The Stanford University (California) Overseas Studies Program has offered students the opportunity to study abroad for the past 40 years. In the 1998-99 academic year, the program took its first step toward utilizing technology to offer its students multi-site courses—courses taught by a single faculty member with students participating from several overseas centers. This paper focuses on case studies presenting an analysis of the implementation of the multi-site courses during the 1998-99 academic year. Included in the case studies are background information on the Stanford Overseas Studies Program and its use of technology; a description of the courses; and an analysis of the courses, including a description of the courses structure and technology. The paper concludes with recommendations for others interested in offering similar courses. (Contains 14 references.) (MES)
The Multi-Site Course: Using Technology to Enable Global Course Offerings

Makoto J. Tsuchitani
Stanford Overseas Studies, Stanford University, Stanford, CA 94305-3089
mako@leland.stanford.edu

Abstract: The Stanford Overseas Studies Program has offered students at Stanford University the opportunity to study abroad for the past forty years. In the 1998-1999 academic year, the program took its first step towards utilizing technology to offer its students multi-site courses -- courses taught by a single faculty member with students participating from several overseas centers. This paper presents the issues encountered in offering globally distributed courses and makes recommendations for others interested in offering similar courses.

Introduction

Many universities are involved with expanding the scope of their course offerings via distance education. Last year, for example, the School of Engineering at Stanford University began to offer a Master's degree which could be earned solely via distance education. The Stanford Overseas Studies Program has also been interested in exploring ways to utilize technology to benefit its students. The development of the multi-site course format is a result of recent explorations.

The Stanford Overseas Studies Program is one of the first overseas studies programs at a major university to offer courses where students in a particular course are distributed in centers throughout the world. One of the primary reasons for exploring this multi-site course format was to enrich students' experience in the course through interactions, discussions, and collaborations with others studying and living in different cultures. Every effort was given to guarantee that these courses equaled, if not surpassed, other course offerings in meeting students needs.

This paper will focus on case studies presenting an analysis of the implementation of the multi-site courses during the 1998-1999 academic year. Included in the case studies will be background information on the Stanford Overseas Studies Program and its use of technology; a description of the courses; an analysis of the courses, including a description of the course structure and technology. This paper shall conclude with recommendations for those interested in conducting a multi-site course of their own.

Background

The Stanford University Overseas Studies Program has offered students at the university the opportunity to study abroad for the past forty years. Stanford has overseas centers located in Oxford, England; Paris, France; Florence, Italy; Berlin, Germany; Kyoto, Japan; Moscow, Russia; Santiago, Chile; and Puebla, Mexico. Courses offered at the centers are taught by local instructors as well as visiting Stanford faculty.

While administrators of some overseas studies programs have been fearful of the use of technology in their programs, Stanford Overseas Studies has been supportive of the use of technology in its overseas centers for the past ten years. Those who oppose the use of technology in overseas programs believe it encourages students to stay too connected with their home campus and country, thus interfering with their overseas experience. Although the use of technology at Stanford's overseas centers has generally been limited to students using the computers for word processing, accessing email, and "surfing" the web, Stanford Overseas Studies has been very interested in expanding the use of technology to enrich its overseas course offerings. The use of technology offers the means to expand course offerings by making courses available at multiple sites, as well as making better use of local overseas experts, having them appear as guest lecturers in courses at the Stanford home campus.

Stanford Overseas Studies' first step towards greater use of technology has been the collaboration on various technology based projects with different groups on the Stanford campus. Last spring quarter, together with Stanford Online, for example, engineering students in the Berlin and Kyoto centers were offered the opportunity to take courses via Stanford Online's web based format which utilized a streaming video technology, vXtreme, to present lecture material.
It was not until this past year, however, that Stanford Overseas Studies was able to hire an additional staff member, the Academic Technology Manager, who enabled them to move forward with their agenda to more fully utilize technology in their courses. Stanford Overseas Studies submitted a proposal and was selected to participate in the Academic Technology Specialist Program which is managed by Research and Instructional Technologies Support of the Stanford University Library/Academic Information Services. Academic Technology Specialists provide to faculty on-site, intradepartmental consulting and support in information and instructional technology for academic purposes to foster their awareness and use of technological resources, both within and outside of the university. In the case of Stanford Overseas Studies, their Academic Technology Manager would play a vital role in overseeing the management of the multi-site courses.

