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ABSTRACT

This document contains the proceedings of a seminar concerned with the systematic development of the concept of life-long learning. The three most critical issues were identified as the adult learner, organization, and finance. Five major addresses and the reports of the workshops on the three issues are presented. Keynote speaker E. E. DuBois presents the concept of "androgogy"--adult education methodology--as a basis for human resources development. This concept calls for a new breed of adult educator, the manager of instruction. S. M. Grabowski looks at community needs assessment for colleges and suggests a needs identification and implementation process based on a dynamic operational philosophy for the college. J. Freeman explains the methods of Xerox Learning Systems and outlines an approach to college-industry cooperation in industrial training. H. Lisson reviews the relationship between education and industrial training and describes a "typical" industrial training program. P. A. Miller discusses community-serving colleges, the revolution in assumptions about higher education and the right to self-development and satisfying work, and making the college experience an integral part of "real life." (MJK)

PATTERNS

Proceedings of the

Patterns Seminar

April 10 and 11, 1975

A series of seminars relating
to RIT and community colleges
Center for Community/Junior College Relations
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The success of this year's PATTERNS Seminar was the result of the time, effort, and participation of numerous people.

Special thanks are due the planning committee for their untiring response to my many appeals for meetings and "special requests". The planning committee members were: Harold Alford, RIT; Charles Claar, Genesee Community College; John Cotnam, Monroe Community College; Frederick Gardner, RIT; Donovan "Buff" Jenkins, Monroe Community College; Robert Panzer, Stromberg-Carlson Corporation; Robert Pennock, Community College of the Finger Lakes; Richard Rinehart, RIT; and Ross Stuckless, National Technical Institute for the Deaf-RIT.

Thanks is also due the speakers who were so capable in transforming the concepts and desires of the planning committee into worthy presentations.

Finally, thanks to the participants from nine states, 28 community/junior colleges, and four other educational organizations without whom, there would have been no seminar.

David E. Hooten
Editor of Proceedings

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Introduction

The seminar was called because of a general concern on the part of the planning committee members for the overall, systematic development of the concept of lifelong learning. After discussion, the committee concluded that the three most critical issues related to the adult learner, organization, and finance. Of particular concern was how these related to a variety of educationally oriented proprietary institutions, business and industrial being the most important, as well as two and four year colleges and universities

Regarding adult learners Cross has said "Adults too have a claim to education that helps them develop their abilities and fullfill their lives They may not be young enough to meet the old criteria of furnishing fresh leadership to a growing technology but they are able, eager and interesting students". In a research survey of the learning preferences and experiences of adults conducted for the Commission on Non-Traditional Studies sponsored by the College Board and Educational Testing Service, it was found that 77% of the people between 18 and 60 in this country would like to learn more about something In another study concerned with highly deliberate learning the conclusion that 77% of the people would like to learn more about something was basically confirmed but it was also found that few of these people turn to colleges, including community colleges, to help learn.

The matter of organizing to recognize the special needs of adults also sends qualms of worry, and indeed fear, over the academic community. One of the most popular ways of looking at educational institutions today in terms of accomodating to change is that of the "Market Place" theory of higher education Martorana & Kuhns in their new book entitled **"Managing Academic Change"** made the observation that the focus of the world of academe has to change with societal changes. Thus the "Market Place" theory of higher education emphasizes the increasing power of the consumer of education rather than the producer. Among the resulting changes that Martorana & Kuhns forsee in coming years is a move toward the separation of academic functions and disciplines rather than their continued integration in comprehensive all-things-to-all-people institutions which have become characteristic of our educational system in recent decades. In support of this theory, Cross said in any essay appearing in **On Learning and Change** published by Change magazine, that "adult learners do challenge the heart of higher education, the curriculum-but equally important and more likely to succeed is a challenge to the time and place requirements of traditional education". Whether one agrees with this basic theory is unimportant. What is important is that the rules of organization, as are most of the rules of higher education, changing, and indeed changed, during the 1970's.

Harcleroad in his foreword to Managing Academic Change has very succinctly stated the case for funding strategies. He said "survival is a strong instinct even for educational institutions—as the current crisis in financial and moral support for post-secondary education has revealed". What legislators decide regarding funding, what business and industry decides regarding tuition reimbursement policies and what the community decides about the value of higher education will thus decide, in a very real sense, the essence of higher education.

With these, and similar, thoughts in mind, the seminar served as a vehicle to bring together a group of people to think and deliberate regarding not only the concept of life-long learning, but also the relationship the concept seems to suggest between and among all institutions and organizations concerned with the education and training of people.

PATTERNS

A Seminar Series Presented by
Rochester Institute of Technology
Center for Community/Junior College Relations

Program

Thursday, April 10, 1975

12:00 Noon	—Conference Luncheon
1:00 p.m.	—Keynote Address: Eugene E. DuBois
2:00 p.m.	—Address: Stanley M. Grabowski
2.45 p.m.	—Address: Jefferson Freeman
3:30 p.m.	—Coffee Break
3:45 p.m.	—Concurrent Workshops —Adult Learners —Organization —Funding and Budgeting
6.00 p.m.	—Cocktails—Conversations
7.00 p.m.	—Dinner
8.00 p.m.	—Address: Helen Lisson

Friday, April 11, 1975

7:00 a.m.	—Breakfast
9:00 a.m.	—Address: Paul A. Miller
9:45 a.m.	—Coffee Break
10.00 a.m.	—Concurrent Workshops —Adult Learners —Organization —Funding and Budgeting
12:00 Noon	—Conference Luncheon
12.45 p.m.	—Workshop Results; Conference Summary & Conference Evaluation.
2:30 p.m.	—Adjournment

The Expanding Role and Function of the Adult Educator in the Community College

Eugene E. Du Bois

Introduction

There have been historians who have likened the teachings of Jesus and Confucius to adult education By all measures of today's standards, these direct lines are probably correct for their students were adults and their technique was one of participation and dialogue.

On the other hand, the early beginnings of adult education in the United States may be traced to the Colonial period where unorganized educational experiences, both of a primary nature as well as vocational, were attempts to provide for a learned citizenry, and a nation of skilled artisans. The capstone, higher education, provided the trivium and quadrivium for the gentry and the leisure class.

The apprenticeship system was the earliest form of vocational education. Designed primarily for the education of the poor in the skill trades, it served as a model for even the professions. Reading law, as it was called under a lawyer, and studying under the independent tutelage of a minister was not uncommon.

Eventually the establishment of permanent institutions for the education of a learned clergy, civil servants and other professions became a mandate assumed with evangelistic vigor by religious societies across the land

Beginning in 1636 with the Puritans in Cambridge, Massachusetts and later in Virginia with the Anglicans resulting in William and Mary, the American religious societies saw the need to establish institutions of higher learning

The vigor with which these groups established institutions recently caused one denominational body to state that they really did not know the exact number of colleges and universities it had fostered Apparently some institutions were merely paper organizations and never operated.

The middle-west was ripe for the establishment of church-related institutions. The Yale Band, that group of evangelistic-educators who criss-crossed the nation founding colleges and influencing "competing denominations" has left its legacy for us today.

Familiar names such as Illinois College, Kalamazoo College, Hope College, Wabash College, Bluffton College, Albion College, Hillsdale College, and others dot the scene. Brubacher and Rudy in their classic history have termed these institutions as "hill top colleges," each attempting to model themselves after the New England college of the eighteenth century.[1]

Later common schools, private vocational schools, and most importantly, the secondary schools evolved as legally established through Michigan's historic Kalamazoo case of 1894.[2]

Historians of the field include a wide range of institutions and institutional settings for adult education. Malcolm Knowles includes within this range churches, the New England town meeting, agricultural societies, libraries, discussion clubs, such as Benjamin Franklin's **Junto**, a discussion club founded in 1727, the museum, and even the first newspaper, the **Boston News Letter** established in 1704 [3]

Contemporary Conditions

Throughout the intervening years, the field of adult education in these institutions has begun to flex its muscles. Many of the institutions that remain have changed to meet the ever changing needs and demands of a dynamic and changing society.

Indeed, the liberal arts colleges, for one, have changed not only into multipurpose universities, but even the small liberal arts colleges in many cases are pre-professional as well as liberal in the classical sense of the word.

Contemporary adult education has made gigantic progress in recent years, although far removed from the centrality of the educational enterprise. Recent reports and studies have estimated adult education and the community college to be the most rapidly growing field in education, now that the post World War II baby boom has reached its hiatus.

The concept of a "learning-society" or life-long learning has been increasing generally, although a few classicists have been doggedly dragging their feet. One recent study stated:

> The changing nature of our society requires virtually all citizens to gain new skills and intellectual orientations throughout their lives Formal education of youth and young adults, once thought of as a vaccine that would

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1 John S Brubacher and Willis Rudy. **Higher Education in Transition An American History. 1636-1956.** (New York Harper and Brothers 1958) p.69.

2. R. Freeman Butts. **A Cultured History of Western Education.** (New York McGraw-Hill Book Co. 1955) p.463

3 Malcolm S. Knowles. **The Adult Education Movement in the United States.** (New York Holt, Rinehart and Winston, Inc. 1962) pp.3-11.

> prevent ignorance later in life, is now recognized as inadequate by itself to give people all the educational guidance they will need to last a lifetime. The obsolescence of knowledge, the rapid growth of new knowledge, the shifts in national priorities, the multiplication and complexity of social problems, and the close relationship between the application of knowledge and social progress all lead to the conclusion that lifelong learning is not only desirable but necessary.[4]

Not only have theorists in adult education expanded the field as an extension of the schools and permanent institutions, they have developed strategies and specialties for a new field of social practice.

The human relations movement beginning in 1947 has found critics as well as advocates. The T (Training) Group began as an extension of the adult education movement and has been accepted as an approach toward relating the world of reality with that of the individual.

