Universities contain powerful blocs of resistance to new educational technology, perhaps especially to television. University attitudes and structures as well as faculty ignorance, apathy, and resistance affect the development of cable television. No one seems to speak with great confidence and precision about the educational potential of cable. In addition, financing of cable television in the universities will depend on the policy the nation as a whole finally adopts. Nevertheless, research universities can contribute to the development of cable television. The crucial question of measuring the effectiveness of the end result will require universities to train higher-level experts in both the uses of the medium and the evaluation of the results. Beyond that, the universities should provide well-planned and executed research in the problems of cable, including those of its organization, relations with other media, preferred funding alternatives, civil liberties, implications, political, sociological, and psychological impact, and so on "ad infinitum." Most immediately, however, universities should be developing software which combines television with other kinds of teaching. However, the first requirement is money. (WCM)
Cable Television and the University

by Richard Lyman

Surely my good friend Henry Chauncey and colleagues who planned this conference must have had their tongues at least partly in their cheeks when they decided to invite to deliver the keynote speech a humanist, an historian converted into a university administrator, a person whose idea of “communications” is a note from his wife reminding him to wear a necktie because there will be 38 people coming for dinner; a man whose grasp of advanced technology reached its peak when, at the age of 15 he assisted in the replacement of a cylinder head gasket on a Model A Ford; an individual who finally got around to watching Sesame Street after having rashly accepted the invitation to speak here, thereby spoiling his record of being the only sighted adult left in the United States with no firsthand experience of how it is possible to educate the very young by exposing them to a hairy monster that lives in a trash can.

SOME UNIVERSITY ATTITUDES

The papers published in this volume have been presented by the experts. They have surveyed the landscape and reported what they found. I now know something of what they found, but when I was thinking about what I might say this evening, I did not. Clearly, for this reason and for the
others already implied, I shall make no attempt to give a balanced sketch of the current state of play between cable and the universities. Still less shall I try to pose as a seer concerning the future of cable; to ask me to do so would be a bit like asking Alley Oop to prophesy the Apollo moonshots. Rather, I'd like to make a few comments on the attitudes and structures to be found in the kind of university I know best, as they affect, or are likely to affect, the future use of this emerging medium in higher education.

I happen to have spent the last 15 years in what is classified by the taxonomists of higher education as a "major research university." A "research university" is not, of course, one that is wholly devoted to research. Impressions to the contrary notwithstanding, a research university generally does a great deal of teaching, of both undergraduates and graduate students. But the major research universities, even those in the public sector, tend to be selective -- often highly so -- in the students whom they admit. Those in the private sector charge outlandish prices, which nevertheless don't begin to cover their costs (Those in the public sector have high costs, too, but in their case it isn't so obvious who is paying.)

Both the publicly supported research universities and the private ones are often criticized for paying insufficient attention to "continuing education," that is, to providing educational opportunities for people beyond the classically accepted student-age group, people who very often, for one reason or another, cannot attend the university full-time. The private universities for the most part deserve this criticism. The public ones deserve it less, since most of them in fact do a formidable amount of extension work.

The various strands of the new technology as applied to teaching have, of course, made an appearance in these high-powered universities. Their incidence is very uneven, but I suppose no institution of any magnitude remains totally untouched. The prevailing impression, however, (as I was sure even before some of the panelists presented their views at this conference) is that these universities contain powerful blocs of resistance to new educational technology, and perhaps especially to television, whether cable or broadcast. And that impression is surely correct. For just a few moments, we might consider why this is so.

In a research university, despite all the demands for student participation in running the place, it is, of course, the faculty that holds the key position regarding the acceptance or rejection, use or non-use, of educational technology. And in our institutions, the faculty's enthusiasm for ITV of any kind has generally been muted, often downright inaudible. It is no secret that the attitude of a great many faculty members can be summed up in the immortal words attributed to a member of the Wisconsin State Legislature: "Personally, I'm in favor of leaving the status
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quo just where it is.” Why this reluctance?

The most obvious answer—and perhaps when all is said and done the most important—is simply the novelty of the thing. Yes, the novelty, however silly that may sound in this 22nd year of the post-McLuhan Era. Novelty as a medium of instruction, I mean, and specifically as a medium of instruction for them to use, with their students. There’s widespread recognition of its applications in the preschool, primary, and secondary school years. But University faculty suspect instinctively what Messrs. Chu and Schramm found out from examining the existing research on the subject—namely, that ITV has, thus far at least, been more successful at those lower levels than it has in higher education.

