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**University of Illinois as a World University:
The Marriage of High Technology and Liberal Arts in the Field of East Asian
Studies**

The first steps towards a program for joint instruction between the University of Illinois, the University of Tokyo, Seoul National University, Hanoi University and Peking University using advanced computer-guided video-conferencing technology and internet communications.

Short Term Goal:

Over the next two years a set of critical courses in the humanities at the University of Illinois, University of Tokyo, Seoul National University, Hanoi University and Peking University will be open to students and faculty of all four participating schools using advanced computer technology provided by the Office of Instructional Resources. Taking advantage of its world-class program in computer engineering and computer science as well as advanced internet capability, the University of Illinois will be the first institution in the world to offer a program whereby courses taught in both English and the languages of Chinese, Japanese and Korean at four separate institutions in different countries are available to our students.

Although the use of such international links will eventually transform the entire university, it will be primarily in the humanities, and specifically in East Asian studies that we will begin this program. After a short pilot program limited to several focused seminars conducted entirely in English, a full program offering a wide variety of courses first to graduate students in East Asian Studies will be set up. Many courses will be offered that would otherwise be unavailable in the United States anywhere.

By dint of the overwhelming advantages that the University of Illinois holds in the computer sciences the humanities program at University of Illinois will be transformed. We will have a program in East Asian studies that will be the envy of schools in the United States and throughout the world. We will be able to promise within Liberal Arts and Sciences a group of scholars second to none because of the participation of those at universities in East Asia and elsewhere and would turn our program in East Asian studies, and other departments soon thereafter, into programs that could compete with any academic program in the country.

Whereas a private university such as Harvard can hire one or two outstanding teachers in any one field of East Asian studies, we would be able to offer access to courses at three major East Asian institutions thereby making ourselves an international center. Eventually our advantages in computer science will make the University of Illinois a vital center for studies in the humanities throughout the world.

Moreover, University of Illinois would not only offer courses in English in conjunction with University of Tokyo, Seoul National University, Tsinghua University and Peking University, it would take on the role also of a transfer

point through which courses shared via video-conferencing between those three universities were routed even in such cases as courses for which there was not great demand at University of Illinois. University of Illinois could promise to act as the hub for video-conferencing and internet instruction and eventually define the world standards for international education.

Long-term goal

The United States has closer economic and political ties with East Asia every day. Already the United States has considerably greater economic ties with East Asia than with Europe. After Mexico and Canada, which are essentially part of the domestic economy, the major trade partners are Japan, China, Germany, United Kingdom and Korea. At the current rate of change, China, Japan and Korea may well become the top three in the next five years. Moreover, from electronics, to software and daily use items, East Asia has an immense impact on current manufacturing and technology. Our applied sciences are increasingly working in cooperation with East Asian academic institutions and private corporations. We have a large number of graduate students and faculty from East Asia. And yet East Asian Studies has not received the attention it deserves on our campus. A strong East Asian studies program with a reputation as strong as our E.C.E. & Computer Science departments is essential to the well-being of University of Illinois.

This project in international internet instruction will not only make University of Illinois the primary center for East Asian studies, it will make it a presence in East Asia as well. Subsequently the reputation of University of Illinois within the humanities will increase. An outstanding program in East Asian studies will make all the difference as East Asian culture becomes more mainstream in the United States and the actual command of Chinese, Japanese and Korean more important in high technology fields. Already multi-Asian word processing is becoming an immense field in the computer industry.

No one has any doubt that we will need specialists in the future not only in the humanities, but also in technical fields, who have an outstanding ability in those languages. Access to instruction in the original language at universities in East Asia would make all the difference.

There is an absolute limit to what the University of Illinois can be as an international university unless its program in the humanities has at least as great a reputation as that in the sciences. This program will allow us to use our advantages in computer technology to catapult our program in the humanities to the top. Cooperation will extend into the applied sciences as well allowing for joint laboratories and joint programs in science and technology.

The program in connection with University of Tokyo, Seoul National University, Tsinghua University and Peking University would establish University of Illinois as a major center in East Asian studies. Eventually courses would be shared with universities in countries all over the world so that the student at University of Illinois would be able to access classes that would otherwise be unavailable. Likewise, our faculty could offer courses for a collection of students at different institutions that they would otherwise not be able to find a sufficient audience for.

