

## NEW COMMUNICATIONS TECHNOLOGIES AND THE UNIVERSITY

Prepared for the October 24-25 Allerton Conference

of the

Commission on the Reform of Undergraduate Education and Living

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The emergence of several new communications technologies in recent decades offers important new possibilities for universities. A few of these are described below for purposes of initiating discussion.

### A. THE USES OF PLATO OUTSIDE THE CLASSROOM

During the next four to five years, the PLATO system at the University of Illinois is scheduled to expand from the simultaneous operation of 20 terminals to the simultaneous operation of 4000 terminals. Although the PLATO system has been designed primarily as an educational device to be utilized by existing educational institutions, the PLATO IV system might also be viewed as a new kind of mass communications system - a mass communications system with feedback. If radio and television are thought of as first and second generation mass communications systems, then perhaps the PLATO system can be thought of as a forerunner of a "third generation mass communications system."

Assuming that these metaphors do not too badly overstate the case, but rather are useful in prodding us to imagine new possibilities, then it would seem that such a system could have many uses beyond conventional classroom activities. A few of the applications which might be considered are as follows:

1. The PLATO system could be used by students, faculty members, and administrators as a medium for discussing university policy in addition to its use in the classroom. At present there is a need for finding new ways to involve students in thinking about the University's goals and policies, and the social consequences of its operations. The probable spread of PLATO-like systems to additional universities during the 1970s implies that others will look to the University of Illinois as an example of how to use this new educational technology. Our actions could thus have an important impact on the direction which higher education will take in coming decades.

2. Alternative long-range plans for a city could be presented to members of the community for their comments and suggestions (see my article "Citizen Sampling Simulations: A Method for Involving the Public in Social Planning").

2.

3. PLATO terminals installed in a manufacturing firm could be used for at least three purposes:

- a. Job training of new employees and retraining of existing employees in new jobs at roughly the same level of skill.
- b. Educating present workers for corporate advancement. Expansion of this activity could provide an alternative to university certification as the almost exclusive route between blue collar and white collar positions and professional and management positions.
- c. Exploring alternative long-range policies and their possible consequences, for example, whether to manufacture war materials and whether to hire more hard-core unemployed.

#### B. AN ELECTRONIC WORLD UNIVERSITY

The idea of a world university has been around at least since the time of the League of Nations. However, the concept, as it is usually applied, refers to a brick and mortar institution, though having an international focus and usually located on neutral ground. But if one of the functions of the university is interpreted to be the transfer of information to a group of people for purposes of education, then the door is open to a whole new range of possibilities using communications technologies which reach beyond classrooms and lecture halls.

If Walter Cronkite on the evening news can speak to potentially every student in the United States every day, why cannot every student in the country take a course from John Kenneth Galbraith, Herbert Marcuse, George Wald, or any other professor who is willing to devote the time and whom the students want to hear? Similarly, with communications satellites and news reports from Viet Nam and Egypt why is it that every student in the United States, Europe, and Japan (at the very least) does not have a regularly scheduled guest lecture from people such as Jean-Jacques Servan-Schreiber and Eldridge Cleaver?

There can be little doubt that an electronic world university either would require or would bring about a very different kind of international system. Imagine the difficulties which would be encountered if a Russian professor were to teach economics to American students, if an American professor were to teach corporate law to Chinese students, or if a Cuban professor were to teach the history of revolutionary movements to Latin American students. Such hypothetical cases are useful in helping us put our present universities in the perspective of the idea that a university by its very name teaches universal knowledge.

The transition to a world with a smoothly operating electronic world university would in all probability be a period of unprecedented turmoil in human history. But an electronic world university can exist without actually being called that. Indeed, the evening news on television, cheap paperback books, the underground press, student exchange programs, television debates, films of America in the 60's, Prague in the summer of '68, and Paris in the spring of '68 already constitute a kind of informal "university." The real question may not be when or if we will have an electronic world university but rather the degree of difficulty which a broad range of institutions is now having and will continue to have in adapting to the expectations of successive generations of students raised in information environments far more complex and technologically advanced than those existing in the university.

#### C. COMMUNITY OR STATE-WIDE EXTENSION BY MEANS OF CABLE TV

During the next decade or two cable television will increase the number of channels available to most people from the present 3 or 4 to somewhere between 20 and 50. It would seem to be reasonable for the universities to have access to about 5 or 6 of these channels. Such an allocation would give the universities about as much television time as is presently controlled by ABC, NBC, and CBS combined, though with a smaller audience due to competing channels.

There is certainly ample reason for universities to want to expand their amount of television time. Present media coverage of campuses does not present a balanced picture of the activities which take place there. Live transmission or edited video tapes of lectures, discussions, seminars, evening meetings, and films made by students or professors would serve to present a more complete picture of university activities, and would presumably be of value to the viewers. It would seem that the public would be far more inclined to generously support their universities if they were regarded as institutions which served the public, in addition to the students, by providing useful information on a daily basis. Accordingly, a new function of universities which could boost public support of higher education in general might be the preparation of television programs on health, nutrition, product quality, news analysis in historical perspective, the psychology of interpersonal relations, and discussion programs presenting individuals addressing controversial issues with the opportunity for viewers to phone in questions.

A few of these kinds of programs are already available on television, though certainly not in abundance. Is the University, or some group within it working to enlarge the educational uses of television in the light of the arrival of cable TV? If professors prepare lectures for classrooms, why should they not prepare programs for television? Why should universities limit themselves to the classroom methodology of conveying information? Increased use of educational television could complement or serve to some extent

as an alternative to open admissions.

More generally, do we want our institutions to define themselves in terms of the communications technologies, which by historical accident they have traditionally used, or in terms of the functions they perform? One might assert that educational television constitutes an alternative to the educational function of the university in every way except certification. Why should educational television be limited to education without certification? Indeed, if the university has become the gate-keeper for social advancement, would it be desirable to create alternative institutions to certify the acquisition of knowledge or skills?