There may even be a feeling—conscious or unconscious—among many faculty that one of the tasks of higher education is to wean from the Almighty Tube a student body whose pre-college lives have been spent glued to it. The faculty are unsympathetic with the mentality of the individual who, responding to a Book-of-the-Month Club question “Have you read (a certain book)?”, wrote “Not personally.” College Professors, taken as a group, are Book People. The Gutenberg Galaxy still provides all that most of them think they need in the way of celestial aids to educational navigation. They read, write, publish, and derive income—both psychic and financial—from the printed word. They understand, even while fretting about and sometimes fighting with, editors. They do not understand, and may readily feel threatened by, both instructional specialists and media specialists.

FEAR OF DISPLACEMENT

Then of course there is the whole question of the fear of displacement. This can take several forms. It may be a general fear, a fear of wholesale technological unemployment. We may yet see the academic equivalent of a strike by the musicians’ union because some obstinate theater owner insists on using canned music without hiring a stand-by orchestra to sit around backstage, idle, while the tape is being played.

In the leading universities, I believe that the fear of outright displacement is slight among the faculty, if only because of a widespread confidence in—some might say arrogance about—their own abilities to compete. This could change, however, as more examples of really high quality educational programming, on the college and university level, are produced and become widely known. Sesame Street is no threat to, say, a professor of advanced botany, but a threat may soon be forthcoming, in the form of a course on the cable in which the instructor doesn’t mumble, the material is up-to-date, and the straight lecturing is agreeably and effectively mixed with film clips, close-ups of lab demonstrations, and requests for responses from the class, instantly collated by computer to
inform the instructor as to whether the students are understanding the material as it's being presented. I've seen something approaching this, though, of course, without the class response, in the broadcast history lectures of the Open University in Britain.

A more indirect concern may be the sense that the coming of cable may tend to threaten the faculty's position of authority within the university. Won't the management requirements of this complex method of instruction tend to push administrators to the fore and wrest control from the faculty members involved? Someone must sort out and try to reconcile the interests and needs of the media experts, the teaching faculty, and a new set of consumers, not to mention a new set of funding arrangements. It is perhaps significant that the Carnegie Commission recommends that: "Institutions of higher education should contribute to the advancement of instructional technology not only by giving favorable consideration to expanding its use, whenever such use is appropriate, but also by placing responsibility for its introduction and utilization at the highest possible level of academic administration."

Of course, the Commission was making a good deal of sense. But it is going to be important to give our faculty as much reassurance as possible that in the things that count most for them, such as control of decisions as to course content, and a fair share of any financial benefits to be derived from development of cable, they won't be left out.

There are likely also to be fears lest the coming of cable strike a further blow against institutional autonomy, and in favor of national standardization and regimentation. I've seen instances of knowledgeable people calling in one and the same paragraph for the utmost freedom for the individual entrepreneur and creative genius in cable, on the one hand, and for "some form of national institution that deals with the assessment and distribution of software" on the other. I'm not (at the moment at least) disputing the possibility that some such national center may become necessary. My point is simply that is bound to sound somewhat threatening to anyone who is already concerned about the rapid advance of homogenizing and standardizing tendencies in American education. And that includes many of our faculty; I cannot refrain from adding that I hope it includes many of you.

Fears aside, I suspect a good many of our faculty simply feel that ITV is mostly an approach suited to audiences other than our particular student bodies—to the part-time student, the severely disadvantaged or culturally deprived, the mass market for the less advanced or demanding kinds of post-secondary education.

This is no doubt partly intellectual snobbery. It is as if one said "The image on the box may be good enough for other sorts of students, but ours need the real flesh-and-blood scholar in their midst." (Never mind the fact that said scholar may appear as a tiny and almost two-dimensional
puppet in the front of the room, with 98 rows of seats full of your classmates between you and him.)

Yet even the Carnegie Commission, in its survey of instructional technology entitled *The Fourth Revolution*, a book that exhibits marked sympathy for its subject, only forsees between 10 and 20% "of instruction in higher education on campus" as being carried on "through informational technology" by the year 2000, and this (of course) includes a lot of things besides cable or ITV generally. Much as I understand and sympathize with the growth of part-time study and off-campus learning (the fastest-growing sectors of post-secondary education’s clientele are part-time students and women, two categories with a lot of overlap) I still see an advantage, particularly for advanced study, in the total immersion of the student in the campus environment of a great university.

IGNORANCE AND APATHY

I think it would be wrong, however, to view the faculty of the research universities as rejecting ITV, out of a combination of fears and objections based on considerations of institutional role. Another element seems to me present—indeed, it may even be dominant. That is an amalgam—a familiar tandem, perhaps—of ignorance and apathy. Most of our faculty simply don’t know very much or think very much about ITV and its potential. Still less have they focused upon cable, and the particular advantages that it will have over broadcast ITV—flexibility, adaptability to specialized audiences, and at least some ability to incorporate student responses.

One cannot entirely blame them. Having already heard me make a fairly full confession of my own ignorance, you may not consider me much of a witness. But after the brief (and I’m afraid often interrupted) cram course that I’ve undergone in preparation for this occasion, I must say that it doesn’t seem that anyone is yet in a position to speak with great confidence and precision about the educational potential of cable.