Benefits to be obtained from this program of study

So much of our computer related research, interaction with high-tech corporations, and future markets for our graduates involve East Asia. Whereas a university like Harvard or Princeton has great advantages in terms of the financial backing for studies in the humanities, they are in fact limited in faculty to a few well-known professors. By setting up a lattice of courses of instruction available to students at University of Illinois, University of Tokyo, Seoul National University, Tsinghua University and Peking University that is administered by the University of Illinois, we will be able to offer a breadth of courses that cannot be matched by any other university. We will not only level the playing field, we will make our technological advantage the key to our program in the humanities.

There remains considerable sensitivity between China, Japan and Korea at an institutional level even as the three countries are drawn together by economic, technical and cultural ties with the United States and each other. For this reason, the University of Illinois is in the unique position of being able to act as a conduit for intellectual exchange between the three Asian countries which will dominate the economy and culture of the 21st century.

It would be far easier for a student at University of Tokyo to take courses at Peking University through our program than to actually work through the complex bureaucracy surrounding such study in Japan or China.

The University of Illinois program in international video-conferencing and internet instruction could become a major institution within East Asia, and as East Asia increases in importance, so will University of Illinois.

Our program will be extended out into the sciences as well, thereby allowing cooperation on scientific projects between the four institutions at a level of complexity and immediacy previously unimaginable. If the University of Illinois acts quickly it can seize the lead in what will be an inevitable revolution in higher education.

Although initial instruction will focus on East Asia, once the system is in place, courses at universities in France, Germany, Italy, Turkey, or elsewhere will also be handled. Specialized courses that could not be offered before due to low appeal to the overall student body will then be available. Problems concerning visas for students and visiting faculty will cease to be a concern.

The disadvantages of University of Illinois location would be completely offset by this program, and the flexibility of the university as a whole in engaging in this project would soon make it a rival with major Ivy League universities. We might not have the endowments that those universities have, but we would be able to match their offerings, their foreign programs, and their faculty. University of Illinois would become the conduit for this new network of international scholarly exchange--and if we do it quickly, we have the chance to jump to the forefront of the academic world.

Steps involved:

A) A series of focused academic conferences on set topics involving University of Tokyo, Seoul National University, Tsinghua University and Peking University. A conference on a subject such as “Modern Chinese history” will include scholars from each participating university and allow us to employ the new medium. Such academic events will make the power of this new approach quite clear to all involved.

B) Discussions with University of Tokyo, Seoul National University, Tsinghua University and Peking University concerning the administration of a trial run of the video-conferencing instruction program. Must make sure that video conferencing facilities were available at the appropriate time at all four campuses, and that their software was mutually compatible. First trial will be entirely courses that are conducted in English, 2000-2001. Either an ISDN or I.P. line, or the new Access Grid of Electronic Visualization Lab will be employed. The times for classes will be China time 8 AM - 11:30 AM; Seoul/Tokyo 9 AM - 12:30 PM; Champaign-Urbana 6-9:30 PM

C) Set up small administration for the trial program.

D) Arrange for a set of classes at each university to be available via video-conferencing to students at all four of the universities on a regular basis. Set up a unified format for the video-conferencing and internet components of these courses. Set up a system for organizing the courses and allowing courses to be available not only to students from University of Illinois, but also simultaneously to students at the other three campuses. Thus a course on Japanese history at University of Illinois, for example, would be attended by students from Beijing, Tokyo and Seoul. The first run would be courses carried in English in the humanities in East Asian studies at each institution that would then be available at all four universities for real time participation (available at University of Illinois from 6-9 PM). Other courses would be taped from all four universities and be made available on the web to a limited number of students at all four campuses. On line asynchronous discussions will supplement the occasional video conferences.

At first a pilot program limited to four seminars (one at each campus) conducted entirely in English will be undertaken.

Eventually a specially outfitted room, or series of rooms at each respective campus complete with a life-size transmitter screen, a simultaneous electronic writing board, instantaneous interactive pads for each students, and complete internet e-mail equipment for interaction in English, Chinese, Japanese, and Korean would be set up at each campus.

