

DOCUMENT RESUME

ED 088 130

CS 500 621

AUTHOR Markham, David  
TITLE Instructional Technology in the Liberal Arts Curriculum.  
PUB DATE Jul 73  
NOTE 4p.; Paper prepared for the Summer Conference of the Speech Communication Association (Chicago, July 1973)

EDRS PRICE MF-\$0.75 HC-\$1.50  
DESCRIPTORS Behavioral Objectives; Communication Skills; \*Curriculum Development; \*Educational Objectives; Educational Theories; Instructional Design; \*Instructional Technology; \*Liberal Arts; Persuasive Discourse; \*Speech Curriculum; Speech Instruction; Teaching Techniques

ABSTRACT

Instructional technology involves the use of devices or systematic patterns of thought to influence behavioral patterns in educational situations. Technology by its nature requires uniform responses which, in liberal arts program in communications, demand certain preconditions. First, the human communication discipline must obtain pertinent questions from instructional technology that pertain directly to the relationships between communication methods and affective behavioral results. Instructional technology must also be interactive so that students' questions and statements can be related to the technological devices. In addition, liberal arts instructional methodology must provoke an understanding and criticism of the socio-political environment and allow students some degree of reflective distance from specific topics (as provided in writing assignments or analyses of film, video, and audio recordings). A proper application of technologies to a liberal arts program can assist in the education of students in effective discourse, persuasion, and interpersonal communication. (RN)

ED 088130

U S DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-  
DUCED EXACTLY AS RECEIVED FROM  
THE PERSON OR ORGANIZATION ORIGIN-  
ATING IT. POINTS OF VIEW OR OPINIONS  
STATED DO NOT NECESSARILY REPRESENT  
OFFICIAL NATIONAL INSTITUTE OF  
EDUCATION POSITION OR POLICY.

INSTRUCTIONAL TECHNOLOGY IN  
THE LIBERAL ARTS CURRICULUM

By

David Markham

Associate Professor  
of Speech-Communication and  
Cybernetic Systems

California State University, San Jose

"PERMISSION TO REPRODUCE THIS COPY-  
RIGHTED MATERIAL HAS BEEN GRANTED BY

David Markham

TO ERIC AND ORGANIZATIONS OPERATING  
UNDER AGREEMENTS WITH THE NATIONAL IN-  
STITUTE OF EDUCATION. FURTHER REPRO-  
DUCTION OUTSIDE THE ERIC SYSTEM RE-  
QUIRES PERMISSION OF THE COPYRIGHT  
OWNER."

SCA Summer Workshop

July 13, 1973

5 500 621

ERIC  
Full Text Provided by ERIC

## INSTRUCTIONAL TECHNOLOGY IN THE LIBERAL ARTS CURRICULUM

We Americans have always had a lot of "know how." Over the past twenty-five years some rather penetrating questions have been asked about our collective intellectual abilities concerning "know what" or "know why." We modern sophists or, more often called, behavioral scientists have not been very concerned about these two questions. Unfortunately, professional philosophers have not shown very much interest either. Today, I wish to speak to you not as a behavioral scientist, social critic, nor media technocrat. I am first of all, a teacher. And, I should like in this segment of the conference, to address and raise some fundamental questions concerning speech communication pedagogy and curriculum.

Some terms need to be defined. A liberal arts curriculum is a systematic unfolding of a pattern of traditional values that are common to all persons. This definition is not only neo-Platonic, but also highly pragmatic. Only through a common set of values can personkind survive. This survival and whatever is beyond will depend upon communication and common perceptions of a very complex environment. In truth, the liberal arts curriculum directly concerns the architectonic science, politics. The Western concept of rhetoric or communication has nearly always centered on this conception of the liberal arts.

A second term requiring definition is technology. Technology is people's use of devices or systematic patterns of thought to control physical and social phenomena. From this description it follows that virtually all of mass education or schooling is technological. Technology has few "know what" or "know why" statements imbedded within it, except for two most important value dimensions. Once a technology is introduced on a mass scale, it becomes irreversible and secondly, technology directly creates secondary effects on human lives.

Let us now try to draw some fundamental distinctions between the virtues of technology and the virtues of a liberally educated person. First, technology is compelled to deal with measurable attributes. Yet, the virtue of an educated mind is that it is unmeasurable by its nature. The differences between these two worlds appears in the following simple example. We could, given the time, develop an extremely complete technical description of a redwood tree. Yet, we could not begin to capture or measure the impact on anyone of us, the sight of one of these majestic trees, nor more importantly, could we, through technology explain why we should make plans to preserve such trees.