> A T Group is a relatively unstructured group in which individuals participate as learners. The data for learning are not outside these individuals or remote from their immediate experience within the T Groups. The data are the transactions among members, their own behavior in the group, as they struggle to create a productive and viable organization, a miniature society, and as they work to stimulate and support one another's learning within that society.[5]

While human relations training may be a frustrating experience for many, it has for the past three decades served as an approach towards non-traditional study of human relationships and has thus developed new strategies for learning experiences in a social context.[6]

The work of such scholars as Leland Bradford, Kenneth Benne, and others in structured as well as unstructured experiences has evolved into a host of sub specialities in the field of adult education.

The Current Educational Mood

Ever since the early 1950's adult educators, learning theorists, and academic scholars have been attempting to devise new approaches toward adults and adult learning. The traditional models simply do not meet the specific needs of adults. Based upon what is known about the learning process, and the maturation of human beings, these lock step designs do not allow the flexibility so necessary for adult learners.

The tradition of needless memorization, rigidity, and conformity are all alien to the modern practice of adult education. I once heard of a school administrator who stated that he never was able to apply any of the research in educational administration to his practice. This is a most unfortunate state of affairs.

However, this man was a public school administrator and he had a captive audience. Those of us associated with adult education do not have that luxury. If our product does not sell, then the student, our client, is increasingly finding other institutions more readily willing to meet his needs or demands on his terms.

The fact that local industry has accepted the modern concepts of adult education based upon the andragogical model has provided a number of means by which these needs may be met.

The andragogical model is based upon research from the social sciences. Its applicability has been repeatedly tested in experimental and practical situations. The adult learner has been a neglected species in too many institutions, and the methods, techniques and approaches which might be appropriate for children are inadequate for adult learners.[7]

The academic trappings of an earlier era are no longer the American dream for many. As youth determine for themselves that learning, cramming and degrees forces them into academic boxes which they find straight jacketing are no longer appealing, they are seeking alternative modes of learning, thus classrooms are becoming empty and enrollments are decreasing.

Unless the research findings which we now know support andragogical concepts, and unless the methodology of the modern practice of adult education is employed in the design of learning experiences for adults, the missing link, adult education methodology, will continue to result in weak programming, irrelevant content, and the continuance of pedagogy for adults—actually a contradiction in terms. It is not moving adult education into the centrality of education, however, it is moving the learner into the centrality of education, and then moving education into a series of planned experiences all of which embodies the concept of self-paced life-long learning.

During much of the expansion of the adult education movement, little attention was given to the unique characteristics of the adult learner. The approaches that were applied were merely a transfer of methodologies and techniques which appeared to be appropriate for children. The literature often spoke of the pedagogy of adult learning without regard to the Greek derivation of the work which relates specifically to the teaching of children.

An Andragogical Design for Learning

The concept of andragogy, "the art and science of helping adults to learn has attracted considerable attention in recent years."[8] Andragogy is based upon four assumptions about the characteristics of adult

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4. Theodore M. Hesburgh, et al. **Patterns for Lifelong Learning.** (San Francisco: Jossey-Bass Publishers.) 1973 p.3.

5. Leland P. Bradford (ed.) et al. **T-Group Theory and Laboratory Method.** (New York: John Wiley and Sons, Inc 1964) p 1.

6. See especially Donald Nylen, et al. **Handbook of Staff Development and Human Relations Training: Materials Developed for Use in Africa.** (Washington, D. C. National Training Laboratories Institute for Applied Social Sciences. 1967).

7. Malcolm S. Knowles. **The Adult Learner: A Neglected Species** (Houston: Gulf Publishing Company. 1973). This is adequate evidence to argue the andragogical approach for children and youth, however, this is not the subject of this paper.

8. Malcolm S. Knowles. **The Modern Practice of Adult Education** (New York: Associated Press, 1970). p.38

learners; 1) the adult enters the learning experience with a concept of himself as a mature human being with values and an adultness unique to himself, 2) as an adult, he has a body of past experiences which he may utilize in determining that which is relevant to his learning needs, 3) his readiness to learn is modified by his developmental tasks and his social role, 4) and that unlike the youth perspective is one of immediate and not future oriented, thus his learning shifts from subject centeredness to problem centeredness.

The humanizing of the classroom where the student becomes an active participant, responsible for his learning has helped to enhance self-direction for the student and thus instilled independence rather than an apathetic receptor of learnings.

Field Expansion

Professor Leonard Nadler, the distinguished professor of adult education at The George Washington University has now expanded the field even further by developing a new subspeciality, human resource development (HRD). According to Nadler human resource development means [9]

1 a series of organized activities
2. conducted within a specified time and
3. designed to produce behavioral change

The most common activities in HRD are "training and education."

David King sees systematic training (i.e., HRD) as providing assistance in areas such as. [10]

1. shortage of labor,
2. high labor turnover,
3. expanding production,
4 diversification of products,
5. automation,
6. redundancy (lay-offs),
7. improvement of quality,
8. reduction of scrap,
9. raising the calibre of staff and
10. establishing new factories.

Leonard Nadler says:

> HRD is here to stay! The name may change, and currently being heard is "manpower policy," "manpower planning" and "effective utilization of manpower " In discussing manpower a "policy must have as its ultimate aim enabling every American to realize and utilize his full potential. This implies a concern not only for occupational training but also for education at all levels "[11]

The New Era

Until fairly recently, most two-year or junior and community colleges were liberal arts oriented. The freshman and sophomore years of the liberal arts college or university has been the standard model. However, with the rapid expansion of the publicly supported two year community college, the technical or career programs, usually more costly to operate than traditional liberal arts programs, have begun to emerge.

Coupled with society's need for technical and skilled graduates, the two year college soon found itself in a growth industry. Campuses began to appear not only in urban areas such as Dallas, St. Louis, and Cleveland, but also in Canadaigua, Escanaba, and Haverhill. The dream of the leadership of the movement was becoming obtainable, a community college within commuting distance of a high percentage of the citizenry.

However, now that the campuses are built, and the instructional hardware and software have been designed, there is a new era of American life and culture. The students of the sixties have matured and their brothers and sisters are benefiting from an "opening of the system."

The alternatives to learning are wider. Classroom attendance is no longer required for the "union ticket." As a matter of fact, the degree is no longer a cherished commodity for many of our clientel.

The military draft too is no longer a threat, causing the campus to be a draft haven. Employers are no longer seeking the large number of liberal arts graduates they have in the past. Liberal arts graduates began to see their fellow technical graduates possessing marketable skills, finding jobs, in envy.

Thus in less than two decades there has been a significant change in the world of education. The buildings were there, but a different student appeared He was more likely to be a woman, he was more likely to be Black or Chicano, he was more likely to be less academically prepared, he was more likely to be less academically oriented, he was more likely to be poor, he was more likely to be older, he was more likely to have travelled abroad, he was more likely to have interrupted his education, he is more likely to be highly motivated, and he is more likely to be more self-directed than in any other time in our educational history.

These new students are not of the same breed of the fifties. They have caused the colleges painfully to change The traditionally oriented faculty, the college in residence, saw all that they held dear falling down around them: The proms and dances, fraternity hazing, the fraternity systems, course requirements, foreign language, the classics, commencement, and worst of all, faculty evaluation by students was part of that change.

The reality of this, however, is that **this is the case.** The real world has changed, and the democratization of the wider social system has affected the household of learning. The new student insists upon having a voice and some control over his existence, both in the classroom and in his life.

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[9] Leonard Nadler **Developing Human Resources.** (Houston: Gulf Publishing Company 1970) p.3.

[10] David King. **Training Within the Organization.** (New York. Barnes and Noble, 1968), pp.62-66.

[11] Nadler. op cit. p.9.

This change may be a bitter fact for those educators who resist change, however, the fact remains true, and unless community colleges and other institutions recognize this change and are cognizant of its implications and the exigence of adjusting to this change, then the alternative forms of learning will naturally arise. And if they prove to be superior alternatives, then they deserve to arise.

The Present Opportunity

Most recent studies devoted to the future direction of American education make three points most clear. The growth in education will most likely continue to be 1) adult education, 2) the two year college and 3) community service education.

Traditionally the two year college has attempted to meet the needs of a wide constituency with programs in the liberal arts, the technologies, allied health, guidance and counseling, adult education and community service. No other educational system has attempted to direct its services to such a wide range of clientele through such diverse mechanisms, sometimes referred to as innovations.

If the two-year college is to meet the challenge of this changing society with concomitant results, it must change from an institution that professes to be one of community service, to one that is more than just service but to one that is community-based. That is, an institution that fails to observe any distinction between any aspect of the community and the institution's relationship to it.

Edmund J Gleazer has devoted considerable thinking as to what a community-based institution should be.

> Its services will relate to the educational needs of a population generally within commuting distance of its service centers or the definition of a community may be geographic or governmental, e g., a county, or metropolitan area or a section of a metropolitan area Ordinarily the word community would not suggest homogeneity or socio-economic and ethnic characteristics
>
> People who use the facilities of such an institution would not be required to change residence to do so
>
> There will be local participation in the policy and program directions of the institution Often a local board will have governance responsibilities or in some cases a local advisory committee. In almost all cases numerous local program advisory committees will be maintained
>
> College services and programs will relate positively to the identified educational needs in the areas stipulated as the college communities 12

There is a need for a sense of community Ours is a transient population and the Community Service Director will play an increasingly larger role in directing the work of the college. He along with the college staff may become the catalyst for the community and its divergent groups.

Common characteristics as seen by Gleazer are.

