

THE LEARNER AND THE FUTURE

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Your theme for this conference is "Educational Priorities and the Future of Experiential Education." Aside from how conference participants deal with the theme, it has to be a winner as a topic. Priorities are a necessity for all of us who live in a world offering alternatives, and talk about the future is a source of never-ending fascination for human beings with their capacity for anticipating events. As individuals we live with the priorities of the present, but we dream and plan for the future. As a collective society, we seek leaders who have a sense of priority, but we also want them to entertain a vision of the future -- either the one they promise to create, or the one we are going to have to adapt to. Forecasters of the future, whether they be concerned with weather, economic conditions, ecological destinies, or college enrollments, are virtually guaranteed an attentive audience for at least the first five minutes. Perhaps that is why "the future" is such an ever-popular conference theme.

But for educators, the future is much more than an interesting conference theme. As commonly perceived, the major task of education is to prepare people -- usually young people -- for their individual and collective futures. Johnny is told that he must do well in school so that he can get into a good college so that he can be accepted into medical school so that he can become a wealthy

and respected leader of society. As far as the concern of the collective society for educational futures goes, we have consistently forked out money and support when reassured by educational fund raisers that the schools are preparing the leaders of tomorrow and that in their hands lies human destiny.

Despite our historical conviction that education prepares people for the future, it is increasingly apparent that the future is both unknown and unknowable. The work of society is now changing so rapidly that the average worker will change jobs seven times and careers three times during a working life. How does a society go about preparing a 17-year-old for life at age 50? We don't even know what personal and career skills will be needed five to ten years hence, let alone the 70 to 80 years of the average life span. It seems clear and even trite to observe that education cannot undertake to prepare people for their unknowable futures. For individuals, education will have to be geared more tightly to the present of their lives, with lifelong learning a virtual necessity.

Educators know full well that adapting to escalating change will be the inevitable constant for future generations of learners. What we are less likely to take into account is that change will dominate education itself. I refer not only to the change that occurs -- or should occur -- in the structure and delivery of education, but also to the change that occurs in the content that we teach as though it represented permanent knowledge. The knowledge explosion refers not only to new knowledge that comes to light with each succeeding generation, but also to changing knowledge. Some things that we taught as "facts" ten years ago turn out not to have

been facts at all. A well-known architect wrote recently that "Almost nothing that we were taught by our betters in or out of the architecture schools of the mid-century has stood the test of time. Nothing -- or almost nothing -- turns out to have been entirely true (Blake, 1974)."

If knowledge is tentative in such an empirically demanding field as architecture, ponder the problems of the social sciences. The president of the American Psychological Association, after grappling with the tentative state of knowledge in certain realms of psychology, urged his colleagues this fall to teach so as to remove "any arrogant scientistic certainty that psychology's current beliefs are the final truths... (Campbell, 1975)." Education, then, is not something that exists in colleges or that one gets or one has. The current picture is one in which constantly developing learners enter a constantly changing stream of knowledge at numerous points in their lives. Inside and outside of the human organism, education is a dynamic process of unceasing change.

My purpose in painting this picture of educational molecules in constant motion is not to make the case for lifelong learning, which needs no advocate in this audience, but to begin to think about priorities as lifelong purposeful learning becomes the necessary norm. Increasingly, individuals are called upon to make choices from a bewildering array of educational alternatives offered by educational institutions, government, industry, community organizations, and private entrepreneurs. While some learners are constrained by circumstances, increasing numbers of learners must decide whether to attend classes on campus, view educational television at home,

participate in an internship in the community, or engage a tutor in order to pursue some esoteric interest. Not only must the learner of the future make decisions about where and how to learn, but there are choices about what to learn -- academic disciplines, vocational skills, esthetic appreciations, hobbies, interpersonal relations. These choices are not mere dreams of a learning society that lie somewhere off in a rosy future. In many metropolitan areas these options already exist. A recent study made for the California Legislature found that "Motivated adult learners have an almost unlimited array of resources to utilize for their own personal and professional advancement (Salner, 1975, p. 147)." Almost without our realizing it, the proliferation of learning resources has grown to the point where the problems lie, not in the historical mission of providing education, but in a future responsibility for cataloging and making orderly learning programs out of available resources and in helping people to locate and participate in programs that meet their needs. I believe that one of our top priorities for the future is the provision of the information and decision-making skills that will make learners more sophisticated consumers of their own educations.

