

VIRTUAL CLASS ROOM MANAGEMENT

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ABSTRACT

Virtual classrooms, virtual degrees, and virtual universities are actually explicit realities in today's educational community. Barker (1994) notes that we are now educating geographically diverse populations and that "virtual [classrooms] will become as common place in higher education as the chalkboard once was". Flexibility in educational provision is one of the many benefits that can result from the use of the World Wide Web in higher education. Of particular concern is the need to blend face-to-face and technologically mediated experiences, and to provide the capacity to mix synchronous and asynchronous collaboration as part of a flexible learning program.

KEYWORDS: Advanced Educational Experiences, On-line Learning Environment

INTRODUCTION

A **virtual** classroom is defined here as a computer accessible, on-line learning environment intended to fulfill many of the learning facilitation roles of a **physical** classroom.

It does ...what a blackboard does for a real classroom.

What's a virtual classroom?

Here are some of the key elements of a virtual classroom:

Virtual education is a term describing online education using the Internet. This term is primarily used in higher education where so-called Virtual Universities have been established. Virtual courses – a synonym is online courses – are courses delivered on the Internet. "Virtual" is used here to characterize the fact that the course is not taught in a classroom face-to-face but through some substitute mode that can be associated with classroom teaching.

INSTRUCTION MODES FOR VIRTUAL EDUCATION

- **Virtual Classroom:** A virtual classroom is a learning environment created in the virtual space. The objectives of a virtual classroom are to improve access to advanced educational experiences by allowing students and instructors to participate in remote learning communities using personal computers; and to improve the quality and effectiveness of education by using the computer to support a collaborative learning process. The explosion of the knowledge age has changed the context of what is learnt and how it is learnt – the concept of virtual classrooms is a manifestation of this knowledge revolution.
- **Hypertext Courses:** Structured course material is used as in a conventional distance education program. However, all material is provided electronically and can be viewed with a browser. Hyperlinks connect text, multimedia parts and exercises in a meaningful way.

- **Video-Based Courses:** Are like face-to-face classroom courses, with a lecturer speaking and Powerpoint slides or online examples used for illustration. Video-streaming technologies are used. Students watch the video by means of freeware or plug-ins (e.g. Windows Media Player, RealPlayer).
- **Audio-Based Courses:** Are similar but instead of moving pictures only the sound track of the lecturer is provided. Often the course pages are enhanced with a text transcription of the lecture.
- **Animated Courses:** Enriching text-oriented or audio-based course material by animations is generally a good way of making the content and its appearance more interesting. Animations are created using Macromedia Flash or similar technologies.
- **Web-Supported Textbook Course:** Are based on specific textbooks. Students read and reflect the chapters by themselves. Review questions, topics for discussion, exercises, case studies, etc. are given chapterwise on a website and discussed with the lecturer. Class meetings may be held to discuss matters in a chatroom.
- **Peer-to-Peer Course:** Are courses taught "on-demand" and without a prepared curriculum. A new field of online education has emerged in 2007 through newonline education platforms.
- **Interaction:** The classroom must offer interaction by allowing the students to ask live questions of the instructor as well as to collaborate among themselves. This interactivity, and not a canned presentation, is what defines a classroom.
- **Content:** The content of the class must be emphasized above the technology being employed. Students are in a classroom to learn new things, and thus the subject-oriented content should be the focus of the virtual classroom, not the technology behind it.
- **Practicality:** As a practical matter, the classroom should not depend on high bandwidth or specialized hardware if it is to be successful for the general population. Too many distance learning initiatives have failed because they required students to attend from special labs, or to install satellite dishes or ISDN lines. These barriers are unacceptable to most learners and, in most cases, are unnecessary.

A VIRTUAL CLASSROOM-PROS AND CONS

If you aren't familiar with distance learning, then the idea of attending classes online can be daunting. What you should know is that virtual classrooms are relatively easy to navigate and contain all of the resources you need to complete your degree on time and efficiently.

A virtual classroom is an online learning environment that contains all course materials. Virtual classrooms usually include email and chat rooms, so you can talk to your classmates and instructor just like you would in a real classroom. Virtual classrooms are an easier and more convenient way to attend classes, you can choose when to attend and you can complete the course from the comfort of your own home.

When you log in, you are taken to a landing page where your instructor can post announcements for all students to see. There is usually a section containing links to all the different pages of the virtual classroom, including lectures, assignments, tests, links, and contact information. It is a good idea to go through the virtual classroom tutorial before starting a course to get a feel for how the technology works.