This is not intended as a criticism. There are, pretty clearly, a great many imponderables that must be resolved before a clear vision of cable’s future can be had. The whole vast question of the economics of cable is one of these. From what sources, and with what incentives, will the financing of cable be forthcoming? Without even beginning to explore the question, let me just state the obvious: The nature of the answer to the financing question that we as a nation finally develop and adopt will affect, perhaps crucially, the future of cable in the universities.

There is also much to be learned, obviously, about the problems of software in Cable ITV. It’s a commonplace that we are well advanced on the road to developing the hardware, but that the software—the programs, course materials, and so on is in short supply and of uneven quality. (I
wish I could escape the hardware/software terminology, but one might as well try to desperately oppose split infinitives.)

And that brings us back full circle to faculty ignorance, apathy, and resistance. For the faculties of our great universities should be involved in the effort to develop the software. If they are not so involved—if we cannot get them to pay attention to the problem (or, if you prefer, if we can't get them to take up the challenge)—I doubt that the resulting system will be anywhere nearly as good as it could and should be.

In so saying, I certainly do not mean that they must take over the production of software. When cable has come into its prime, and we are all living in the Great Wired Wonderful World, many of the master teachers whom it will bring into living rooms and classrooms all over the country will have come from outside the universities entirely. And much, perhaps most, of what has been accomplished so far has come from institutions other than the major research universities.

There is more than enough challenge to go around, in any case. Consider the task of preparing the number and variety of trained professionals, other than teachers, whose collaboration will be required if instructional television is to be more than just televised instruction; if, in short, full advantage is to be taken of the medium's possibilities. It was talking with one of my colleagues at Stanford recently, an able scholar and administrator, who once, back in the early days, worked on a crew televising professional football. He remarked on how primitive the techniques then were: "About all we did was aim the camera at the guy we thought had the ball, and try to follow him." He contrasted this to the considerable sophistication by means of which the television audience is now enabled to follow and appreciate the detail and nuances of the game and as a result, is involved in it emotionally and mentally.

Now clearly the problems of improving ITV software are much more complex. I yield to no one in my appreciation of the truly awe-inspiring complexity which dedication to the goal of making professional football America's number one sport has managed to introduce in what might otherwise have become a mere testing of brute strength. But it's still a simpler and more single-focused affair than ITV can ever be. If ITV is to achieve comparable success with its programming, its producers will have to put together more complicated and more carefully balanced production teams than are needed for sports telecasting. One suspects that integration of university professors in such teams—and deciding the precise extent to which the professor is to have the deciding vote when conflicts arise between technical and academic considerations—will be trickier than the parallel problems in sports telecasting.

There is also the crucial question of measuring the effectiveness of the end result. Measurement of the effects of higher education is a problem very much on a lot of people's minds these days. (Even at Harvard, where
the value of what the institution provides for those fortunate enough to be its students is sometimes thought to be taken rather for granted, a research project is under way, backed by the Federal Fund for the Improvement of Post-secondary Education, entitled "Value Added: Measuring the Impact of College.") In the case of televised instruction, an additional dimension is added to what is already a baffling set of problems. It isn't very satisfying to be told that there is no observable difference between televised instruction and more traditional modes, or even that ITV is better, when we know so little about how to measure either.

At Stanford, we have found that it's not too difficult to interest members of our faculty in playing the role of professor in a televised course—perhaps there's a touch of the lens louse in each of us—but that it's quite another matter to enlist scholars in taking on the tough challenge of evaluating the results. Yet without such evaluation we shall be left to the tender mercies of more or less unguided trial and error. In a time of strained resources in education, a blind man's bluff approach isn't likely to find much favor from the possible funding sources in government and the foundations.

WHAT RESEARCH UNIVERSITIES CAN CONTRIBUTE

Let me sum up what I believe the major research universities should be able to contribute to the progress of cable in higher education, before offering a few tentative do's and don't's for anyone wishing to persuade the universities, and especially their faculties, to venture into the effort.

The universities can help train the higher-level experts in both the uses of the medium and the evaluation of ITV's results. The latter will be more difficult than the former, but it must be tried. And both would benefit from more explicitly focused efforts. It's great to be able to adopt skills learned for one purpose to the achievement of another—we successfully made computer scholars of converted physicists and mathematicians before the first computer science departments were born. But a little clearer recognition of cable in Education and its skills requirements surely would not hurt.

Beyond that, the universities should provide well-planned and executed research in the problems of cable, including those of its organization, relations with other media, preferred funding alternatives, civil liberties implications, political, sociological, and psychological impact, and so on ad infinitum.