Consumerism in education is beginning to surface as a political issue, but it should become an educational issue as well. The political concern is consumer protection; the educational issue is the education of consumers for lifelong learning. One operates to dignify and make legitimate the services, the other to make sophisticated and knowledgeable the consumers of education. Both are necessary, but of the two, I believe that consumer education is the

more important, and to date it has been largely ignored. Of course we have an obligation to protect the unsuspecting and uninformed from fraudulent educational practices, but learning is a highly individualistic matter. What is quality education for one person is not necessarily quality for another, and what is excellent education at one stage of life may be quite unsatisfactory at another. At the moment, it is probably safe to say that for the majority of adults, the selection of learning alternatives is more by accident than by design. Too many learners take whatever comes to their attention -- through the recommendation of a neighbor, or the notice on the plant bulletin board, or the mailed circular from local adult schools or community colleges, or the radio announcement of an encounter weekend. Yet in this era of nontraditional expansion, we are so intrigued with the opening of the new frontier of lifelong learning that we are more interested in whether people are signing up for learning than we are in the kinds of decisions they are making. In the near future the learning options will be sufficiently great that we will have to concern ourselves with the matter of choice.

The sophisticated consumer of education should be able to answer the following questions whenever an educational choice is made:

- What are my individual learning characteristics?
- What are my educational needs at this time?
- What alternatives are available to meet my needs?
- What is the best buy in terms of money, time, and expected benefits?

This audience here today represents some articulated interests that are moving toward helping people find the answers to these questions. Nontraditional education is broadly concerned with offering learning alternatives to meet individual needs, and CAEL in particular is concerned with the assessment of learning as it affects the individual. But let us take up in some detail what educators might do to help the learners of the future become sophisticated consumers of their own education.

First, let me address the question of individual learning characteristics. At the common-sense level, we are aware that what is a rich learning experience for some people is a bust and a frustration for others. At the practicing level of conventional education, however, we ignore this and batch students of vastly differing learning styles together, blithely assuming that educational opportunity is educational opportunity. Nontraditional educators are often as guilty as traditional educators in ignoring the folk wisdom of "different strokes for different folks." The nontraditionalist who assumes that flexibility and individually-negotiated learning contracts are good for everyone may be making the same error as the traditionalist who assumes that structure and content are the universals of education.

Let me illustrate the importance of this point with a brief discussion of what we know about cognitive styles. Psychologists have been investigating individualistic perceptual phenomena in the laboratory for some 30 years now, but we are just beginning to look at the educational implications of cognitive style research. How an individual perceives a learning situation -- especially an

unstructured experiential situation -- has a great deal to do with what he notices, what he remembers, how he organizes knowledge, and how he solves problems.

There are at least a dozen dimensions of cognitive styles that have been the subject of systematic research, but for illustrative purposes. I shall describe briefly only the most extensively studied dimension which is field-dependence vs. field-independence (see Cross, 1976 for a summary of research on field-dependence-independence). Although cognitive styles are usually presented as polarities, field-dependence-independence is really a continuum ranging from global or intuitive perceptual modes at the one extreme, to analytical approaches at the other. The reason for the name field-dependence-independence is dramatically illustrated by a laboratory experiment in which the subject is seated in a darkened room with a luminous rod placed in a luminous picture frame which has been set aslant. The task is to set the rod to the true vertical position. With remarkable consistency some people align the rod to the slant of the frame -- swearing that it is vertical when it may slant as much as 30 degrees. Others ignore the frame, apparently using internal cues to set the rod upright. Those who ignore the surrounding field formed by the luminous frame are called field-independent, whereas those who depend on the slant of the frame to give them their orientation for positioning the rod are termed field-dependent.

These perceptual modes, it turns out, are related in significant ways to a number of educational variables, and we need not rig up complicated laboratory equipment to discern the cognitive style

of an individual. The phenomena that occur in the darkened room also occur when people are presented with a paper-and-pencil test known as the Embedded Figures Test. Field-independents can pick out a geometrical figure camouflaged by extraneous lines in the background, whereas field-dependents, with their global perceptual style, have a terrible time separating the figure from the background.