A virtual classroom is part of a learning management system, or LMS. The LMS is the software that delivers and maintains the virtual classroom. Some of the most common LMS's that colleges use are Blackboard, Moodle, and WebCT. These software programs are essential to the existence of online classes.

The LMS is designed to be easy to use and has many features that weren't available before. The instructor can create a dynamic course without having to learn web design skills. This technology has opened up the number of courses available to students over the internet and revolutionized the education industry.

An approach in making opportunities for the learning can be considered in terms of virtual classrooms in the following topics. They were all physically in the same room. Some instructors require that the class get together in the chat room of their course at a specific time once a week to discuss lesson.

- **Target Location:** Learners can choose any course from any instructor from around that world if they are allowed to register without the limitation in terms of location.
- **Flexible Time:** Learners can participate at any time (day or night). Feedbacks can be given by both instructors and peers without the limitation in terms of time.
- **No Commute:** Learners can work and learn at home. This is an advantage for the people with disabilities because they do not have to travel. Even the people who are responsible for the family can learn. This factor is an opportunity which brings alternatives and comfort.
- **Time Saving:** Learners who have to commute can save time if they learn with virtual classrooms.
- **Collaboration through Technology:** Learners can exchange information easily in virtual classrooms whereas it is difficult in normal classrooms. Learners in virtual classrooms can discuss issues and share their projects.
- **Opportunities for Participation:** With communication system using computer as a medium, learners have more opportunities. They have the same opportunities in asking, making points and participating in activities.

Virtual classrooms have the following objectives:

- Virtual classrooms are developed using virtual image creation technique.
- The efficiency of the virtual classrooms is measured so that they can be used as a digital medium for on-line and off-line connectivity.

EXPECTED OUTCOME

- Learners can learn in a safe way, with less risk which might arise from errors and mistakes in real situations.
- There are more opportunities for learners to go to places where they cannot travel in real life, for example, practice in a dangerous laboratory.
- This is an opportunity for learners to do an experiment in a simulated situation.
- There will be procedures for the development of virtual classrooms as a resource for the bodies of knowledge in the next research or the related fields.

There are many arguments for and against the use of **virtual classrooms** for instruction. Some of the benefits include:

- Completion of the course at your own pace
- You can attend classes from anywhere; all you need is an internet connection
- You can have a full-time job and still have time to attend classes
- You will have more time to enjoy the things you like to do

The arguments against online classes generally involve the asynchronous communication between the class and instructor. This means that there is no simultaneous interaction between the instructor and students, instead communication is through the posting of messages, which take time to reply to. However, almost all LMS programs have the chat room feature, which allows students to interact with each other and the instructor as if lesson materials. This provides the same kind of interaction that the students would get in a typical classroom session of the course.

The advantages of online education are so numerous that it is impossible to list them all. The most important thing to remember is that **distance learning** can open up many opportunities that weren't available to you before. You can earn your degree and advance your career all from the comfort of your own home in less time than ever before.

The inclusion of out-of-the-classroom supplemental materials and activities, particularly real-world industry-provided problems, is known to reinforce concepts and improve learning in ways not available through traditional methods of lecture. Students develop problem-solving skills, project management skills, communication and teaming skills, and a sense of professionalism through such experiences. For Engineering Economy in particular, real-world problems convey the difficulties of data gathering, assumption making, and problem formulation, and bring to light the importance of economic analysis in decision making. While the potential benefits may be great from real-world problems and supplemental materials, the investment of time and effort in creating and administering these can be significant. Reflecting on limited resources and time of all participants, one must question whether student learning is sufficiently improved to justify the significant effort required for offering such experiences in courses other than senior design courses, the most typical course for such enriched experiences.

The rapid growth and affordability of Internet and computer technology has provided an immense opportunity for educational institutions to expand, enhance, and perhaps replace traditional classroom teaching. Web-based instruction, or the virtual classroom as it is sometimes known, is an environment that can potentially facilitate collaborative learning among students, between students and instructors, among instructors, and between an entire class and wider academic and non-academic communities. The virtual classroom can also be used to support independent and active learning techniques and self-paced instruction. While the Internet offers many new potential benefits, exactly how and to what degree the Internet is effective in education is an important question to address. This is especially true in light of recent studies that show classroom instruction cannot be effectively replaced solely by a virtual classroom environment.

When used as a supplement to the classroom, however, the Internet has been shown to be an effective medium for enabling new approaches to education. It can help to define an interactive learning environment with new opportunities for students to experience distributed and cross-functional teams, increased personal attention, and collaboration with industry for teams as well as individual students.

