This paper addresses the assessment of an online academic course delivered through WebCT at San Diego Miramar College in Southern California. The native and non-native college students who took this course experienced online academic instruction for the first time. WebCT gives learners both knowledge input and interactive practice by encouraging divergent thinking and facilitating complex understanding and instant reflection in online discussion. WebCT provides assessment tools, which assist instructors in designing course curriculum, tracking students’ learning process, and assessing students’ performance. WebCT includes seven assessment tools: online group discussion, feedback, examination, phone conversations, surveys, quizzes, and written assignments. Instructors and learners are able to share information, join group discussions, and send assignments, and issue grades anytime, anywhere. Lastly, within this course design, instructors had access to new technology tools such as Camtasis, Horizon Wimba, and Macromedia breeze. Finally, this paper suggests ways in which instructors can utilize WebCT's technology tools to facilitate assessment, grading, and active student reflection in an effective learning environment.
INTRODUCTION

San Diego Miramar College (SDMC) is a high-tech academic institution. Approximately 12,000 full-time and part-time students attend this school. The learners are diverse in age, nationality, cultural beliefs, and educational backgrounds. In order to meet their equally diverse expectations, the school started to provide online courses (website: http://www.sdccdonline.net) for those students who live outside San Diego, need to work or care for dependent family members, or who otherwise require a flexible learning schedule. Since 2001, SDMC has offered its faculty training in designing and conducting online courses. Teachers create a convenient learning environment by providing clear information, step-by-step procedures for follow-up, and instant feedback through WebCT. In addition, its learners can assess their learning process, contact instructors and other classmates, and receive commands anytime, anywhere. Finally, WebCT provides instructors with effective assessment tools to assess students’ learning process and course performance (Volchok, Caines, Graf, 2006).

Review of the Literature

The literature review briefly introduces how SDMC assesses teaching and learning online. The first section describes the importance of performing assessments online. An overview of the practice of online course assessment through WebCT
follows.

**Introduction of Online Assessment at San Diego Miramar College.** As an increasing number of educators employ computer technology tools to facilitate learning, online assessment has come to greatly influence higher education (Angelo & Cross, 1993; Arend, 2006). The type of computer technology equipment found in the classroom has changed dramatically over the past ten years (Borja, 2007). Around 1997, the United States began to furnish its classrooms with chalkboards, desktop computers, or projection screens, yet in the beginning of 2007, its classrooms began to receive interactive Whiteboards, Wireless laptops, and digital cameras, all of which improved teaching and learning. At the same time, “55% of colleges and universities now offer distance learning courses” (Terry, 2000, as cited in Gaytan, 2005, p. 25). Distance education has become increasingly prevalent; hence, online teaching and learning assessment is a vital resource for the higher education system. Traditional forms of assessment involve tests or quizzes and facilitate teaching and learning in positive ways (Draves, 2002). Furthermore, assessment has become an important aspect of teaching and learning in online education (Benson, 2003).

Angelo (1996) defined assessment as, “the systematic collection, analysis, interpretation, and use of information to understand and improve teaching and learning” (p. 58), while Arend (2006) stated that “assessment is shifting from the
traditional methods of objective measurement toward new alternative assessment practices” (p. 32). More specifically, Robles and Braathen (2002) address the role of assessment in online education:

The opportunity for online education brings about new considerations in assessment. Online assessment is more than just testing and evaluation of students. By keeping in mind some basic tenets of assessment, online educators can adapt their assessment activities to demonstrate quality. (p. 39)

Moreover, online education and assessment offers many advantages, as Perkin (1991) noted:

One of the potential advantages of computer-based learning, in this context, is that the process of learning can be made more visible. Regardless of the context and the teaching methods used, the active involvement and participation of the learner’s assessment of who is involved and who isn’t is subject. Extrovert students often appear to be more active learners. In a computer-based class, however, the interface between student and coursework is rather different and the computer can log the learners’ activity…. (p. 60)

Furthermore, the literature distinguishes between two aspects of online assessment: (a) teaching assessment and (b) learning assessment (Black & William, 1998). Miramar Community College's faculty members are facing the new challenge
to design specific courses for online education (Berryhill & Durrington, 2006). Hence, this school is also providing training workshops on how to integrate the use of computer technology tools into theory-driven instruction. These workshops are designed for experienced instructors, adjunct faculty, and faculty members who are unfamiliar with computer technology tools. Some workshops build competency in basic computer programs, such as Microsoft Access, Excel, PowerPoint, and Word, while others offer advanced instruction in Camtasis, Dreamweaver, Illustrator, Flash, Horizon Wimba, Photoshop, and Macromedia Breeze. Similarly, SDMC offers trainings on WebCT online.