Other experiments demonstrate that people show consistent differences in the extent to which they are influenced by a surrounding field -- not only in visual perception, but in auditory, kinetic, and social situations as well. People who are dependent on the surrounding field to define physical situations, for example, are also field-dependent with respect to social situations. Field-dependents tend to be interested and sensitive to what other people are thinking and doing; they tend to be conforming, and they like to have people around them. Field-independents, on the other hand, are more internally directed; they are not as sensitive to their surrounding social field, nor are they as concerned about what others may think. Predictably, field-dependents are drawn to fields of study that involve people and human relations -- social sciences, counseling, teaching; whereas field-independents favor the sciences -- mathematics, biology, and engineering. Although cognitive style seems not to be related in significant ways to IQ, field-dependents are likely to have trouble with the analytical tasks demanded by school subjects such as mathematics and sciences. There are other differences between field-dependents and field-independents that have educational significance. Research indicates that the more analytical field-independents seem to structure their own learning

material, whereas the more intuitive field-dependents benefit from greater external structure.

Although knowledge about cognitive styles is still in the early stages of development, the phenomenon does seem to exist, and at the lowest level of sophistication, learners need to be self-consciously aware of what constitutes an effective learning experience for them. There is reason to think that field-independents may do rather well in independent study, whereas field-dependents may do better in learning situations that present greater opportunity for social stimulation and personal interaction. It would be interesting to know whether the dropouts from independent learning alternatives tend to be field-dependents who would probably benefit from more personal warmth in the learning situation. It would also be interesting to know whether field-dependents take to experiential learning, with its emphasis on social surroundings, more easily than field-independents. Structure and personal interaction are two variables that have implications for design and guidance in non-traditional programs. Students sometimes know or sense the learning conditions that are important for them, but if they are to become wise consumers of educational alternatives, they need to be aware that there are acceptable individual differences in learning style, and they need to be able to diagnose their own learning characteristics.

The second question to be answered by the wise consumer is what are my educational needs at any given time? Incidentally, learning needs do not always correspond to learning preferences. In the case of cognitive styles, for example, a field-dependent may be aware of her need to develop a more analytic style of perception

for certain learning situations. Hence, she may deliberately choose an instructional method that she knows will be difficult and frustrating in the hope of developing a non-preferred style. But there is a lot of difference in the attitude of students having difficulty because they think they lack ability and those experiencing temporary frustration because they knowingly set out to test themselves in difficult situations.

Beyond helping students select the methods of instruction that best meet their needs, there is the matter of choice with respect to the purpose or content of education. The national educational priority of the present is clearly directed more toward economic betterment than educational enlightenment of learners. The case for most government-supported programming has to be made on grounds of job relevance, with special attention to the potential for upward mobility for disadvantaged segments of society. Indeed, so visible is the top priority of bringing the new clientele into mainstream higher education that some dedicated nontraditionalists are downright disappointed when well-educated, middle-class segments of society keep showing up to dominate the educational offerings. But education for leisure may become even more important than education for work in the years ahead.

To be sure, the Puritan work ethic is alive and well on our nation's 200th birthday, as the majority of the populace seek self-actualization and self-fulfillment through their work. Yet there is substantial evidence that the majority of American workers are dissatisfied with their jobs. While some things can surely be done to increase job satisfaction, we may have to face the reality that

self-fulfillment is increasingly unlikely through the kinds of jobs that most people have.

If the learners of the future are to find self-actualization, it may have to come through the adoption of a "leisure ethic" in which leisure is viewed, not with negative connotations of idleness, guilt, and participation in mass, mindless spectator activities, but from a positive frame of reference in which leisure offers new opportunities to enhance the quality of life through self-development and self-actualization. I am not talking about filling one's leisure hours with the presumably worthy activity of taking classes -- a mindset that is probably related more to the work ethic than to the leisure ethic. Rather, I refer to educating learners of the future to their needs for self-definition through leisure as well as -- or perhaps instead of -- through work. We have almost no concept of helping people to build lives through meaningful, significant leisure. Yet leisure is becoming a major item in the life of the average American worker, and what is done with it will have a profound effect upon the quality of life. And so one of the oft-repeated goals of education, the worthy use of leisure time, demands revitalized attention. The future consumers of lifelong education need to be helped to assess their learning needs in the totality of self-development.