Most immediately, however, if ways can be found to free up the necessary resources, such as topflight faculty, without despoiling the rest of our teaching program, we should be constructing our share of the software—the courses for television, or (more likely) the courses that combine TV with other kinds of teaching. (Perhaps 20% of the teaching done in the Open University in Britain is on TV, and when one visits the
place, one is impressed by the extent to which it's a publishing house as much as a TV producer's headquarters.)

Now, assuming that it's important to do so, how is one to lure the universities and their faculties into doing all this?

The first requirement is, of course, money. You would not believe that I'm a real university president if I did not say that. But to discuss the financial problem would require a whole separate speech, and I shall not inflict that upon you. Besides, what I'm going to suggest is not the Grand Strategy, but merely some possibly useful hints on tactics.

First, if you're approaching a university administrator, don't tell him/her that your proposal represents only "a modest expansion." He has heard that so often in relation to projects that in fact represent considerable outlays and lasting commitments that you'll simply increase his wariness that way. Indeed, you might wish to consider the opposite approach—a shock tactic like "This represents such a daring leap into the future that only a truly courageous and imaginative president (provost, dean) would consider taking it."

But admittedly that is risky, so you might consider lulling him into a false sense of security by using all the clichés he has become accustomed to at once: "a modest expansion," "truly innovative approach," "soundly based on the already recognized strengths of the institution," and so forth. Especially don't forget to throw in "prestigious."

As a fourth—and to me preferred—alternative, you could try telling him/her the truth, as accurately as you can forecast it, as to what your proposal will cost and can reasonably hope to achieve. As Mark Twain said long ago, "Always do right. This will gratify some people and astonish the rest."

In approaching the faculty, in most cases I would suggest a careful avoidance of media and computer jargon. Resist catching aphorisms like the well-known definition of the human body as "the most highly-developed, non-linear negative feedback system that can be produced by unskilled labor." Let them learn that kind of thing for themselves; they'll pick it up soon enough.

Instead, look for reassuringly familiar words and phrases, designed to make faculty members think that, if the coming of cable to the campus is to be a revolution, it will be a mild one, one that will still leave largely intact the old, comforting landmarks—classrooms, blue books, library lines, and the rest. A British friend of mine who is a professor at the Open University brought me solace and a sense of security another day simply by referring to this bright and shiny new institution as "the boring old Open University," for all the world as if he were talking about the most soporific of Oxbridge senior common rooms.

In dealing with everybody in the universities, watch out carefully and be prepared in advance for the swirling eddies (and dangerous undertow) of conflicting interests in academe—for example, the frictions between
faculty and administration concerning issues of copyright or who will gain which dollars from a successfully marketed video-taped course. Speaking wholly dispassionately as an administrator, I hope that universities will have the sense to secure at least some of the return from such ventures for the institution and not be content simply to provide overhead, equipment, and heaven knows how many free services to faculty entrepreneurs. (See what I mean by "swirling eddies"?)

I'd also urge you to resist, no matter how great the temptation, telling academics that you've found universities to be the most set in their ways and resistant to change of all the species of institutions you've met—too decentralized to make a decision, too many vested interests to make a progressive decision, too much academic vanity to make a sensible decision. Either the people you'll be dealing with think this already—in which case your comments will be redundant—or they may be insulted.

Finally, don't oversell the product. In a new book by the perceptive French journalism entrepreneur Jean-Louis Servan-Schreiber, there is a delightful anecdote about how Marcel Proust listened to the entire opera Péles et Mélisande, over the subscription service telephone. Predictions were no doubt rife that this would become the normal way of attending the opera; would not the theaters all be dark once this convenience had become generally available? Well, here we are, 72 years and heaven knows how many radio programs, movies, and television productions later, and it hasn't quite happened. The point is not, of course, that the telephone had no future merely that its future didn't turn out quite the way people thought it would in 1902. Many academics are convinced, and not without reason, that there's very little, ever, that's genuinely new under the sun in education. They're used to encountering the Hawthorne Effect—and to seeing it fade, once the new methods, of whatever kind, have become established and familiar.

All of this I say not to be discouraging, and certainly not to defend some sort of Academic Maginot Line against developments that are full of promise for the improvement of education and the significant broadening of cultural opportunity. There has been a lot of frustration, I know, among those who have come to recognize the great potential of the cable, yet have encountered resistance or apathy in the world of higher learning, and more of it, apparently, the higher you get. Yet every major advance of technology has encountered similar phenomena in the affected community, at least for a time. And nowadays, faced as we constantly are with the mixed blessings that human ingenuity and entrepreneurial zeal have brought us, we may well be less contemptuous of those who resisted than it was fashionable to be in an earlier and more innocent time. It's more important to arrive at our destination than to cut corners. Perhaps we all need to remember the cry of that supreme realist among statesmen, the French Minister Talleyrand, cautioning his coachman: "Not so fast!"
Not so fast! We are in a hurry."

REFERENCES