1. Access to all.
2 A sense of continuing collegiality will be nutured.
3. The college will seek ways to destroy the hierarchy of values now often institutionalized of vocational/technical, academic, developmental etc.
4. There will be a structural recognition of the market, possibly a vice president for community assessment.
5. Flexibility to respond quickly to community needs.
6. The quality of flexibility further suggests the need for performance criteria.13

Gleazer further states the Characteristic of community-based post-secondary education:

1. Students stay in the community as differentiated from "going away to college." They will participate in the life of the community and be a part of it
2 Community facilities and resources will be used in the institution's programs. Programs will be available in industrial plants, churches, health facilities, neighborhood centers, business establishments and in the schools
3 Faculty, administration, and board will have interest in and knowledge about the community. College personnel will have responsibility to maintain a continuing inventory of data required to set college priorities.
4. The college will serve as a "broker" in seeing to it that identified post-secondary needs are met either through its services or another more appropriate institution. It will increasingly take the initiative in establishing working relationships with other institutions.
5. The student population will be a cross section of the communities served.
6 The college will be seen as "part and parcel" of the community rather than providing services for the comm community The relationship will be symbiotic rather than paternalistic.
7 The college will be aggressive in searching out community educational needs It may make available information about the community to other community agencies for planning program purposes. It may provide counseling services. It may contract to train people for specific purposes. It may provide library and recreational facilities. As "broker" it can encourage communication among those social agencies which impinge upon the lives and circumstances of its students. It can offer programs, for example basic adult education, or see to it that other appropriate agencies provide such services. The college is committed to both the individual and social benefits of education and will "merchandise" that concept.
8. College programs will be performance based. The concept of the college as providing centers of educational resources for the community implies continuing utilization. Frequently entry and exit points are required. Diagnostic measures are required to assist students in establishing justifiable beginning points and completion points for designated units of work. People will be expected to move into and out of the institution as they have needs and opportunities.
9 Target populations will include a large proportion of personnel not previously found in post-secondary education. These will include persons who have been unable to continue past high school education Adults unemployed or in jobs that are obsolete. The hard-core unemployed. Women in the community including young mothers with children at home. Senior citizens. The effects of servicing these populations will include a rising age level, higher proportion of students from lower socio-economic levels, and a larger number of "part-time" students 14
10. Among problems in moving toward the concepts presented here are these
    a many adults think that the college is not really for them.
    b some states provide no community services money
    c. some community colleges are highly preoccupied with academic credit and transfer role.
    d. poorest teaching as equated with need done in adult basic education and in "developmental" programs.

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[12] Edmund J. Gleazer, Jr "After the Boom . : . Now What for the Community Colleges?" **Community and Junior College Journal.** Vol. 44, No. 4. December/January, 1974 p.10.

[13] Ibid. p 9-10

[14] Ibid. pp. 10-11

e. faculty "love" academically qualified students
f. colleges do not have a "good handle" on community needs.
g. dichotomy exists between occupational and academic education
h. facilities dictate program
i. serious need for retraining of presidents, vice presidents, and faculty 15

A Call for a New Breed

Should the two year college move towards the learning-living designs as proposed here, then the traditional role of the community director and/or adult educator will have to change. No longer will this person be relegated to the "marginal man" status he has held in the past. For what is proposed here, is actually what the more progressive and innovative practitioners have been seeking and the university-based theoreticians have been proposing in the literature.

If the two-year college is to become truly community-based, recognizing that students shall come and go as they see it, then the attrition rate as presently defined will no longer hold true For if the student leaves the college, later to return after volunteer service such as in the Peace Corp, or should he travel for an extended period of time, or seek employment, the fact that he does return, he should not be counted as "lost."

Recognizing these factors, then a new kind of community service director or adult educator needs to be developed. For no longer will the model of existing programs suffice. Cafeteria style, duplicating day-time offerings in the evening will not meet the needs of this new type of student and institution.

Merely enrolling in one or two courses in a graduate program in adult education will probably not be adequate preparation for this new breed. However, this new **manager of learning,** not merely a teacher, but a manager of learning, the history and philosophy of the two year college, community organization and development, human relations training, organizational change, evaluation, and guided field experience will certainly be prerequisites for this evolving professional role 16

Only through sound preparation for this new type of institution will the two year college realize its full potential as a truly community based, performance based institution

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15 **Ibid.**

16 See Malcolm S Knowles **The Modern Practice of Adult Education—Andragogy vs Pedagogy.** (New York Associated Press. 1970.)

Identification and Assessment of Needs

Stanley M. Grabowski

The dynamism of the Community College movement, in its recent development, is characterized by flexibility and a reaching out to meet the needs of the community Its relative newness, at least in the vast numbers of colleges and enrollments within the past decade, calls for a good hard look at where it's at, where it's going, and how it ought to proceed.

In this connection the conversation from **Alice in Wonderland** between Alice and the "Cheshire-Puss" is instructive. Alice asked, "Would you tell me, please, which way I ought to go from here?" "That depends a good deal on where you want to get to," answered the cat.

When Alice went on to explain that she did not much care where she went, the cat interrupted her to say that it did not really matter, then, which path she took. But Alice protested, " so long as I get **somewhere**." If all she wanted to do was to get **somewhere**, the cat pointed out that it was no serious problem, that if only she walked long enough, she was bound to get **somewhere**.

The cat's logic is misleading Alice could end up nowhere. She could, conceivably, cover the countryside only to end up back where she started. Or, she could do worse.

Recognizing Alice's kind of predicament as possibly being their own, many educators in Community Colleges as well as in other areas of adult education, subscribe today, at least in theory, to a needs approach to education. They believe that "an effective program of adult education, should consider the needs and related interests of the adult learner and attempt to discover and meet his real needs as well as the needs of his social order." (2.141)

Real needs are not the same as felt needs.

> The real need is a desirable element or condition that is lacking in, and would improve, a situation Felt needs are what people with problems recognize as the elements necessary to improve their situations It would be emphasized that felt needs may also be real needs, but that often they are not Felt needs may be derived from symptoms alone rather than from true problems (7 11)

"If you would know the needs and interest of your students, know the community " (3 27)

"Personal needs do not operate in a vacuum, they are shaped, conditioned, and channeled by the **social structure and forces** of the human society in which each individual is born. Each of us is driven by survival needs, but the survival behavior of a primitive hunting tribesman is far different from that of the organization man in western industrial society." (9 3)

There are, to be sure, community needs apart from the needs of individuals, and there are such things as community pressures But we must still look at the community to determine educational needs.

> Blackwell has identified seven interrelated dimensions of the community He emphasized that they were not water-tight compartments and stressed the dynamic nature of the community He urged that the dimensions be considered only in a framework of social change His seven points were the following
>
> 1 The popluation base In his words, "If we are to understand the community, we need to know something about the human raw material that makes it up Who are the people, what about their age and sex composition?" He pointed, also, to racial characteristics, educational level, mobility within the city, and migration.
>
> 2 The institutional structure of the community This he identified as "the complex web of organized social relationships which people have created in order to help them better meet their needs." He mentioned families, agencies, business and industry, the pressure groups the civic organizations, and other special interest groups.
>
> 3 The value systems He referred to the value systems of the people, the things that they hold dear, the things that are high on their priority rating in that community He pointed to such qualities as neighborliness, hospitality, attitude toward government and its function and their rating of security.
>
> 4 Social stratification This he identified as the way society layers the people according to range and prestige
>
> 5. Informal social relationships He expressed the belief that the pattern of the network of interpersonal relationships is extremely important. He differentiated this characteristic from the organized institutional structure and made particular reference to certain informal leaders who help mold opinion He suggested that the informal networks are what we often refer to as the grapevine.
>
> 6 The power structure of the community He spoke of the "individuals behind the scenes who pull the strings that make things happen or can block things from happening in our communities "
>
> 7 The ecology of the community He defined the ecology as "the spacious distribution of people and these other social aspects of the community, the way the community has been divided up in terms of functions, particularly social and economic functions " (8 16, 17)

I'm using the word "community" in a very loose sense to include a specific population which the community college seeks to reach with respect to its goals. "The community may be the people in a single apartment house or on a city block. It may be the people in a voting district. It may be the entire population of a municipality or of a region . . . The technical definition is not important, the important notion is that of the total group of people whose lives are affected by the problem." (8.4)

"The major purpose for adult education programs, then, becomes that of meeting the real educational needs of individuals, groups, institutions, and communities, and the needs of the society of which each is a part." (1:141)

The conviction that needs assessment is critical has led many educators in Community Colleges to ask how they can better assess needs. Their concern and their quest for this kind of expertise is both admirable and encouraging, but the most critical question is not "how." The more important question they should be asking themselves is "why." "Why a needs assessment?"

It may appear somewhat naive to suggest asking the question, "Why a needs assessment?" Up until quite recently, I would have agreed that asking that question was naive. I no longer consider asking "Why a needs assessment?" to be very naive in the light of my experience with a group of community college faculty members.

I was working with two dozen community college teachers and administrators who were trying to do a needs assessment for their institution. They, as I, thought it would be a relatively simple and easy process. It turned out to be a painful and drawn-out effort mainly because they did not have a cogent notion of an operational philosophy of their college. They thought they would be able to turn to the college catalog description, but were surprized, then disappointed, and finally somewhat discouraged by what they found. Eventually they had to begin formulating an operational philosophy themselves before they could get on with their assessment. They realized that they could not do a needs assessment without knowing what the goals of the college were as well as the principles and assumptions on which these goals were based.

The "operational philosophy" I refer to "should be a dynamic, practical instrument that is used periodically or continuously for making decisions on school matters at all organizational levels and by all personnel." (4:20)

Understood in this way, an operational philosophy of education may be somewhat different from what ordinarily passes for an operational philosophy. It seems that there is a need to change our ideas about the characteristics of an operational philosophy of education if it is to measure up to the requirements as I spelled them out.