D) Set up a program for granting credit for the courses offered by the program between the four universities.

E) Put together database of all faculty at each of the institutions participating that can be readily adjusted at a later date so that scholars covering similar subjects can easily communicate with each other.

F) Run a set of courses for which credit is actually granted between all four universities.

G) Expand that set of courses from one humanities course for each university to include courses in both the humanities and the sciences. Also arrange for video conferencing between the seven universities as part of joint research in the humanities and the sciences.

H) Arrange for the use of such video conferencing to set up joint laboratories in the sciences between Asia, Europe and the University of Illinois. Expand the range of the technology quickly so as to make the University of Illinois a clear world leader in education.

Basic approaches

1) Lectures from designated classes that are recorded on video and made available at the other campuses. Students would watch the lectures then compose e-mail format responses (or postings on a web page) that would be responded to by teaching assistants at the campus from which the lecture originated. The video recordings of lectures would be divided into two different categories: video tapes of lectures that could be kept permanently on file & video tapes of lectures that could be shown only one time and then have to be destroyed.

2) E-mail address exchanges between students at each university studying similar subjects. The students would carry out an extended dialog via e-mail, or postings at a common web page for the course of a semester—perhaps working on projects together. After a month or so, there would be a video conference discussion between students on a the topic they had previously investigated.

3) Extended video conference academic conferencing on set topics for professors and researchers. Scholars working on a similar topic would meet to discuss a topic of common interest via video conference. They would first exchange comments on set topics via postings at a common web page (in whichever language was most appropriate ECJK). As scholars would not have to pay for travel and eventually will be able to carry out such academic conferences from the computers they have at home, the international conference will become far, far easier.

4) Occasional meetings via video conference for students taking similar courses at all four universities. Faculty members would also be present for these non-credit intellectual exchanges.

5) Selected seminars conducted entirely via video conference including students from all four campuses (conducted in language appropriate to the subject). These seminars would be conducted largely via daily posting at common websites with an actual video conference once a week, or perhaps once every two weeks (alternating with a meeting of students at the local campus). Papers would be sent via e-mail for grading, but require a special code to identify them as

original. The grade received by a student is in all cases at his own institution, so there is no problem with credit for the course attended.

6) Joint web pages between administrators at each institution that are accessible only by code. These web pages would allow the presidents of each institution, for example, to share valuable information or tips for future cooperation without that information becoming public. It would make it simple for a dean, for example, to figure out who is the person of equivalent rank in the other three institutions.

7) Joint web pages shared by scholars in similar fields. Thereby professors in Chinese studies, for example could easily go to a web pages on which all scholars working on China at all four institutions are listed. They could then proceed to arrange scholarly exchanges on their own.

8) 50 minute multi-media class modules on a set topic prepared for viewing via internet at each university. The module would consist of A) a spoken lecture by a professor; B) a set of images related to the topic; C) a set of relevant texts illustrating the issues concerned; D) recordings of relevant sounds. So a 50 minute module on Chinese poetry would consist of a selections from a lecture on the topic by a professor, images of Chinese landscape and traditional clothing, selections from Chinese poems in the original language and in translation and a recording of a poet reciting his own composition. After observing the entire module, the student would respond to various topics and engage in an e-mail discussion with students at his campus and the other three campuses. He would also have to respond to the teaching assistant who would grade him on his comments.

9) Massively parallel research laboratories. Scholars conducting research on a specialized topic, say chip fabrication, would be connected via a dense tissue of video conferencing, sophisticated shared web pages, shared data bases and systematically coordinated planning. Therefore massive parallel research laboratories could be created between the four universities in which faculty and facilities could be massed and complex tasks partitioned and assigned so as to avoid duplication. The result would be a new level of speed and sophistication.

10) Immigration has become an issue and the governments of Korea, Japan and the United States have made it more difficult for Chinese students to obtain visas recently. Although such policies are often unfair, immigration is a serious issue to take into account. If Chinese students and scholars can participate completely in the universities of Korea, Japan and the United States via internet and video conferencing, however, they can make a full contribution without leaving China. After they have finished their studies, they can work for international companies and make a significant contribution to the world economy while remaining in China and using such internet, shared databases and video conferencing technology.

