

Moore & Kearsley (2005) explain that there are a variety of technologies in existence for delivery of distance learning classes and that the challenge is knowing which technology to use for which purpose. They explain that each technology has its strengths and weaknesses in relation to the teaching goal at hand and the target audiences involved (2005). Fahy (2004) explains that some instructors view interaction to be important in learning (synchronous) while others view information, facts, and contact from a wide variety of resources to be more important in the development of the student (asynchronous). Fahy further explains “the differences in how various technologies accomplish their effects are important to their potential usefulness” (2004, p.150). For this assignment, the synchronous learning technology of Elluminate was compared with the asynchronous learning technology of JESS.

Elluminate, serves the relatively narrow focus of gathering several participants and an instructor at the same time, under a uniform interface, in order to teach one distinct lesson. The system is designed for teaching of focused material, most likely lasting less than two hours for each session. McGreal & Elliott (2004) explain that students in various locations participate in real-time and collaborate with the instructor and with other students allowing all students to cover the same material in the same sequence. Fahy (2004) contrasts that to be a weakness of asynchronous learning.

The second system, JESS, is a complete teaching platform allowing for multiple lesson plans and modules that can be maintained in the system and referred to over the course of a semester by each student. The JESS system allows for additional functions such as testing facilities, grading, and databases to keep score of each student’s progress throughout the course. Fahy (2004) notes that such a system allows for self-directed learning that utilizes prepared

materials and for control of the details of learning to a much greater extent than group instruction.

Elluminate is designed for real-time synchronous education and feedback between instructor and students. As such, it requires a computer that can play/record audio and process video, and have enough screen real estate to show all sections of the program. It can be run on Windows, Mac, and Linux. A high-speed connection is required particularly if video is to be broadcast. Should the user experience audio delays during a session, the system speeds up audio playback of missed portions so that the student can be in sync with everyone else in the electronic classroom. The instructor's display shows out of sync students so that the instructor can wait for them to catch up. Computer technical issues are cause for concern because all users need to be in sync over the computer for the system to work.

The instructor is able to see raised hand of each student in the computer and can then allow that student to ask questions. Computer files can be transferred from the instructor to students, and files can be dropped into the whiteboard portion of the program and displayed to all users, with the instructor making notes, drawing, or writing. The instructor can also launch websites within the whiteboard to demonstrate a website to students. Rooms are created by the instructor and student members assigned to each room to discuss questions and prepare answers, which they may then post for the instructor. Users create profiles in order to facilitate social networking. Each student can send instant messages and email to the instructor, and to other students from within the system. An entire classroom session is recorded and saved in Elluminate's proprietary format for future playback, which is useful for student review or in case of absence.

JESS, the second system reviewed, is an asynchronous system. Its technological requirements are lesser than that of Elluminate; a computer that is capable of running a web browser efficiently is able to run the JESS electronic classroom. Since contact between instructor and students is not real-time, a computer with lower speed Internet may be used, which makes the system attractive to highly remote areas or developing countries. The JESS system is a complete platform that can be used to conduct all the activities of an electronic classroom, including instruction, testing, maintaining records of grades and assignments, and administration. The system provides user access levels for administrator, teachers, and student.

The main menu is a tool bar on the left of the screen that allows access to various sections of the online classroom. Except for minor access-based differences between instructor and student, this menu is standard. The instructor may have a bio available in the system and students can email the instructor at any time. Previous lessons are accessible to the student and can be used to review previously covered materials in order to get the most from the current lesson. Students review lessons and ask questions which the instructor answers via a conference system. Moore & Kearsley (2005) explain that this is a valuable feature to most instructors in that it allows students to take their time when sharing their questions and thoughts.

To assess performance, the instructor may also design tests directly within the system. Tests can be timed and seven varieties of test types are possible including multiple choice, essay, true or false, fill in the blank, etc. Students view each test electronically within the system and answer each question before submitting the entire test. Different degrees of feedback may be provided to a student's work or tests, and all scores are maintained within the system. Bonuses by way of extra credit assignment, or penalties for late work or other reasons are also possible

within the grading system of the program, making the JESS system a one-stop solution for the distance learning class.

Each system serves a different purpose. As pointed out by Holmberg (2003) synchronous education is suitable for classes following a timetable and for group work, while asynchronous is suitable for personal study during periods of time that fit each student. Holmberg (2003) also points out “synchronous interaction with a tutor and with fellow students may seem desirable, but is often out of reach” (p.133). Moore & Kearsley (2005) also observe “some students prefer the reflective thinking style associated with print while others thrive on the impulsive live dialog in a teleconference” (p.95). These observations bring us to the point made in the beginning of this essay: that different needs call for different modalities of distance learning.

References

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