Some have described a new concept of an operational philosophy as a "value bank." The "value bank" is analogous to a "data bank" in storage of information and facts Just as data banks and instant communication devices have replaced annual reports as baseline data, so too, dynamic "value banks" must replace the "once-per-decade" officially adapted statements of educational philosophy. That is, "value banks" must be adapted if there is to be a basis for sound educational policies and decisions.

The reluctance of some individuals to become involved in the determination of an "operational philosophy" is understandable, although inexcusable. It is understandable because it means trying to change an institution. John Gardner has observed that "you can't change institutions unless you're willing to talk about details, unless you're really willing to dig in and learn some basic realities about the institutions you hope to change. And very few social critics want to go to that trouble. It's tiresome, it's boring, it means you have to do some homework." (5)

It is inexcusable because anyone who is part of an institution has a responsibility to try to bring the changes that are required to keep the institution in concert with its goals, or to change those goals.

My statements up to this point have been made on the assumption that an institution already exists. If it were a case of starting up a new institution, an operational philosophy would have to be formulated, perhaps after a needs assessment had been conducted. In either instance we are back to the "how" of needs assessment.

Needs Identification Process

As soon as you begin thinking about conducting a needs assessment, several procedural questions arise. For example, who should be involved in the process of determining needs? Whose needs? How does one go about determining these needs? and what mechanisms should be used?

The answers to some of these questions will be partly answered when you have determined "why" you're undertaking a needs assessment. The rest of the answers will depend on a number of constraints such as time and resources.

Needs assessment is supposed to discover gaps—gaps between the current circumstances and the desired circumstances. Needs assessment is aimed at discovering and locating gaps in knowledge, competence, and maybe even commitment, as well as the decisions of how to go about filling up those gaps. "Simplistically, the difference between what a person should know and do and what he actually does know and do indicates an educational need." (6 146)

A major part, then, of a needs assessment is gathering data. There are only three basic ways I know of how you can collect needs data. 1) You can ask and listen; 2) You can look and listen; and 3) You can study other available data.

Ask and listen. You can ask verbally or through a written instrument. You can conduct personal interviews with individuals or groups; you can administer paper-and-pencil questionnaires in person or by mail; and you can ask questions printed in newspapers, magazines, or shown on television.

Look and listen. This category refers to observation. You can observe what is going on in the community by taking a walk around the community, or read the local newspapers, including advertisements, job opportunities, and the social column, or look at the kinds of businesses and industries located in and around the community; or you can look at the schools, the religious denominations served by churches and synagogues; or the recreational patterns of the community; or the cultural offerings. You can also listen to what people talk about most often—for most of us tend to talk about what is uppermost on our minds.

Study the data. There is a lot of information about the community already compiled and available to you. For example, there are census data, economic statistics, labor statistics, history of the community, and a whole range of literature including educational catalogs, brochures and leaflets describing programs for adults in places such as colleges, chruches, YM and YWCAs and community centers

In gathering data, the major elements to look at would include the historical background of a community; its physical setting, population characteristics, economic structure, functional operations, institutional structure; value system, social stratification, power structure; and ecological patterns

Such a data gathering process will help you identify the general characteristics of the community, the general needs of the community, and many specific characteristics and needs of individuals. You may have to devise and use several strategies to effectively identify the needs, since many needs are unrecognized.

Once these concerns have been collected you must classify them in order to analyze them. The analysis process will provide a large repository of useful values, policies, and facts that are essential for the screening process

This is the point to check for adequacy and integrity of the data. A simple checklist for adequacy might include three questions What is (present time)? What could be (present time)? and What can be (future time with technology trends and information explosion)?

A check on the integration of facts might ask the following questions What are the facts surrounding the present condition? Have the facts been carefully separated from assumptions? Are the data free from any unintended bias? and Is the evidence objective?

Once you have collected, classified, and checked the data for their adequacy and integrity you are ready to analyze them. This consists of selecting the educational needs you want to change Putting it another way, you must set priorities in a rational systematic way, replacing guesses, intuitions, hunches, or special interests by the use of thoughtfully designed criteria based upon objective data.

The analysis of data follows a sort of "match-mismatch" process to identify discrepancies or inconsistencies among the concerns of the participants or potential participants, as well as others These discrepancies or inconsistencies will constitute validated needs Essentially this is a winnowing process where you systematically apply evaluated criteria—values, policies, and facts—to each of the collected concerns or needs. Very often this is the weakest link in the chain of events by which needs are appraised. Ultimately, the chief criterion of effectiveness of the procedures used to collect and analyze data must be in the utilization of results.

"When institutional goals, societal goals, and learner goals are brought into congruence, a climate for learning is created. Without this congruence concerted action toward the longer goal is not possible." (6:148)

The indispensable step in creating a conducive climate for learning is assessing needs—individual needs of learners and potential learners, as well as the needs of the community. With these needs you must mesh the goals of the community college in its operational philosophy and the concerns of the faculty and administration of the college. The needs assessment is a necessary and perhaps first step, but it is not sufficient by itself.

Converting Needs Into Programs

Needs assessment is supposed to discover gaps for the purpose of assisting in making decisions. It ought to serve to secure better curricula Knowing the needs of participants and potential participants ought to lead toward the development of better programs.

Implementing identified needs is closely linked to two factors—one of these is the extent of community involvement in the needs assessment process, and secondly, the issue of governance in the community college.

If you had involved a large segment of the community in your needs assessment you could turn to them for help in mounting and conducting some programs For example, some of the health delivery agencies might be able to help with clinical opportunities as well as specialized facilities. Business and industry people might be willing to provide you with some instructors if they perceive that the program, based on their needs imput, will produce the kind of workers they are seeking. Both of these examples are actual instanc[illegible]here such arrangements resulted from needs assessments community colleges conducted in these agencies.

The second, and perhaps the more important factor from a realistic standpoint, is the way the community college is governed and administered. Governance in community colleges is not very different from what you might find in four year colleges and universities. What you can expect to find is a whole variety of styles ranging from autocratic through democratic leadership/administration In community colleges, there is a new thrust developing towards greater involvement by faculty and students, partly because of the more democratic approach through the open door policy of admissions and partly because of the growing unionization among community college faculties.

Where students and faculty are involved in the governance of a community college a constant and immediate feedback mechanism is available at all stages of implementing needs. Faculty and students, along with the administration aided by representatives from the community can participate: in prioritizing needs, converting needs into goals and into component objectives and tasks, and in evaluation of the needs assessment, the attainment of objectives, and the overall effectiveness of the program.

In converting needs into programs you must provide for the following: estimate the cost of each goal and its component objectives and tasks; examine each goal and its component objectives and tasks, examine each goal in terms of payoff and risks; rank order each need goal for assigning available or obtainable budget funds; and follow through on mounting the program using the usual channels of marketing, advertising, enrollment, delivery, and evaluation.

The best needs assessment/implementation models provide for communication to those who provided input to the needs inventory, of actions planned as a result of the findings. This kind of feedback mechanism provides not only some measure of potential evaluation, but also some insurance of cooperation in future needs assessments. And, further needs assessments will be necessary since needs are not static.

There ought to be a rational base to any needs assessment model, there ought to be a flow from finding, to planning, to implementing, to observable output. The last category calls for evaluation as an on-going part of the program.

The evaluation process ought to include at least the following categories:

1. The **Product**—the identified needs.
2. The **Process**—the method for determining the needs and the method for validating them
3. **Management**—those who manage the needs assessment as well as the goals of the management team;
4. **Participation**—method of choosing those who will be involved in the needs assessment, the implementation, management, and evaluation of the entire process;
5. **Communications**—understanding by administration, faculty, students, and community of purposes of the needs assessment process and notification of the results of the goal determination and development,
6. **Resources**—sufficiency and adequacy of personnel, time, and money, as well as worthwhileness of their expenditure on the results. (10:65,66)

A recapitulization of the needs assessment and implementation processes could be put in the form of questions that would go like this.

1. Formulate and enunciate philosophy:

   Who are you? What do you believe? Why do you plan? What will happen if you do not intervene?

2. Clarify the goals:

   What are you working towards?

3. Identify the needs.

   What are the gaps?

4. State the objectives:

   What specifically are you going to do? In what sequence? When?

5. Determine the scope and thrust of program;

   What are the available resources that can be used to implement the objectives? What financial base is required? Who will do what?

6. Assess obstacles and restraints:

   What will you do about them?

7. Evaluate and revise:

   How will you monitor and measure progress along the way? How will you feed new information for continued effectiveness of the program? How will you know that you have accomplished what you set out to do?

Conclusion

I have tried, in labored fashion and overlong form to sketch for you a needs identification and implementation process. To do that I have had to tell you more than you really wanted to know about operational philosophy and about community to fulfill the various steps of the process.

I consider these two elements crucial to an effective needs assessment for a community college. Without them a needs assessment will surely be inadequate, with them there is a greater chance of getting at the real needs of the individuals and of the community.

My presentation was meant to point out the steps in the process of identifying and implementing needs based on the belief that to learn needs is to bring relevance a step closer to reality in community college education.

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Building the Connection Between Industry and Continuing Education

Jefferson Freeman

This afternoon I plan to address three different topics. First, I will be telling you someting about Xerox Learning Systems and the approach which we take to deal with training needs in industry. Second, I will spend some time describing how this approach has been incorporated into management training within Xerox Corporation. Finally, I will outline an approach to building the connection between training in industry and the resources which continuing education programs can offer to industry.

Let me turn first to Xerox Learning Systems and explain something to you about who we are and what we do

Those from the Rochester area probably know much more about Xerox Corporation than I do. In 1959, Xerox Corporation introduced the 914 copier and revolutionized the copying industry. In the past sixteen years, the company has grown from a small but successful Rochester firm to become one of the international industrial giants.