The second definition between a virtue of technology and a virtue of a person's intelligence is the fact that technology by definition has to operate in a sequential pattern, while a person's thoughts when forming an idea do not. Please do not misunderstand me at this point. In the

process of training, thought is sequential, but not in the process of education. Training is akin to analysis, or data gathering which is important, but education is synthesis or illumination which is a truly human activity. Civilized discourse is, after all, synthesis in one of its highest forms.

Technology by its nature requires a uniform response. This is a sobering feature of instructional technology. The question for us is at what points of curriculum do we wish to design points of uniform response or training, and at what points are we capable of designing uniqueness and education to free the mind to discover the common elements of personkind.

Before I am accused of being a neo-Luddite, I affirm my belief that instructional technology has a very important place in liberal arts education. Technological imperatives however, are of such a nature that the machine often leads the teacher rather than the teacher developing systems guided by human purposes. This paradox follows from the nature of technology which is to create the line of least resistance; to manufacture the easy way out. Since the student's intelligence is complex, and unique to him or her, there is no uniform line of least resistance in a collective educational experience. Hopefully, technology will be intentionally transformed to produce more difficult lines of resistance.

In order to design an instructional technology subordinate to intellectual purposes, several conditions must be met. The purposes are useful to a liberal arts education. In actual design practice, the conditions will probably never be fully reached, only approached.

A first principle is instructional technology should produce telling questions. Questions which are central to our discipline as we understand it. In human communication, one telling or central question is how does the tension between cognitive and affective systems operate? In other words, do the symbologies we use think and feel correct? Conditions of interpersonal power, trust, credibility, status, roles, norms, perceptions, all have influence on these tensions. Further, we all have various technologies in our sophistic suitcases that produce conditions which produce tensions with some clarity. I am afraid that we are collectively guilty of using these devices as means rather than to further ends of understanding. Do our students really understand the telling question concerning the interactions of the dimensions of persuasion?

From this first principle, a second follows. Instructional technology must be interactive. Student questions must be heard and statements must be perceived as questions. Devices such as computer assisted instruction, language laboratories, and programmed texts are beginning to move in this direction of interactive questioning. We should be urging more motion in this direction.

I am afraid that much of our technology in speech communication does not really operate in a very interactive fashion. Or at least the teachers who apply the technology don't really want to deal with a truly interactive process. In application, the telling question must be paramount in the teacher's cognitions.

A third principle of liberal instructional methodology, is that the methods must provoke an understanding and radical criticism of the socio-political environment. Technology should be focused on the collective values and cognitive norms of a segment of humankind. Do our students understand the effects of poverty or abundance? How do the socio-linguistic patterns reflect the collectivities around the world or even in one's own community? Our students are in the process of inheriting the most powerful economic-political system yet devised. Will they be able to apply that power with compassion or arrogance? More specifically, what common value structures are presented to the American public via television, movies, or popular music? All of these media forms offer liberating experiences if certain questions are asked of them. Field observation with data collection devices such as cameras and tape recorders offer another rich source of data.

The final principle of instructional methodologies should be the creation of spatial-temporal distance from the topic. The student must have the luxury of reflection upon the matter at hand. This may sound strange in this electronic world of speedy gadgets, but this distance is important. Let us consider one of the oldest instructional technologies; the writing of a paper. One of the real educational functions of such an activity is to slow the student's cognitions down, fix them, and allow the student himself to evaluate his own ideas. A robust discussion accomplishes the same purpose. Intelligence does not really comprehend an attitude, idea, or value until the person can metaphorically stand in a different place so that the total concept may be synthesized.

Communication technologies also have the capability of providing such distance. A simple form would be a book; but film, video, and audio recordings hold a concept long enough for inspection. Obviously, video and auditory delayed feedback technologies use this technique, but beyond this, distance emerges also in the simultaneous presentation of several forms of media vividly contrasting two opposing modes of conventional wisdom. I have found this to be an effective means of helping students uncover our common backgrounds and biases.

None of this should imply that I oppose behavioral objectives, skill training, or the new vocationalism. All these have their place in the curriculum of mass education. One needs to know many things, including defensive listening, how to follow a question, normative pronunciation, styles of linguistic construction, how to block a play, the use of communication diffusion, and cognitive dissonance. I am arguing here that today's student also must know about his position in a complex world and the value of civilized discourse in shaping that world.