A number department administrators and faculty members tried to add online assessment when designing their course curriculum. Since 2001, SDMC has transformed its academic offerings to include online degrees, programs, and courses, which are supported primarily by WebCT. Learners use this tool to add and drop courses, view their course guidelines, download course materials, submit assignments, and interact with instructors and classmates. In addition, instructors not only use this well-organized, online assessment tool to enhance their teaching, but they also use it to examine their learners’ incremental learning outcomes.

Online Course Assessment Practice with WebCT. When the subject is online education, attendees of teachers' conferences, trainings, and regular faculty meetings
commonly ask, “What is the best way to assess learners’ learning”, and "How does assessment make feedback more meaningful between instruction and assessment" (Mandinach, 2005, p. 1815). The goal of online assessment is to enhance teaching effectiveness and facilitate interactive learning. Educators consider WebCT to be the primary learner assessment tool. Its seven components include online group discussions, feedback, examinations, phone conversations, surveys, quizzes, and written assignments (see Figure 1.)

Figure 1. The Seven Components of WebCT Assessment

First, learners engage in online group discussions to post questions and obtain answers. They interact with their peers and instructors by sharing their knowledge or personal points of view on assigned topics. In addition, Vonderwell, Liang, and
Alderman (2007) proposed that “online instructors need to consider different strategies to structure discussion as a learning and assessment environment” (p. 322).

Second, online education allows instructors to provide essential feedback to learners more efficiently. Third, instructors teaching online courses can post exams early in the morning on the day of the test. Learners can then download and complete it before the due date. Fourth, learners can dialogue with their instructors and peers for free by using an online phone service, as they only need a microphone and access to the Internet. Fifth, schools and instructors conduct online surveys to understand their students’ perspectives on relevant issues. For example, instructors often ask their students to complete an online course evaluation survey at the end of the term.

According to Freeman, Pharm, Schrimsher, Kendrach (2006), it is important “to ensure that learners are comfortable answering questions” (p. 3); hence, most online surveys are optional. Sixth, online quizzes assess students' knowledge of the textbook, course topics, or other relevant materials. Typically, learners can view the quizzes at the beginning of the course, which allows them to prepare and submit answers by a designated time as they finish each chapter. Lastly, because written assignments often involve extensive research, instructors post them on first day of class, allowing students to prepare for them, and even submit them, in advance.
Research Questions

(1) Please describe your experience with online teaching at Miramar Community College?

(2) In your online teaching, what instructional methods have been most effective for online assessment?

(3) In your view, what methodological considerations affect how you design online assessment?

(4) In your view, what differences exist between traditional courses and online courses, and which way is the most effective for teaching and learning?

(5) What suggestions would you offer to future teachers who will conduct online teaching and learning assessment?

Methodology

This qualitative study attempted to explore the effectiveness of using online assessment with multicultural learners enrolled in online courses. Two instructors answered five questions, which related to online teaching and learning. The online format allowed participants to register for the courses from any location in the world. Courses were conducted entirely online. During the instruction period (Dr. Simpson’s 25-week online business course; Mrs. Rechelle’s 5-week personal growth course),
participants were asked to finish all assignments and post them on time to the WebCT.

The instructors assessed these assignments each week. The initial online class orientation provided students with a downloadable video, which introduced them to their instructor, the required course materials, and the assignments. In addition, they had the opportunity to post their answers or upload papers before the due dates.

Although the researchers only interviewed two instructors, this study is also relevant to any school administrator, instructor, or student teacher, who is interested or involved in online education.

Participants

The researchers collected data by interviewing two instructors, Dr. Dorothy Simpson and Mrs. Rechelle, who are experienced teachers at San Diego Miramar College in San Diego, California. Both have been teaching online courses for at least four years. Several factors may influence online education, including instructors’ content knowledge, teaching strategies, skills in using computer technology tools, and their perceptions of online teaching and learning. Both instructors were confident, competent online educators.

Results

Each professor answered all five of the research questions. They shared their teaching experience as follows:
Dr. Dorothy Simpson, Business Department Chairperson. Dr. Simpson teaches online business courses, such as an introduction to business, business communication, and marketing. She posts her curriculum online prior to the start of the term so that students can evaluate the course content and assignment load prior to registering for the course. Once the term has begun, she posts all materials, questions, and exams on Blackboard, which is a tool of WebCT. Dr. Simpson favors a combination of collaborative and individual learning, which she accomplishes by assigning online group projects as well as quizzes to be completed independently. Students 'get together' to complete their group projects by conversing via the message board and the Internet Chatroom or by using telephone conference calling. Learners receive feedback about their performance quickly and can review the course materials and discussions they may have missed, which are logged on the discussion board, as often as they like.