**Course Descriptions**

Stanford Overseas Studies' first multi-site course was a Religious Studies course, "Religion in Culture," which was offered in the fall quarter of 1998. Students in this course studied the different ways in which religion forms and is formed by culture. After an examination of different theoretical approaches to that subject, students worked on projects that drew on the resources of their local sites. Examples of such projects included understandings of the relation of religion (e.g., the church) to the state, depictions of specific sacred themes in art and architecture, the character of distinctive religious activities such as pilgrimage, and the significance of holy people, living and dead, for some believers.

This Religious Studies course involved participants from five different locations. It was taught by a Stanford faculty member who was based at the Florence center. The teaching assistants for the course were located at the Stanford campus in Palo Alto, CA. While the course was open to students at any of the overseas centers, a total of nineteen students from the Florence, Paris, Berlin, and Oxford centers enrolled.

The second multi-site course was a Comparative Literature course, "Literary Institutions," which was offered in the winter quarter of 1999. In this course students examined institutional structures and contexts for literature in different studies. However, rather than focusing on the close readings and interpretation of particular works, students explored how literature is presented to its public at various levels. Some of the questions raised in the course included: What sorts of literature are discussed in the press, and what are the issues raised by such literary criticism? How is literature presented in schools? Is it primarily the "local" national literature or is "world literature" read? Do students read "minority authors"? What texts are taught at universities, and what plays performed in theaters?

The Comparative Literature course involved participants from six different sites. While the faculty member and teaching assistant were located at the Stanford campus in CA, the twenty-four students in the course participated from overseas centers in Oxford, Paris, Berlin, Florence, and Santiago.

**Course Structure**

Traditional modes for delivering distance education courses have been correspondence courses, courses on audio and video tapes, and satellite/cable broadcast courses. These formats have been most successful at delivering educational programs based on the "traditional" delivery of knowledge model of learning, which treats learners as passive recipients of information. The active learning model, however is based on the notion that more effective learning is achieved when the learner is actively engaged in the creation of knowledge rather than the passive recipient of information. More specifically, learning is achieved within an environment that fosters interactions between learners and instructors, between learners and content experts, and amongst learners themselves.

In order to ensure that the multi-site courses were not just email or web based correspondence courses, an active learning, or learner centered, model was adopted for the multi-site course format. The faculty structured the courses to be project based and emphasized collaborative work amongst students, encouraging students from different centers to work together. This structure required students to complete a significant amount of field research in their local environment. The technology used in the course not only allowed students to communicate with the faculty member, but also enabled them to share their research and experiences from their host countries with one and other. The multi-site courses also employed the use of local mentors at each of the overseas centers. The local mentors were content and/or language experts of the native country. Their primary role was to assist students in accessing local resources when conducting their research. Since students did not have face to face contact with the
faculty member teaching the course, it was important that the local mentors were not perceived as "local" instructors for the course. Otherwise, if the students perceived the local mentors as local, or "surrogate," instructors, they could have begun to rely on the local mentors as "the instructor" and their online participation would have suffered. The course could have become fragmented and "mini courses" might have developed at each center.

Technology

A course web site was constructed for each of the multi-site courses. These web sites included course related information such as the syllabus, assignments, a calendar, and a web based discussion software. The discussion software was utilized as the primary means for interaction between the faculty member, teaching assistants and the students.

Students utilized the computer clusters, available at each of the overseas centers, to access the course web sites. The clusters consisted of Macintosh computers and a laser printer. A flat bed scanner and Sony Mavica digital camera were also available to allow students to capture images and upload them along with their postings. Sony digital cameras were selected because the use of regular floppy disks as the recording media, a familiar technology, made it easier for students to transfer their images and upload them with their postings. Students utilized the cameras to include photographs of literary institutions they visited in their local communities.

The Academic Technology Manager acted as the technical liaison coordinating the campus computing resources for the faculty member, teaching assistants, students, and overseas center staff. Because these courses were somewhat experimental in nature, the Manager's role was crucial in ensuring that the proper technologies were in place in order for the courses to be conducted. In addition, the Manager acted as the system administrator for both courses.