In 1974, total revenues approximated $3.6 billion and total profit after tax reached $331 million.

Xerox employed over 100,000 people worldwide at the end of 1974.

In the early 1960's, as the copier business began to achieve its initial tremendous growth, top management undertook expansion of the company into other business areas. One of these areas was the field of education. Today the Xerox Education Group is made up of five different publishers and suppliers of educational services to the education, library and training markets

These companies include

- Ginn & Company, a major publisher of elementary and secondary curriculum materials,
- Xerox Education Publications, which supplies periodicals to the classroom and provides book club services to individual schoolchildren in the home,
- Xerox University Microfilms, a leading supplier of microform information including out of print books, past volumes of periodicals and newspapers, and doctoral dissertations,
- R.R. Bowker & Company, a major supplier of publishing information to libraries, schools, bookstores and publishers, and finally
- Xerox Learning Systems, which offers training programs and services primarily to industry and government.

Xerox Learning Systems, like other operating units within the Education Group, is an international company

Although our base of operations is still primarily oriented to the United States, we have substantial and growing activities in Canada, the United Kingdom, Europe, specifically Germany and France, and Australia.

Let me give you a little more background on Xerox Learning Systems. We were founded in 1960 as Basic Systems Incorporated and were acquired by Xerox Corporation in 1965 Today we have a staff of over 200 people located throughout our international operations. Approximately 120 of these people are professional level staff. We have operations established in 26 cities in North America and service the needs of over 4,000 active clients.

In some respects, it's rather difficult to describe the essence of our business since we are part publisher, part consultant and part trainer. I find it easiest to describe what we do by saying that we offer products and services to improve the productivity of human resources.

We are somewhat different from the other education companies within Xerox Corporation because the major part of business is done with industry and government We also have some programs which are used in educational institutions but our major orientation is to support the training needs within companies.

Over the years of servicing the needs of different clients, we have established distinctive competence in four different areas.

- Sales and service training for industrial and commercial sales representatives and service representatives such as the tech rep who services Xerox equipment.
- Management and supervisory training for sales managers, foreman, middle managers and others who hold responsibility for direction of human resources within organizations.
- Technical training to upgrade the skills of individuals in apprenticeship programs and in such functions as plant maintenance and building maintenance
- And finally communications skills training applied across many different functions within companies.

Our business tends to fall naturally into two different areas. First, we have standard off-the-shelf programs which in many respects are similar to the standard offerings contained in a college catalogue These are provided to companies either as program materials which the company's own trainers can then use to conduct training, or Xerox Learning Systems can provide the instructor and conduct the seminar for the company.

Increasingly in the past year we have also substantially expanded our effort in what we call contract services, a second major area of our business. This separate venture performs a variety of consulting services and charges a fee for the services performed.

- For example, we get involved in so called 'front-end" needs analysis to help companies determine what kind of training should be undertaken and whether in fact training is the answer to the problem which they are confronting
- We also assist in training systems design to assure that a company gets maximum utilization from the money invested in training effort
- Very often it is necessary to adapt our standard programs through customization to a particular company's environment
- We also develop new materials which deal with needs which can't be satisfied by our standard programs.
- Occasionally we get involved in project management, undertaking the entire training support requirement on a contract basis for a specific organization.
- Finally, we also assist companies in measuring the effects of training either through program validation or through collection of data on a systematic basis to provide information for further refinement of a company's training program.

Over the years, Xerox Learning Systems has provided products and services to a variety of different clients. I think it is important to mention that Xerox Corporation is but one of our many clients. We do assist in supporting internal training needs at Xerox but the major purpose of our business is to function as a separate entity and to provide our services generally to industry and government.

By now it is no secret to anyone—whether in education, industry or government—that today's business environment is fairly dismal

We are in the midst of a substantial recession which appears to be deeper and to be lasting longer than any other we have experienced since World War II.

A major problem confronting all of us today is that we don't know how long our different organizations will continue to be impacted and we don't really have a good feeling for how serious this impact will be.

Economic projections today tend to range all over the lot.

- from recovery before the end of 1975,
- through a long, slow climb out over the next several years;
- to continued economic deterioration

Two recent business articles, one by Royal Little in **Fortune** magazine and the other by Peter Drucker in **The Wall Street Journal** suggest that a key to economic recovery will lie in the careful allocation of recources. Last week the Chase Manhattan Bank took a full page ad in the business section of **The New York Times** to cry wolf Their biggest concern lies with the level of capital formation within our economy.

While the list of action steps which they recommend might not find favor with everyone sitting in this room, I think that the Chase's theme overlooked one thing with which all of us are vitally concerned. I would submit that improving the productivity of human resources can make a substantial difference in assisting our general recovery.

Nothing can lead us quicker toward economic improvement than the development of new skills, expansion of knowledge and attention to the attitudes and feelings of the some 85 million individuals in this country's workforce.

Productivity of human resources is the key. Let me take a few minutes now to tell how Xerox Learning Systems deals with the issue of human productivity since many may well raise the question about how it is possible for training to deal effectively with the question of productivity.

I believe the answer lies in adopting a systematic approach to the question.

As a first step, it is necessary to recognize that training is only part of a process called human resource management. All too often, an organization takes a trainee, puts him through a training program or series of programs, and hopefully winds up with an employee qualified to do a particular job. All of us know that it ain't that simple. As a matter of fact, I believe that a line manager's distrust of training or education stems from his disinclination to believe that training is more complicated than this, and the frustrations he experiences when training efforts such as this don't produce results.

In considering human resource management, one of the first factors beyond training which has to be taken into consideration is the recruiting and selection process What qualifications does the new trainee bring to the job? What has his pre-training experience been, and what are his expectations about the work environment in which he will be operating?

Another factor concerns the objectives which have been established for training. Most importantly, what degree of change does the organization wish to achieve in the process of putting an individual through a training program? What investment is the organization prepared to make? How much time is to be given to the training process, and on what kind of a schedule will training occur?

Two other major factors also affect the performance of the qualified employee. The management actions of coaching, on the job support, communication, problem-solving and change of objectives can have substantial impact on how the employee performs, as does leadership style.

There are many organizational factors which also affect employee performance and which must be taken into consideration in improving productivity of human resources. Such issues as compensation, the degree of incentive built into compensation, perceived opportunity for personal growth, the degree of autonomy granted the employee, scope of work (for example, production line vs. production team), and organizational norms are some of the factors which influence employee performance.

Another major factor often overlooked is the external environment—actions of competitors, general change in the economy, governmental action, and so forth. For example, a carbon paper manufacturer in 1958 might well have had all of these system elements fine tuned to produce desired objectives. Then along comes Xerox with a dry copying process which completely upsets the different elements of the carbon manufacturer's system.

No system is complete without an adaptive mechanism and, therefore it is necessary to add in some mechanism for evaluating the performance of the qualified employee and then developing approaches for change,

- in recruiting and selection standards,
- or in the objectives for training (which leads to change in the training itself),
- or in management action influencing the performance of the employee,
- or in other organizational factors affecting on the job performance.

Indeed evaluation of performance may well lead to cycling the qualified employee back into training to improve performance to a new standard.

Particularly in industry, but also in education, we must acknowledge the individual differences among employees or students and attempt to adapt the training so that each person pursues the path which should be followed, in order to achieve competency required to do the job.

The last aspect of human resource management involves integration of elements over time. Once a company is prepared to look at all of these factors and take integrated action, it is virtually impossible not to achieve an improvement in the productivity of human resources. This is the approach which Xerox Learning Systems takes to assist its clients in dealing with productivity improvement.

Let me turn now to examine an application of human resource management, and use Xerox Corporation as the example.

A major factor in the domestic operations of Xerox Corporation is our Information Systems Group. This organization markets and services all of our copier/ duplicator products.

The dimensions of this organization are awesome, particularly to those who can remember Xerox way back when. ISG is headquartered in Rochester and has some 25,000 employees working in over 100 locations throughout the United States. At this point in time there are some 90 branch operations All told ISG has approximately 3,000 first-line supervisors and some 600 managers at the next level—those people who are involved in managing supervisors who manage people or projects.

Training this cadre of managers and supervisors is a complex task, and there are several critical needs which the Information Systems Group confronts in managing this human resource First there is the need to identify those individuals who will most likely have potential in a supervisory or management capacity. Next there is a need to provide them with some form of indoctrination prior to promotion to assure that they are prepared to do their jobs. Once the person is promoted into a new job, it is very important to track the progress of the individual, and to provide assistance furthering personal development. Formal training takes place at several different locations. With over 100 field locations there is a need for some mechanism to assure decentralized follow-up once training is completed. Finally the human resource management process needs to deal with the rapidly changing environment confronting Xerox Corporation today.

Over time, the human resources management staff located at a center at Allen's Creek in the Rochester area has adopted a building block approach to provide training programs which meet the needs of these supervisors and managers. They have also created a tracking mechanism known as the experiential grid which adapts training resources specifically to the need of each individual. Perhaps most important however is the fact that this staff has developed and assigned separate responsibilities for development to the individual, to the manager, and to the training function.

Within the ISG field organization, there are essentially three different types of first-line managers. those involved in sales, in service and in administration. Each candidate for a first-line supervisory position is put through a series of training experiences relevant to the present job held. These experiences are designed to occur in a building sequence so that each is completed shortly before the individual's promotion.

Shortly after the individual is promoted to a first management position, the person again goes through a training experience to become better prepared for handling the first-line supervisory job more effectively. The individual also continues to work on the individual job experiences structured by the experiential grid to develop greater competency in different job skills. After one year of experience in the new job, the individual goes through an additional workshop to refine what has been learned earlier and to provide skills for dealing more effectively with the management of human resources on the job.

The human resources management staff has classified the developmental needs of Xerox managers into four major categories, based upon extensive analysis of training and management objectives.

