected. Give students regular opportunities to practice answering similar questions and to get feedback on their answers. If students work in study groups, that corrective feedback often can come from their peers" (Angelo, 1993, p. 6).

VI. *Demand Quality*

"Expect more and you will get more. High expectations are important for everyone-- for the poorly prepared, for those unwilling to exert themselves, and for the bright and well motivated. Expecting students to perform well becomes a self-fulfilling prophecy" (Chickering & Ehrmann, 1996, p. 5).

A. Examples of Blackboard use:

1. Provide a rubric or grading criteria by which students will be evaluated. Make sure the criteria are available from the beginning of the course. If a specific format is expected, indicate or provide the format.

2. Post examples of what you consider unacceptable work, minimum standard work and excellent work. Use un-editable formats such as PDF or screen captured images to prevent direct copying.

3. Allow students to evaluate and "grade" an assignment. This will give them a chance to take the instructor's perspective in evaluating work.

4. Identify and highlight components of exceptional current student work and share this with the class.

5. Ensure integrity. Post course policies for citing other work. Indicate that work must be original from the student's own efforts. Provide a link to the student handbook (http://www.bradley.edu/ccd/stuhndbk99.pdf) "Standards of Conduct", p. 32.

6. Post Frequently Asked Questions about the handling of the course or the course content.

7. Make expectations very clear in the beginning – dates, deadlines, late work, plagiarism, etc. Perhaps issue a "contract" at the beginning of the course to outline responsibilities and expectations.

8. Alert students as to the system and software requirements. Some will not be able to use some tools if they do not have the correct version of Java. They can find the system requirements through the Bradley Blackboard homepage. Use applications supported by the University whenever possible.

B. General best practices of expecting quality from current educational models:

1. "Begin by finding out what students expect of themselves in your class, letting them know what you expect, and discussing those expectations. Begin the course with assignments that diligent students can succeed in to build confidence. Have learners interview successful former students, or invite them to class, to illustrate in flesh and blood that high expectations can be realized" (Angelo, 1993, p. 7).

2. Maintain the same high quality expectations of student performance and output when putting the course online. Online courses should be as challenging as traditional courses.

3. Clearly articulate the criteria for evaluating performances through samples of excellent, average, mediocre, and faulty performance. The examples can provide a basis for peer evaluation.

VII. *Balance High Expectations With Student Support*

Bruner (1987) described a technique called 'scaffolding' in which a parent, teacher or older sibling would use language or concepts slightly advanced of a child's existing ability in order to challenge the child to grow their understanding. As the understanding increased, the language or concept advanced as well. This method would continually challenge the child to learn new meaning, yet not overwhelm the child by using language or concepts too advanced for the child to grasp. Angelo (1993) applied this metaphor to the college environment, stating "Scaffolding is a useful metaphor for college learning, as well. The weaker or smaller the student's foundation (preparation) in the subject, the stronger and larger the instructional scaffolding (structure and support) that is required" (p. 7). Keep expectations of the students high, but provide ample support for those who have less exposure to or ability in the subject.

A. Examples of Blackboard use:

1. Require students to do their own research of the subjects being studied. Have them research respected organizational or journal web sites and write a review to share in the Discussion Board.

2. Compile and share student-researched resources and post them in the External Links section or in the Discussion Board.

3. Maintain high grading standards. In making and grading assignments, provide students with an assignment criteria or grading guidelines.

4. Consider holding online-office hours.

5. Establish group pages to provide accessible means for students to work together and support each other.

6. Provide timely feedback to student questions and work.

7. Provide Frequently Asked Questions on course topics and course procedures.

8. Consider creating and encouraging the use of an open Discussion Board to allow students to support each other.

9. Consider using the glossary for terminology that is new to students and inform them that the glossary is active.

10. Communicate how students should contact you for assistance, including whether you intend to use email, chat (online office hours), announcements or Discussion Board postings, or other methods to provide instructional support. Specify how soon or on what days you check your email or Discussion Board (or other method) and how quickly the student should expect a reply or posting from you.

B. General best practices of balancing high expectations with student support from current educational models:

1. "Even when learner ability or preparation or both are weak, expectations should remain high. To reach those expectations, less prepared students will need more and more explicit instructional 'scaffolding' such as tutoring, highly structured directions, and more personal contact with the instructor" (Angelo, 1993, p. 8). Encourage the better-prepared students to master their learning by serving as tutors, helping to create scaffolding for others, and to take more responsibility for their own learning through independent studies and special projects (p. 8).

2. Following a lecture or reading, Cross and Angelo (1993) suggest having the students write a "Minute Paper" to find out what students thought were the most important points and what questions they still have (pp. 148-153). This can provide useful information on where the students are getting lost so that the instructor can help them get back on track.

3. Set expectations as to how to contact you for assistance.

VIII. *Enhance Motivation to Learn*

"Motivation to learn is alterable; it can be positively or negatively affected by the task, the environment, the teacher, and the learner" (Angelo, 1993, p. 8).