Additionally, Dr. Simpson uses multiple types of assessment to measure students' individual learning. She evaluates their online discussions and their performance on individual and group projects, time-limited quizzes, and their papers. By learning in this way, students acquire skills and experience in using forms of technology that are widely used in the global business environment. While she likes the face-to-face contact she has with students in traditional courses, she also prizes the
ability to give students instant feedback in the online courses. Also, she believes that the online format benefits non-native learners, who often find it easier to express their opinions and participate.

Nonetheless, Dr. Simpson offered two suggestions to future teachers of online courses. First, instructors should communicate their expectations clearly and in as much detail as possible. Second, they need to be vigilant in evaluating whether or not their students' posted answers and questions are appropriate for public viewing. She concluded by noting that instructors have the right to delete or omit this material, if necessary.

Mrs. Rechelle, Associate Professor, conducts the Personal Growth course entirely online; it aims to help students to “enhance academic skills and develop strategies for success in a diverse society” (p. 1). Like Dr. Simpson, she believes the best way to assess students’ learning is to use multiple methods (Angelo, 1996). Her goal was to craft fail-proof, well-organized assessments, which she achieved by creating teaching materials, assignments, and rubric specifically targeted for the online learning format. Six components comprise her assessment method: (a) 12 journal entries each worth 5 points = 60 points, (b) 10 discussion board activities each worth 5 points = 50 points, (c) a web review of an organization that assists those who are disabled = 25 points, (d) resume writing = 15 points, (e) a scholarship search = 20
points, and (f) the final exam = 30 points. Thus, students have the opportunity to earn
200 points total. Mrs. Rechelle also repeatedly reminds students to submit their papers
or tests before the due dates; therefore, her students cannot use the excuse that they
forgot.

Furthermore, Mrs. Rechelle noted that teaching online courses involves
several unique challenges. She spends twice as much time solving technological
problems than she does answering students’ knowledge-related questions. Frequently,
students cannot log onto the WebCT with their student ID or password, or their
computers are too old to download files or upload assignments. Sometimes they have
problems with wireless Internet access. Despite these difficulties, she offered two
suggestions to future teachers of online courses. First, they should strive to inspire
students to learn in their own way. Second, they should build a student-support
service. Her points are noteworthy given that some learners, especially the elderly, are
new to using computers to advance their learning. Consequently, online course
instructors need to encourage their students to view learning as a boundaryless,
lifelong endeavor.

Discussion

The researcher, Ju Yin Yang, authored this discussion section. I derived great
value from interviewing Dr. Simpson and Mrs. Rechelle, who possess rich
knowledge about online teaching and willingly shared it with me. In particular, I was honored to interview Dr. Simpson, as I interned with her when she taught an online course during the Fall 2006 and Spring 2007 semesters. Additionally, I was fortunate to attend the San Diego State University sponsored workshop, 'Starting Academic Rehabilitation Programs & Disabilities Course Development', which was held on June 28-29, 2007. It was there that I heard Mrs. Rechelle give a useful speech on 'Developing Online Programs and Courses'.

During interviews, I asked both instructors if they were concerned about students cheating on online quizzes or asking someone to finish their online projects. Smiling, they told me that the America education system is based on an 'Honesty Policy'. Hence, they trust their students to honor this policy in the online classroom. In addition, to discourage students from cheating or asking friends to complete their work, both instructors utilize multiple kinds of weekly activities or assignments. Nonetheless, I persisted in asking if it was possible to create a more equitable learning environment. Dr. Simpson mentioned an interesting practice that is being adopted in the business field. Employees can only gain access to their companies' computer system if their fingerprints or eye imaging matches that found in the company's database. Perhaps schools will use this form of technology in the future to ensure that students are acting ethically in their online courses. Overall, these two instructors
gave both researchers clear examples of how they conduct online course assessments and how they organize their courses. Future online educators will benefit by incorporating the examples identified in this paper into their practice.

Acknowledgements

I express great thanks to Dr. Dorothy Simpson, Chairperson of the Department of Business at Miramar Community College in San Diego, CA. She may be contacted at: dsimson@sccd.edu. I am also indebted to Mrs. Rechelle Mojica, an associate professor at Miramar Community College, who provided us with helpful assessment tools. She may be contacted at: rmojica@sccd.edu. Additionally, I appreciate to my dissertation chair Dr. Ken K. Kelch for his support on feedback and reviewing of this paper.
References