The personal skills area includes such items as goal setting and others. For each, different building blocks are identified. It is then denoted where the skill is first addressed or reinforced in each of the different building blocks. In reviewing the skills list you will note that many are relatively generic in nature. They aren't necessarily generic to the Xerox environment but they do focus very much on personal skills that an individual must have to function more effectively in the work environment.

It is also necessary to address technical and functional skills. These skills are much more closely related to the Xerox environment and deal with the process of improving the individual's capability to handle the job and to direct the jobs of others

Within an organization as complex as Xerox Corporation, it is also very important for each first-line manager to have an understanding of the different functions within the company and techniques which can be used to get results from those over whom the individual has no formal control Most of these subjects again are related specifically to the Xerox environment and the heaviest dose of training occurs just prior to the individual's promotion to the first supervisory job.

The fourth area deals with people management skills. Here again the skills which are developed are generic to any organizational environment although many of the examples focus specifically on Xerox situations, to give them revelance. The needs addressed are relatively more universal. The concentration of the training effort occurs after the individual has been in his supervisory job for a period of time. Somehow the process of people management becomes much more relevant after the supervisor has been cut up a few times in a tough people management situation.

Human resource management doesn't stop at the end of the individual's first year of experience as a supervisor

The Xerox branch manager is the key general manager within the Xerox field management structure. The branch manager needs a substantial amount of training to develop the skills necessary to handle this complex and demanding job Thus the human resources management group has adapted the first-line supervisory training approach to apply to the more senior manager so that the latter can be prepared to move into this demanding position with the skills and knowledge needed to be successful at the job

But his training doesn't stop here because the corporation also provides executive development programs to address the needs of more senior managers including a special two-week Xerox seminar, a seminar in quantitative decision making and access to such external programs as the advanced management program and the program for management development at Harvard Business School.

From this brief review, I think you will see that the ISG staff at Allen's Creek has done an effective job of addressing several elements of a human resource management system. We still have a long way to go particularly in integrating management and organizational factors into the system. But we are a long way down the road in determining what needs to be done, and how we should do it.

By now you may begin to see the connection between the industrial training environment I have described and the educational institutions which most of you represent. Educational institutions, particularly those involved in continuing education activities, can function as an important resource in human resource development. Unfortunately, industry often overlooks the value and relevance of this resource.

Educational institutions need to do a much better job of identifying the needs which exist in industry and then tailoring their educational services to fulfill these needs.

As we have seen from my description, the industrial environment is confronted with a very complex training process. There is a continuous need for building blocks to develop human resources. Industry seeks organizations which are responsive to its needs and which are willing to adapt products and services to meet these needs.

In providing services to industry, continuing education divisions all too often think in terms of the programs which might attract individual participants from companies. There are at least four other resources which should be of interest to many companies.

- **Facilities** of an educational institution may often service the need of industry to get away from the day to day business environment.
- **The Faculty,** with its experience in specific learning disciplines and its different perception, can offer an interesting counterpoint to business thinking.
- **Instructional Services,** ranging all the way from the creation of learning materials to the use of libraries, should supplement and perhaps supplant a duplicate investment by industry.
- Finally, the aura of the educational environment can be used to advantage, particularly when a need exists to depart from traditional business thinking.

It's much easier to talk about the connection than it is to build it. In building it, the continuing education function really should be structuring a new approach to marketing its services. I see at least eight steps which should be taken to support this effort

The first is to identify the key local companies which a given educational institution can service. One major distinctive advantage provided by an educational institution is its proximity and immediate responsiveness to the needs of local industry. It doesn't do me much good, for example, to receive a listing of the management conferences available through the division of continuing education at Brigham Young University when these look a lot like services which I can obtain through more accessible industrial training organizations.

Once the director of continuing education has identified his key prospects, he or the president of the institution should visit some of the top managers from local industry. For my money these visits are too infrequent. There is much to be gained by asking top management people about their perspectives on the need for human resource development, and the office of the president within the educational institution certainly should carry enough weight to assure establishment of a number of different appointments.

However, talking to top managers is not enough. The same kind of visit should also be paid to the training and personnel staffs of the different local business enterprises, and perhaps to other key operating managers as well.

Based upon an understanding of the needs as expressed by these institutions and individuals, and an analysis of the resources available within the educational institution, it should then be possible to build a catalogue of competencies which should have substantial appeal to local industry.

Mailing a catalogue to key industrial prospects is also not enough. Educational services are very tough to sell to prospective users be they incoming college freshmen, prospects for continuing education programs, or companies like Xerox Learning Systems. It is my feeling that a continuing education division must make an investment in actual selling effort. With a catalogue in hand, go back to make personal contact with some of those individuals who have been interviewed previously, and with other prospects from local industry.

In going back to talk to these prospects, it is my feeling that the division of continuing education will have to offer a combination of programs and educational services and facilities to awaken industry's interest in the potential of continuing education resources.

To this end the continuing education function might serve as a broker for making faculty available as trainers within industry. There is no question that this approach is a double edged sword since the organizations and individuals may quickly reach the conclusion that there is no need for a middleman. I believe a program can be structured which will allow this resource to be made available within an institutional framework in a way which will attract more companies to use the services of a continuing education division, and which will make the continuing education division more attractive to prospective faculty.

There are many situations within Xerox and in many other companies where a need exists temporarily for additional instructors to handle a training overload, or for special expertise not available in the company.

The obverse is also true, and many of your institutions undoubtedly now use business executives as adjunct faculty in certain programs. Perhaps this approach can be sharpened to involve the key decision making executives as faculty in special programs. This sort of a step might help to solidify the link between the continuing education division and local industry.

Perhaps many of the steps I have suggested here have been tried by each of you and found wanting. My interest is in giving you some perspective on improving the productivity of your efforts in continuing education. Looked at from a slightly different perspective, productivity can often be best achieved through innovation. Let me tell you quickly about three innovative programs RIT and Xerox have undertaken together.

The Masters in Engineering program brings the resources of RIT to our engineering and manufacturing functions in Webster, New York. Research by Dean Richard Kenyon of RIT several years ago revealed that numerous company employees were not taking advantage of educational opportunities becuase it was too troublesome to get to the RIT campus. For some Xerox people, attending classroom sessions at RIT could involve an hour's travel each way. This RIT program is conducted on-site in Webster. It's oriented to the practicing engineer. Each participant attends two 30 minute video-taped lectures each week, and completes extensive out of class assignments. Every other week, the course professor travels to Webster to conduct a 2 to 3-hour diagnostic, counseling and discussion session. 75% of the course work is built around the formal classroom experience; 25% of the course credit derives from relevant work done on the job. Kodak, Stromberg-Carlson, Sylvania and others in the Rochester area also participate in the program with RIT.

Xerox has to address more informal needs to keep its engineers and scientists up-to-date as well. We do this in conjunction with RIT through our Professional Excellence Program. Based upon an internal survey of needs, Xerox identified specific technical areas (e.g., thermodynamics, materials science) which would be of general interest to our technically oriented workforce. Through interaction between faculty and Xerox subject experts, courses from the RIT catalogue were fine-tuned to fit the Xerox environment, and the faculty was provided with numerous Xerox examples to use while teaching. The courses are 30 to 50 hours in length, but are not arbitrarily locked into school terms. Although non-credit, the programs provide extensive homework and testing to measure proficiency. Xerox has gained the advantage of highly qualified faculty teaching Xerox-oriented courses. RIT has gained insight into company needs and applies this information in the regular classroom. And the first four faculty members have found consulting assignments at Xerox. Everybody wins!

A professor working on a project for the National Technical Institute for the Deaf refined his skills at linear programming of learning material. Training staff in Webster, having identified a need for training in electrostatics, determined that a series of programmed instruction units would best satisfy our training requirements. By bringing the need and the resource together, Xerox was able to secure non-staff programming skills. We in turn have produced the materials, and the first version of the program is now being tested on RIT students.

We had to overcome fixed thinking about the roles of industry and education to create programs like these. If you can innovate, I believe that continuing education divisions will find companies—not individuals—to be among your best prospects provided that the programs and services which you offer are truly responsive to their needs and provided that you take the extra step to help make the connection.

I have talked today about the innovative approach which Xerox Learning Systems takes to deal with human resource management. I have also addressed an innovative program which our corporation is using to get more mileage and better results from its management talent. Finally, I have addressed the need for innovation which must be met by institutes of continuing education to expand their services to industry. By building a bridge through innovation, both industry and education should be able to achieve greater productivity of their human resources.

Industry and Education—A Partnership?

Dr. Helen Lisson

I have been asked to review the relationship between education and industrial training as I have observed this partnership over the past 15 years. To do this, I will first describe my own introduction to both education and training emphasizing the similarities, the differences, and the way in which each compliments the other. I will then describe a "typical" industrial training program from its conception to its completion in an attempt to present our training needs and our current methods of meeting these needs.

My first exposure to education occured when, as an undergraduate majoring in mathematics, I added education courses to my college schedule. At that time, a new curriculum development called "modern math" was being investigated at the university level. A team of mathematicians held a demonstration class to show how elementary school children were able to "discover" number theory. The demonstration was so successful that I descended, with great enthusiasm, upon a curriculum expert who was known to be most unimpressed by all attempts at curricular reform. I insisted that he visit our demonstration class to observe fourth graders in the act of discovering the field axioms. My enthusiasm was not contagious, and he was singularly unimpressed. He stared at me in stony silence before he finally spoke. He said, "you could capture a group of fourth graders, lock them in a room for forty years and they would never discover mathematics What you have just witnessed was a demonstration showing how a Ph.D. in mathematics who is an excellent instructor and has rapport with children can successfully teach fourth grade. What will you do next? Will you place more Ph.D.'s in more fourth grade rooms?"