Web Crossing, by Lundeen Associates, was the threaded discussion software utilized to support the Religious Studies course. Web Crossing provided the capability to setup folders to organize course discussion according to topic, assignments, or group project. The faculty member and teaching assistants determined the structure of the folders for the course discussions prior to the beginning of the course.

The Comparative Literature course utilized the Forum, a web based discussion software developed by the Stanford Learning Lab, to support course discussions. The Forum was selected because it provided additional functionality over Web Crossing, and its interface provided a more efficient method for navigating discussion threads. In order to combat the connectivity problems that were experienced in the previous multi-site course, the Stanford Learning Lab was able to provide use of a dedicated line to Sweden that one of its other project partners was utilizing. Use of this line meant that the course web server could reside on the Stanford campus, but appear to be located in Sweden since it was assigned a Swedish IP address. Students at the European centers utilized the Swedish server address in order to route their traffic to Stanford via the Swedish dedicated connection, thus bypassing any bottlenecks on the east coast of the United States. Students from the Santiago Center successfully accessed the course server utilizing the Stanford server address.

A Comparative Analysis

Since course participants in the Religious Studies course were distributed in five different countries it was decided that Web Crossing, a web based discussion application, would be an appropriate technology for providing a rich "classroom environment."

While Web Crossing has the capability to include images along with postings, as well as a chat component, neither of these functions were used, however, in the Religious Studies course because of connectivity problems. Both the Web Crossing server, as well as the web server for the course web site, were located on the Stanford University campus. Access to these servers from the European centers was very slow and unreliable during most of the day (8 am - 11 pm). Connection speeds were so poor that students generally surfed the web with images turned off. Given that conducting telnet sessions was difficult at best, it was decided that synchronous communication was not feasible given the current connectivity between the centers and Stanford campus.

While the course was ultimately successful, a number of other difficulties were encountered. The overseas centers lacked the on-site support staff necessary to adequately support students who had difficulty using the technology. In addition, the faculty member and teaching assistants had limited experience using "advanced" technology prior to teaching this course. They were previously primarily familiar with word processing and email.
While they were ultimately able to learn and effectively utilize the discussion software, it was at times a struggle and a stressful process. Lastly the normal course “house keeping” issues became much more difficult and time consuming to manage with the course being distributed amongst several locations. Registering a distributed group of students into the system and issuing logins and passwords took a significant amount of time and effort.

The faculty member and teaching assistants felt that the course succeeded on many different levels. While it took some time for the students to adapt to the different learning environment, once they felt more comfortable and adjusted to the connectivity problems, they were motivated to participate in the online discussions. In fact the volume of the number of postings surprised the faculty member and teaching assistants. They were especially surprised by the frankness in which the students shared personal information, such as their religious background, which would never had occurred in a "conventional" classroom.

A course web site which incorporated the use of the Forum, a web based threaded discussion software developed by the Stanford Learning Lab, was utilized as the primary vehicle for (asynchronous) communication in the Comparative Literature course. The Forum provided the faculty member the capability of creating folders to organize the course discussions and assignments.

Because the Comparative Literature course had the benefit of utilizing the direct line to Sweden, it was determined that there was sufficient connectivity to support a synchronous communication component in the course. A simple chat client was integrated into the course web site. Weekly chat sessions were conducted as a follow up to weekly assignments, to discuss and share research findings, as well as build a sense of community for the students in the course.

Weekly assignments were posted on the course web site. Students would then post completed assignments into the appropriate folder within the Forum. In order to ensure that students participated in online discussions, students were required to post a minimum of five initial responses to a topic question and respond to at least one topic thread each week. There was less instructor participation in discussions as the quarter progressed in order to allow students to take full ownership of the discussions. In addition, students easily incorporated digital images or other documents (e.g., Microsoft Word, etc.) as attachments to their postings.

In addition to posting assignments to the Forum, the students were involved in a real time chat session (synchronous communication) with the faculty member once a week. The chat sessions were conducted after the weekly assignments had been posted to the Forum. These sessions gave the faculty member and students an opportunity to further discuss assignments in real-time. These sessions also served as a vehicle for building a sense a community for the students in the course.