Web-based instruction is an evolution of computer-assisted instruction (CAI). While the benefits of CAI have been difficult to substantiate empirically, many studies have found a definite reduction in learning time for computer instruction, representing a significant advantage for industrial training programs. Another significant benefit of CAI is its cost effectiveness, particularly as the cost of computer hardware continues to decrease and software platforms for developing instructional treatments proliferate. CAI has become the backbone of many "media" comparison studies. Studies have treated the media as the independent variable and performance (e.g., a grade or final score) as the dependent variable. Clark and Russell observe that "no significant difference" in media studies is a common finding and it simply suggests that changes in outcome score did not result from any systematic differences in the treatments compared.

"Distance learning" has undergone many transformations in the past few years. It began as correspondence courses and moved to audio and videotape. Now, distance learning has entered the era of live, online classrooms. Early forays into virtual classrooms focused primarily on video and video conferencing. The genre has included non-interactive classes, such as college courses on cable TV, somewhat interactive courses that use satellite feeds and button-boxes for response, and highly interactive classes that employ two-way video conferencing over broadband networks. Which type provides distance learning, then? Perhaps none of them.

THE STUDENTS PERSPECTIVE

Students may perform a variety of confidential tasks through the student menu. A student may select an unfinished assignment and choose to complete it. Consequently, an assignment form is sent to the student, and the student resubmits the form upon completion. If the instructor permits, students may also select a completed assignment and view their answers and the answer key. Additionally, students may view a summary of their assignment scores or change their password and email address. Asynchronous and synchronous communication privileges are similar to the instructor's. Students may email other class members, join in a classroom discussion forum, and interactively chat with other class members. Unlike instructors, students may not edit characteristics of a discussion forum.

ASSIGNMENTS

Assignments are HTML form created by the instructor and stored in Class Net's Data base. A Class Net assignment editor helps instructors build various types of assignment forms. Through the editor, an instructor may perform question-level activities such as adding questions, editing questions, providing answers to questions, and specifying question point totals. Instructors may also perform assignment-level activities such as specifying a due date, making the assignment available for student completion, and permitting students to view the answer key. Knowledge of HTML is not required in the assignment-construction process, although it can be advantageously used to construct assignments containing audio, video, or Java simulations.

FEATURES AND FUTURES

Separating content delivery from course management is a design decision deserving special attention. By relegating content delivery to other servers, Class Net can manage many more classes and provide better performance than a server which must do both. Classroom data for the past semester (fall, 1996) has only required 10.7 megabytes of storage space for approximately 45 classes (both national and international) and 560 students, while maintaining an acceptable level of performance. Requests for new Class

NET FEATURES INCLUDE

- Storing links to student Web page portfolios,
- Calculating weighted grades and permit deletion of lowest score,
- Storing or routing incoming data from Java simulations,
- Providing a class calendar, and
- Providing a reminder file of important deadlines.

CONCLUSIONS

The development of Class Net has been an exciting and ongoing process of thinking how to improve education using the Internet. The use of the Web and CGI scripts has allowed distance education to become much more interactive. For example, the weather forecasting contest has been extended to other elementary, secondary, and postsecondary students and classes. This was not possible without the use of a tool such as Class Net and required no modification of Class Net's design. Our hope is that Class- Net will aid teachers in facilitating the learning process by better managing local as well as global classrooms.

REFERENCES

1. Barker, D.I. (1994). A technological revolution in higher education. *Journal of Educational Technology Systems*, 23(2), 155-168.
2. Dix, J.A., Allen doerfer, R.D., Jones, W.E., Lacey, R.A., & Laurenzi, B.J. (1995). An electronic curriculum for introductory chemistry.
3. *Journal of Educational Technology Systems*, 24(2), 151-157.
4. Pitt, M. (1996). The use of electronic mail in undergraduate teaching. *British Journal of Educational Technology*, 27(1), 45-50.
5. Poling, D.J. (1994). Email as an effective teaching supplement. *Educational Technology*, 34(5), 53-55.
6. Shotsberger, P.G. (1996). Instructional uses of the World Wide Web: Exemplars and precautions. *Educational Technology*, 36(2), 47-50.
7. Stout, M.W., & Thompson, J.L. (1995). Instructional design issues and the World Wide Web. *Educators Tech Exchange*, 3(1) 24-35.
8. Thach, L. (1995). Using electronic mail to conduct survey research. *Educational Technology*, 35(2), 27-31.
9. Wei He, P., & Knapp, S.D. (1995). Electronic reserve with WWW: A promising way to enhance classroom instruction. *Journal of Educational Technology Systems*, 24(2), 119-125.