For the next two years, I was employed as a public school teacher working on an applications research project designed to test the feasibility of implementing a modern math curriculum. I found that as I began to apply my educational knowledge in the classroom, my skills were not always sufficient I continued my university education and developed a different relationship with college personnel. I was an "adult learner". My concerns were the concerns which we now know are typical of adult learners. The adult learner is interested in theory, but demands to know how that theory can be applied to his area of interest The adult learner is a more selective student. He will read course descriptions, select courses from a variety of fields, and actively seek out references and resource people to supply specific applications knowledge.

When the experimental results of the mathematics project were assessed and published, they showed no significant difference between the learning achievement of students taking traditional or modern math. We did implement a program, originally designed by university personnel, in typical public school classrooms. Most of the expected learning results were, however, lost in the translation.

The next innovation which affected my interest in education was the introduction of the computer. I began to investigate the use of a computer as a vehicle for bringing relevance into the mathematics curriculum I went to IBM and asked to see a computer and learn more about its functions. The discussion which followed revealed an area of mutual interest. IBM was about to expand their computer training program on the use of computers. They wanted to hire an employee with an education background to work in training.

For the next 8 years, I worked for IBM and both designed and taught computer training courses. I learned that there is an essential difference between education and training. When a company hires a new employee, he is expected to know the theory and concepts which are relevant to his job area. This knowledge comes through education. Which theory and which concepts he will need depend on the specific company and the specific job. Industrial training programs rarely attempt to teach theory or concepts. Company training programs begin where education leaves off. A company will hire an employee, such as an accountant, and then train him on the specific information and skills required for his accounting job. There is no convenient way for a college or university to anticipate which company and what job a student will eventually select. Even if these needs could be anticipated, the required information and skills may change over the two to four year college period. It is equally impractical for an industry to teach theory and concepts. Knowledge normally acquired over a period of years cannot easily be condensed into a short training program.

One of the common skills required in industrial jobs is the use of a computer. Again, although the new employee may know what computers are and what they do, there is no way to anticipate which computer and computer language that a given student will eventually need to know. Specific computer training is usually offered by either the company that hires a student or by a vendor company such as IBM.

Following my work at IBM, I completed additional education courses and then took a job with the Eastman Kodak Company.

The Learning Systems Laboratory of the Eastman Kodak Company has been engaged in applications research since 1966. Laboratory personnel have consulted with educators and trainers in the development of ~~learning systems using~~ photography, microforms, and computers. Our investigations have been directed toward first identifying applications which require photography as an integral part of the learning process and then specifying the instructional technology needed to support these activities.

In 1970, a traditional equipment service training course was selected to be redesigned in an individualized instructional format. Service training provides newly hired employees with the knowledge and skills required to maintain equipment leased or sold to customers. Trainees are hired with an educational background equivalent to two years of college and their specific skills include a knowledge of mechanics, electricity, and electronics. Some trainees hold an associates degree while others have gained experience either in military service or through previous jobs. Upon completion of the training program, they will become equipment service representatives responsible for the installation, maintenance and repair of micrographics equipment. For the most part, they will work alone rather than as members of a team.

The traditional classroom approach to instruction consisted of three one-month training sessions separated by field assignments, structured to reinforce classroom learning. Each instructor taught eight to ten students for four weeks. The instructor's background included five years of field experience. Instructors were assigned to the training center for a two to four year period. These expert practitioners conveyed their knowledge and skills to trainees using a combination of lecture, demonstration and guided "hands-on" practice.

An analysis of the traditional classroom program showed that instructional time, method, and content were held constant while the amount learned varied from student to student Unfortunately, the amount learned is the one factor which industries can least afford to vary. Each trainee is expected to learn his job If he learns too little, he will not be able to function at an acceptable performance level. If he takes too long, money will have been spent on training which could have been used for some other purpose

Trainees worked in teams of two or three students as they disassembled, reassembled, and adjusted each of twenty equipment models This practice made it difficult to assess the contribution of individual team members and provided too little "hands-on" experience.

Our proposed solution to these problems was the development of an individualized industrial training program Each student would be assigned his own piece of equipment, study at his own learning rate, and remain in the training program until he had achieved mastery level performance on every learning task.

A systematic method of course development incorporates all relevant parts of the training environment. Course outlines, instructor comments, printed materials, audiovisual aids, and "hands-on" exercises were collected and assessed. The curriculum for the first one-month training session was divided into 56 learning units which were then recombined to form 12 independent learning modules.

By providing a number of alternative learning paths, we hoped to optimize both student time and equipment utilization. When the first two learning modules were developed and tested, the results indicated that an individualized approach to training could provide more learning at less cost. Students achieved mastery level performance in less time than was normally allotted for traditional classroom training sessions.

Encouraged by these results, the remaining ten modules of Phase I training were scheduled for redesign by a curriculum development team. Subject knowledge came from the Equipment Service Division, instructional development skills were supplied by the Marketing Education Center, and consultation in both educational strategies and the use of media was provided by the Learning Systems Laboratory

Orientation sessions, company tours, and similar learning units remained as scheduled group activities. Most units were redesigned to be self instructional containing both subject matter and directions for learning. Course management guides were written to direct students from one learning module to the next.

The new classroom structure required a complete revision of the instructor's role. The instructor no longer provided substantial amounts of subject matter information. Content was presented through mediated learning packages. The instructor no longer specified each learning activity. Directions were incorporated into the learning packages. Individualized instruction did not, however, either eliminate or diminish the need for classroom teachers.

The instructors have become managers of learning spending most of their time working with individual students. Their work with average students consists of checking student progress, answering questions, explaining areas of difficulty, and administering and evaluating both written tests and work sample tests. If a student or group of students are deficient in course prerequisites, the instructor may provide remedial instruction. The instructor helps students solve problems which might interfere with learning. As new product changes are announced (approximately one every three days), the instructor adds this information to the curriculum.

The orginial student teacher ratio of eight to ten students for each instructor has remained relatively constant. Most teachers feel that individualized instruction is more demanding than traditional classroom sessions. A teacher cannot plan one day ahead, he must be able to answer questions from any part of the curriculum at any point in time. Student failure is not easily excused. Each instructor has the option of adding time, supplementing content, calling for another instructor, in fact, doing anything within reason to help students.

A variety of media and learning strategies were used in the design of self instructional modules. Alternate formats were tested to determine which methods of instruction were most effective for this training application. Our analysis of learning results indicated that a combination of audio messages, visual images and "hands-on" experience produced the most acceptable learning results.

Learning results for the first 180 students showed that trainees learned at least as much in an individualized classroom and took 20 percent less time. The time range for individual modules was typically one to ten. A fast student might be expected to complete an instructional unit in one tenth the time required by a slower student. This order of magnitude difference did not, however, apply to the course as a whole. The time range for the entire course gave a one to three ratio. Fast students finished in one-third the time required by slow students. It would appear that fast students on one unit become average or slow students on other units. Being fast or slow is not a good indicator of either intelligence or aptitude. The speed with which students complete course material is a complex function of education, experience, personality and ability.

An analysis of the Phase I program showed that individualized training can be cost effective. A modularized, self-instructional curriculum using audiovisual performance guides can improve instructional effectiveness and reduce training costs. In fact, the amount of money saved was more than sufficient to pay all course development costs. Company management decided to invest in course development not only because the investment was educationally sound, but because the investment was economically sound.

A ten man task force was assembled at the Marketing Education Center to write self-instructional modules. In addition to the full time task force members, services were purchased from both internal company departments and from outside vendors. Developing course materials requires the expertize of educators, designers, writers, artists, photographers, media specialists, plus a variety of subject matter experts. Several levels of subject matter experts were consulted. Equipment service representatives were selected to model expert performance techniques learned through years of field experience. Equipment engineers supplied in-depth knowledge of equipment functions. Experts in micrographics, photography, and electronics were consulted to supply the principles and concepts required to meet both current needs and future trends in micrographics equipment.

The development of individualized instructional units requires more time, money, and expertize than the development of a traditional training curriculum. Individualized modules must contain detailed subject information, and directions for learning. The system must provide learning management procedures as well as self-instructional packages. Development costs can be justified if many students save substantial amounts of learning time. Industrial trainees are paid to go to school.

The example which we have just reviewed is a typical industrial training program in that it meets a type of need which is commonly found in industry. The example is atypical in that it utilized a sophisticated model of instructional technology incorporating individualized instruction, modular course design, audiovisual presentations, and both computer managed and computer assisted instruction and testing. The use of extensive technology was cost justified by substantial savings of student time.

Perspectives and Probabilities of Work/Leisure/Life-Style Implications for Continued Learning and the Plans of Universities and Other Organizations

Paul A. Miller

To introduce myself on a personal note, a community-serving college found me at age 10 in the remote mountain valley where I was reared. I was to learn at 12 that some colleges included within their objective that of helping people lessen drudgery on a family farm, as when such colleges helped the milking machine to be introduced, and also, through Rural Electric Cooperatives, brought about the displacement of the kerosene lamp with electricity.

I planted trees at 14, and became concerned about conservation, later my first vocation, and staked out strips of corn and grass, under the eyes of an educator from a community-serving college who faced my parents one night, they reluctant, that it was right and necessary that I go to college, and all this with such force that I dreamed of becoming such a person, and, as history helped with it, I did.

Perhaps, then, you will not think it trite of me when I say to you that I came gradually to believe

. . . in the idea that learning by doing, and combining study and experience and service, is necessary to the education of a responsible man and woman,

. . . in the idea that taking an interest in the community, and with imagination and a sense of enlargement, is among the aims of a true college,

. . . in the idea that there is as much intelligence in the population as a whole as there is in the elite, and access to educational opportunity is the key to the gate.