The third question that consumers of education must raise is what alternatives are available? For most adult learners this is the first question they raise rather than the third. There is already a recognized need for better brokerage systems between suppliers and consumers. The California study to which I referred

earlier undertook to catalog the educational resources in a square mile area of Oakland. The number and variety of opportunities turned up would surprise even the most determined seeker of educational opportunity. There was overlap, of course. Educational institutions discovered that their latest program launched to serve student needs already existed through public or private or informal means. If educators don't know what is going on down the block, pity the consumer who may know what he wants but does not know where to find it. The California study concluded that "Of all needs for expanded postsecondary opportunities in California the most critical is simply information about existing opportunities (Peterson and Hefferlin, 1975, p. 56)."

The need for consumer information extends beyond a catalog or card file of programs and phone numbers, however. The fourth question for the wise lifelong consumer of education concerns what is referred to in the jargon of the day as the bottom line. What is the best educational buy in terms of money, time, and expected benefits? There has been strong pressure from governmental and consumer agencies to make more information available about traditional as well as non-traditional education. Representative James O'Hara captured the general mood of educational consumerism when he made the frightening observation last spring that, "Truth in advertising is as appropriate in the catalog of a distinguished university of ancient lineage as it is in the television advertising of a trade school." The Education Commission of the States (1975) has recommended that student consumers should receive access, process, and outcome information about postsecondary educational alternatives. In short,

educational consumers should know how to gain access to appropriate educational experiences, what will happen to them during the learning experience, and what they may expect as a result -- a not unreasonable request, but an embarrassing one, given the abysmal state of knowledge about both the process and outcomes of education.

Nevertheless, education represents a substantial investment, and people should know what they are getting for their time and money. If as educators we don't know, then we can hardly blame consumer advocates for suggesting that we had better find out. I rather suspect that without substantial external pressure, food processors would still be unable to provide the nutritional information and calorie counts that are appearing with increasing frequency on the labels of canned goods. On this particular aspect of consumer information, I am aware that I am probably committing the sin of the preacher who exhorts the faithful on the values of regular church attendance. CAEL is doing as much as anyone to struggle with the problems of assessing the process and outcome variables in education.

If the learner of the future is to become a knowledgeable and analytical consumer of education, how shall we shape educational priorities? I think that we are beginning to make some progress on the easiest consumer priority -- that of providing information about educational opportunities. Certainly the problem is now widely recognized. Furthermore, we now have the capability in computer technology to store, update, and retrieve information about educational options, and in our technologically-oriented society where there is a way, there is a will.

Aside from flagrant violations, the best route to consumer protection is still consumer education. Caveat emptor continues to be good advice in a free society and for any realm in which individual values play such an important role as they do in educational choice. Indeed, as I look at the priority of preparing the consumers of education for their futures, I worry more about overprotection than underprotection. One of the responsibilities of education is to make people less -- not more -- dependent on external assistance. Yet as educational alternatives increase, there is a universal call for more counseling for nontraditional learners. While I do not deny the importance of providing readily available individualized assistance to help people make wise educational choices, an overdependence on the old counseling model could turn out to be a disservice to individuals and to the cause of lifelong learning.

I would point to the fact that the costs of one-on-one counseling are soaring out of reality in these times of fiscal austerity. Furthermore, unless people learn how to collect, analyze, and use information to their best interests, ever-escalating numbers of people will become dependent on others to guide them through the decision-making process. Learners of the future will need to make choices, but even more important is their need to learn the skills of information gathering and self-analysis. Much can be done by educators to prepare people for their lifelong role as decision-makers about learning alternatives.

I have proposed to the University of Nebraska, for example, that they offer an experiential course in Learning Analysis with

the express purpose of helping students become more sophisticated consumers of education in their remaining years on campus and for the rest of their learning lives. The course will concentrate on helping students become competent diagnosticians of their own cognitive styles and learning needs, and it will also give students actual experience with different forms of teaching-learning strategies. We want Nebraska freshmen to become self-consciously analytical about what they learn from a lecture or an independent study project or an internship. We don't expect all methods to be equally effective for all learners. That is the point of the instruction -- to individualize the diagnosis. Presumably we can teach these consumers of education, not a set of permanent answers, but the skills for diagnosing and satisfying their changing learning needs.

As I look toward the learners of the future, I see people engaged in informed decision-making about the purposes and processes of their own educations. The education of sophisticated educational consumers will not only improve the quality of education attained by individuals, but it will make a more significant and long-lasting impact on the quality of educational offerings than any other priority we could assign ourselves. In a free society, consumers who know what they want have usually been quite successful in obtaining it.

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