A. Examples of Blackboard use:

1. Post intriguing questions on the Discussion Board.

2. Consider creating a scavenger hunt within the Assignments area.

3. Have students share news articles related to the course topics.

4. Have students develop materials specific to their major.

5. Include students in the decision of what Discussion Board forums to create. Consider establishing a Discussion Board policy.

6. Use realistic cases.

7. Use pre-tests to demonstrate to students any gap of knowledge.

B. General best practices of enhancing motivation to learn from current educational models:

1. Engage students by having them diagnose their learning needs, formulate their learning goals, identify resources for learning, choose learning strategies and evaluate outcomes (Drummond, 2002, p. 8). "People tend to feel committed to any decision in proportion to the extent to which they have participated in making it….Leaders can optimize learner's readiness and willingness by offering an invitation to step into the learning process and take responsibility for their own learning" (p. 8).

2. Motivate your students by conveying the value of what you're teaching; make them believe that learning it will help them achieve other important goals; help them believe that they are capable of learning it; and show them that you expect that they will succeed (Angelo, 1993, p. 8).

3. "Give students lots of specific examples of the value and usefulness of what they're learning and help them make connections between short-term course goals and their own long-term goals. Use simple, anonymous surveys to gauge students' expectations, beliefs, and self-confidence levels, then respond to that information with specific examples, suggestions and whenever possible, realistic encouragement" (Angelo, 1993, p. 8).

IX. *Encourage Faculty-student and Student-student Interaction and Communication*

"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 working. Knowing a few faculty members well enhances students' intellectual commitment and encourages them to think about their

own values and plans" (Chickering & Ehrmann, 1996, p. 2). This concept applies equally to student-student interaction (p. 3).

A. Examples of Blackboard use:

1. Use email, discussion boards, chats, virtual classrooms to foster instructor-student interaction.

2. Consider setting a specific time during the week for online office hours using the Chat tool.

3. When assigning team projects, establish and promote the use of Blackboard Group pages to encourage students to communicate and share information with each other online.

4. Post staff information and complete contact information with faculty preferences (e.g. do not call me at home, or you may call me at home until…).

5. Establish clear guidelines for how e-mail should be handled in the course. Have students include the course and section number in the subject line.

6. Consider developing a chat policy that may include expectations on appropriateness, professionalism, rules for staying on topic, referencing other students posts, spelling, participation, etc.

B. General best practices of faculty-student and student-student interaction from current educational models:

1. Promote sharing of ideas and collaboration. "Learning is enhanced when it is more like a team effort than a solo race. Good learning, like good work, is collaborative and social, not competitive and isolated. Working with others often increases involvement in learning. Sharing one's ideas and responding to others' improves thinking and deepens understanding" (Chickering & Ehrmann, 1996, p. 3).

2. Have students study in groups, team up for group projects or problem solving, and discuss assignments to deepen student-student interaction and reciprocity (p. 3).

X.   *Help Students Productively Manage Their Time*

"Time plus energy equals learning. Learning to use one's time well is critical for students and professionals alike. Allocating realistic amounts of time means effective learning for students and effective teaching for faculty" (Chickering & Ehrmann, 1996, p. 4).

A. Examples of Blackboard use:

1. Announce major class events, assignments and approaching deadlines.

2. Consider listing all important course events on the calendar (exams, project due dates, presentations…).

3. Allow the students to choose the due date on one assignment.

4. Set deadlines for projects to help students meet course competency goals.

5. Balance the workload throughout the semester.

B. General best practices of structuring tasks over measurable times from current educational models:

1. Provide the students with a calendar of the entire semester's work to be completed by student. Provide the grading scale/point value for each facet of the course.

2. Help students coordinate schedules between tasks in your class and tasks in all classes.

3. Promote the establishment of priorities.

4. Help students learn to manage commitments.

5. Provide students with a simple form for logging how much time and what time of the day they studied for one week and indicate how productively they studied during each of those study blocks (Cross & Angelo, 1993, p. 300-302; Angelo, 1993, p. 7). The Bradley University Learning Assistance Program has these forms as well as additional resources to help students better manage their time.

6. Encourage students to take advantage of resources (on the Internet, through other classmates and through the instructor).

Conclusions

This study was conducted to identify and give practical examples of effective teaching both in the classroom and using Blackboard, based on an identified need by the students to improve the use of Blackboard in teaching, and based on an outlined goal of the university to improve academic programs. Faculty and staff from several disciplines met bi-weekly throughout the year to research and discuss effective teaching. Relevant articles on best practices and effective teaching principles were examined. Desired teaching principles and practices were identified and tried in the classroom, and final recommendations drafted. This cross-curricular research into effective teaching with and without the use of Blackboard on Bradley's campus is just one effort to increase teaching effectiveness and improve academic success of our students. Evaluations of these principles, user feedback, and additional research will lead to continued improvement.

If you would like to contribute other teaching principles or examples to be included in future versions of this guide, please send them to: Instructional Technology Assistance Center, Bradley Library Room 20, Bradley University, Peoria, IL 61625.

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