11)

ASYNCHRONOUS SYMPOSIUM:

The asynchronous symposium is an innovative format in Internet communication designed to allow intellectual discourse between individuals with similar fields of expertise who otherwise would never have any contact for reasons of culture. In a nutshell, there are four parallel web pages representing a basic “chat room” on which participants can post their responses to a given topic. In this first experiment, the languages of English, Japanese, Chinese and Korean are suggested, although obviously there is no limit. The responses posted by scholars on each of four parallel web pages are then translated into the other three languages and posted for the other participants to read. The first asynchronous symposium will discuss the broad issue of technology and globalization. Once the web pages have been developed and translators are found, any number of subjects can be brought up.

THE ASYNCHRONOUS SYMPOSIUM IS CONDUCTED EMPLOYING FOUR PARALLEL WEB PAGES.

The Asynchronous Symposium is conducted over four parallel (but linked) web pages. One page is set for English input, one for Chinese, one for Japanese and one for Korean. A set of questions or topics are posted at the top of each web page in the four languages. Scholars (or experts) post their responses to the given subject at the web page set for their own language. Thus a Chinese scholar merely composes in Chinese. Graduate students (or professional translators) are paid to translate the postings into the other three languages from each web page every twelve hours. Therefore a scholar reading the postings in any one of the four languages can have a discussion with others with similar interests but unable to express themselves in a foreign language. A special code is required to log on to a page.

This format allows meaningful dialogs between individuals who would otherwise never communicate. Even if they met, they would most likely feel ill-at-ease or inarticulate. The cost of paying graduate students to do the translation is minimal compared with the costs of putting together an international conference—although the relationships established by these asynchronous exchanges may lead to further projects. Moreover, the results of such an asynchronous symposium would most likely be worthy of publication in a magazine or newspaper.

Major intellectuals or government officials in China, Japan or Korea may well get in the habit of logging on to this informal discussion when they grow tired of their work late at night. We may well get insights otherwise unavailable.

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Underlying Principles for the University

I

The next generation of the internet will bring far more reliable and user-friendly means of communicating information. As a result a thick binding tissue will develop between institutions involved in the systematic application of internet connections. The implication is that the effectiveness of one's hierarchy of connections, and its user-friendliness will determine the status of the university more than actual physical installations on campus. The internet and video conference ties to other universities of scale abroad will make the difference to the university. This truth has not been realized, but it will soon be apparent.

II

When we visualize the university, we should imagine a mirror that has been broken into hundreds of shards and lies spread across the floor. Each splinter shines brightly and the total is most impressive. The important point, I feel, is what can be achieved if each of the fragments of glass is tilted ever so slightly. Each fragment does not have to actually be moved, or transplanted, just propped up in one direction or another. Once this process is achieved, the light reflected from each piece will converge on a single point, a single goal. Then the light reflected by those many fragments will be powerful enough to vaporize the dense stone. Imagine if we could add the light reflected by fragments from other institutions to that beam.

III

There are figures who made great fortunes in real estate by pursuing the following strategy. They look at maps of the city over a period of twenty or thirty years, figure out where the business and residential centers are, then interpolate as to how the city will expand and transform over the next five to ten years. Once they have mapped out their speculations as to what will happen to the population in the near future, they buy farmland in those areas that look like they are marked for development. Once the farmland is bought, it can be rented back to farmers, and the proper moment must be awaited. We should plan for the university in precisely this manner.

IV

Video conferencing will make teaching over the net far more legitimate and convincing in the next few years. Internet technology is rapidly moving towards a "just like actually being there" state. It is not there yet, but this is the time to approach the technology systematically. Video conferencing will also become a central part of the internet as well during that period. This moment is the best moment to enter into the field in a systematic manner.

V

Time zones can be a problem, but asynchronous learning can be as effective, or more effective, than live teaching. Asynchronous discussions punctuated with live video conferencing can achieve all required goals. Written responses can be far better than classroom comments. It is just a matter of refining the technique.

VII

Internet connections can be viewed as connective fiber tying together institutions. Pairing up specialists at different universities as that connective fiber grows thicker can lead to a unique international academic community.

Webpage for Concept:

www.staff.uiuc.edu/~epast