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While Web Crossing displayed the contents of a single discussion folder per screen, the Forum software utilized a three pane window to display a listing of folders, a listing of messages in a folder, and the contents of a specific message. In general its interface was more flexible and took less time to load in a browser. In addition the Forum provided a means for the faculty member to make general course announcements and easily include attachments (i.e. images, Word documents, etc.) with their postings. Another very beneficial feature was the email copy feature available when posting messages. The Forum provided users with the ability to send, via email, a copy of any posting to a specified group of users (i.e., the faculty member, faculty member and teaching assistants, all students in the course, students from a specific center, etc.).

The faculty member played a key role in the success of the Comparative Literature course. His use of a learner centered approach in structuring the course was a major factor in its ultimate success. Because he was more experienced user of technology, he had an easier time learning to effectively use the technology to manage his course. At the beginning of the course, he spent a significant amount of time and effort online in creating the feel of a community for the course, responding to every student posting in the Forum. In these postings, he would repeatedly emphasize to students that they should look to one and other as resources, encouraging them to seek out other students, especially those at other centers, to collaborate with on their projects.

Conclusion

Stanford Overseas Studies found that the development of the multi-site course format gave us the opportunity to create exciting globally distributed learning communities in which students became active learners, local researchers, and collaborators engaged in real and personal learning activities. The inclusion of students from centers in different countries added an additional dimension of incorporating multiple perspectives on important topics, issues, events.

This shift from the passive to active model of learning required a shift in the roles of both faculty member and students. The cooperation of the faculty member in modifying their teaching style was very important to the
success of the multi-site courses. The faculty member no longer played the familiar role of "disseminator of the knowledge." His/her role became one of facilitator instead. Rather than requiring a major term paper, students were encouraged to work collaboratively in completing a group project. The formation of groups was facilitated by the faculty member. S/he encouraged students with like interests to work together; especially students from different centers.

In developing the multi-site course format, every effort was given to guarantee that these courses equaled, if not surpassed, other course offerings in meeting students needs. That is, the multi-site course was not the repackaging of a course delivered via distance technologies. Special care was given to ensure that the technology used in the course did not become the focus, or interfere with the content, of the course. A major restructuring of the course, including a shift to a learner centered methodology, was thus necessary to utilize the technology in a way to maximally benefit the students in the course. In other words, having the faculty, students, and technology staff embrace a learner centered methodology was a key to the success of the multi-site course format.

The following is a list of issues to consider for those who may be contemplating offering their own multi-site courses:

- Under a learner centered model, students need to assume a far greater responsibility for their learning. Besides choosing what and when to learn, they must become active questioners and investigators. Whatever the environment, it is important that students feel comfortable conducting an intellectual discussion or doing work.

- It is important to encourage participation and/or structure activities to get students involved in online discussion. Students need a clear understanding of what is expected of them and the objectives and outcomes of each assignment/activity. These needs are heightened in courses which are taught via a distance where nonverbal means of communicating is not possible.

- Faculty members need to remember they need to allow students to take ownership of class discussion and assume the role of the facilitator, not necessarily the "instructor."

- Planning and designing an effective distance course requires a significant amount of time and resources. For instance, faculty must develop meaningful projects/research opportunities for students in the local communities. In addition, funding for stipends needs to be secured for bringing "local experts/mentors" into the course.

- Lastly, institutionalization of the appropriate technology is imperative for the success of multi-site courses. Local centers need to have the technology (i.e., software, hardware, and connectivity), along with the local technical support, to participate in this type of course.

Stanford Overseas Studies views these first couple of courses as the first phase of its venture into the multi-site course format. Future plans involve the refining and possibly redefining the use of synchronous communication technology. There are also plans to branch out and offer more media rich courses, such as a photography course, in the multi-site course format.

In conclusion, new technologies for distance education have the potential to provide learning environments that can support active learning only if combined with shifts in teaching styles, content delivery, and learning activities. Curriculum design and technology integration are also essential. Curricula needs to be designed to take full advantage of the technology and go beyond the traditional delivery of knowledge model. Without these changes, Internet based courses are nothing more than correspondence courses conducted by email.
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