I turn now treating in these remarks two clusters of forces which bear upon the relation of college to community and on the future of continuing education for adults. One is at the macro-level, and concerns the revolution now under way in higher education. The second is at a more intimate or micro level, and concerns the changing feelings of people about such basic human institutions as work, leisure, and family.

Few doubt these days that a revolution has overtaken higher education, that one of the chief reasons for this revolution is what the community colleges have been doing, and that they will be in the forefront of what will happen in the future.

There are many aspects to this revolution. People do not give as high a priority to going to college as they once did, which is likely a good thing. When one goes to college is becoming less standard, and students already are weaving periods of going to college into other aspects of their lives.

There is a much talked about and analyzed financial crisis, which means that colleges are now forced to be themselves in order to survive. What is meant by the curriculum, by teaching, by grades, by learning itself, are all under attack. Experimental institutions are springing up—universities without walls, open universities, places like Empire State College. In all of these, combining study with actual experience and work is very much in style.

However, such earmarks of the revolution, as important as they are, do not interest me today. I want to comment on what I think to be a quite key element of the revolution in higher education, the new and increasing mergers of college and community. People like you have accelerated it, for one, I hope you may remain among those who lead it.

Underlying this merger is the proposition that the word education no longer describes what we are actually doing in the field of learning. Human development comes closer, forcing an old truth into the open. that learning is not alone the province of the school and college, and nothing short of arrogance will allow the educators to claim otherwise. In the long and short of it, education can in no way be viewed any longer as the property alone of the institutions which function in its name.

But this change in meaning catches all of us in a somewhat embarrassing posture for we still equate our colleges too much with the young, even as the need for continuous learning on a lifelong basis grows clearer by the day. The average college still remains less hospitable to the old than to the young, and the most awkward arrangements account for as much hospitality for the old as there is.

But what, now, of the relationship of the community college, certainly an important spark plug, as least the cutting edge, of the academic explosion of the mid twentieth century? One question I have for you is. Will the community college chart out new pathways or settle for what it now has?

Inventive models of the past found it hard to sustain what they had learned about the great good that results from the merger of college and community. Indeed, when their boom was over, they turned their energies to protecting themselves.

For example, the land-grant college helped transform agricultural efficiency, so that one person may now produce enough to feed forty others, perhaps the most remarkable technical feat in human history. However, as unneeded rural workers were forced to migrate straight into the urban ghettos, these colleges have not found it as easy to adjust to an urban society as to work with a rural society.

The teacher colleges helped fashion the public schools, to staff them, to evaluate them, to be their comrades. But, not unlike the land-grant colleges, having cut many of their local ties to emulate a more classic form of university, they have not been able to respond to the crisis of the urban school as they once did to the rural school.

But equal to the question, what of the community colleges, will it now stall out, is another question. What have they (and all of us for that matter) learned from the most recent boom that could help us prepare ourselves for the future of closer merger between college and community?

We have learned, I believe,

. . . that colleges and universities, while fundamental to modern society, cannot be all things to all people, no instant cure for the ails of society,

. . . that people learning, even at the higher levels, can happen anywhere, that the overall community itself becomes the campus;

. . . that the value of a man, of an education, of a worker, cannot be measured by a piece of paper, whether a grade, a diploma, or a degree;

. . . that Americans should relax somewhat about who goes to what college, at what time in his life, for how long, all at once or in episodes;

. . . that most of us don't enjoy education very much, that we need to laugh more, to have fun, to take delight in learning together as companion, students and teachers alike,

. . that the college or university, like all organizations and institutions, must prove that it is willing to do the best job possible for the least cost;

. . . that the colleges will be better places as we learn how to climb over the walls, between student and teacher, between departments, between the colleges themselves.

So, these large forces in the educational world insist now that a new conception of a college or university is emerging,

. . where learners of all ages and interests can draw upon the learning resources of the whole community,

. . . where people learn and work at the same time,

. . . where students have all the institutions available to them, rather than but one;

. . where talented citizens, paid or volunteer, may be both teachers and learners;

. . . where self-contained expensive campuses no longer multiply, instead the full use of community libraries, industrial laboratories, the media, the art centers, and in time, with the cable and cassette revolutions in television, each home and office.

With such thoughts about what we are realizing about the educational revolutions I turn now to a closer look at the set of values which, here and there, and likely with greater success than we know, is rising to challenge the core of values which shaped our society and which determines the behavior of most of us who are forty-five and more today.* I shall mainly refer to how this new set seems now to be expressed by young people, those who are under thirty.

First, there is the stronger hold that personal pleasure has taken upon life in general, and the hedonistic element contained within the new demand that success in life is measured by enjoyment and self understanding rather than by work for achievement, with production as its end. For example, Yankelovich found recently that only four of ten college students believe that hard work always pays off, compared with seven of ten in 1967.[1] Eighty-seven percent ranked work as very important. Gottlieb, another research scholar in this field, finds that college youth believe in work as a builder of character but not that work alone makes one a better person.[2]

Second, in increasing their interests in person-centered aspects of enjoyment and satisfaction, the young, having experienced no sustained economic deprivation as did many of their elders, possess what some call a psychology of entitlement. This view argues that society has achieved such a level of technology and material means that each person has earned the right to a job that gives satisfaction, the right to participate in the decisions which affect that job, the right to count on a secure old age, the right to have major health care provided, and the right to life-long education. Moreover, this view holds that it is natural for people, once they have food, shelter and safety, to pursue self-development. In the long and short of it, and in one form or the other, countless people have been influenced by the self-actualization ideas of the psychologist Maslow and others.

Third, the challenge made of the impersonal by the personal also challenges the rationality upon which modern efficiency and science are founded. Whether in the distrust of management (some educators find efficiency and learning antagonistic, for example), in the views of most counter-culture movements, or here and there in the environmental movement, efficiency is alleged to be exploitative and inimical to future society. To some scholars, such as Amitai Etzioni, this view challenges the core values of the American experience more than any other. Etzioni says, "Most revelant is the point that the traditional method of work is being questioned." Further, he says, "The fact that hedonism and productivity cannot be combined, because the tenets of one undermine the other, has been rediscovered today. Early capitalism saw this point but resolved it in favor

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*Early capitalism in America built upon an enormous resolve to achieve and to produce, and with or without the theory of the Protestant Ethic, this commitment drew upon the core values of self-discipline, objectivity and rationality. Few would doubt that such values helped us create and sustain complex industrial and governmental systems, large-scale administration, government through laws, and the enterprise of science.

of the primacy of achievement. The new legitimacies resolve the conflict in the opposite fashion. play hard and work easy "[3]

Fourth, changing values about family life not only erode the traditional distinctions in the roles that men and women play, they also stimulate the beginnings at least, of new life-styles. two-career families, the family without children, the rising acceptance of being single as a way of life, relaxed views about divorce, house husbands, trial marriages, to mention but a few. At the same time, the evidence suggests that young people are no less committed than their parents to joining in a traditional marriage, that they want to be more sure of themselves before entering into it, that they want on balance to have closer marital relationships than they feel that their parents enjoyed. Young people today evidence that they want to live more in small intimate groups—of their spouse, children, kin, and a select group of friends. "Before I can help others," they say, "I have to get myself together."

In summary, then, of these four clusters of values, one might conclude the following. at least among younger Americans self-fulfillment is gaining on money and security as the measure of occupational success, interest in small group living is growing, certain basics, including continuing education, are believed due one as a right, spontaneity is espoused as more important than planning, informality in relationships can be trusted, the argument goes, but be watchful of those in authority. There is basis here for the hypothesis. that insofar as these values challenge an earlier core, and not unlike the separation of work, family and community which followed the guild system, we are experiencing at least a temporary sundering of the social structure from the culture, the former meant as our institutionalized ways of doing things, the latter, a mix of old and new values presently preoccupied by a newer and perhaps expanding concern for the enhancement of self.

I can't begin to say how many urgent problems lie herein. for example, I mention two only. The first one concerns the transition to adulthood. how one becomes a mature adult. We know little about this, indeed, we in the United States have not developed a positive concept of adulthood. In an early rural phase, we exposed youth to the real world as quickly as possible. Later, however, we began to keep youth in school and out of the labor force as long as possible. Among the consequences is that young people in our society depend upon others like them for social interaction. Many now believe that this emphasis upon schooling is too limited an environment for mature transition to adulthood. A new phase is now suggested, of alternative environments, in which more overlap is achieved between work, education, and family and community life.

The second problem would direct our interest to what might be termed the canonical pathway of the lifespan—the separation of a lifetime into segments. When we are young we go to school for a third of our lives, to become an adult, to learn how to work. Then we enter work in earnest, full-time—but not quite, for we have that time which is free from it. Much later and older, we stop work altogether, we retire. nothing then but free time to use as we please. If young, go to school, if adult, work, if old, retire. While many variations and exceptions characterize the pathways of individuals, such is the general pathway for most of us. Yet many people now ask, and some are acting upon it. Is it not better to combine learning, working and leisure throughout a lifetime? Already a substantial movement is under way—from the continuous learning requests of labor unions in Europe, the recent recognition and expansion of continuing education, the talk of workers sabbaticals, the present leveling off, if not decline, of college-going males in order to pursue work first and schooling later (if not a combination of both), proposals for second and third careers, and the evident skepticism of retiring without authentic work.*

. Accordingly, we witness today the signs of a new ethic about work and about its relation to family and learning. This ethic can be not only positive but also supportive of a more interdependent society and world. This ethic makes work more an end in its own right, less a means to some other. It says that work should be satisfying, useful, relevant, emotional as well as rational, that it should include chances for one to interact with others in influencing the goals and procedures of the work situation. Younger people refer to this ethic by saying that work should be better interwoven into other activities of life, especially of families and education and that it is more important to achieve this balance than it is to see work in relation to money or prestige.

Now what do these two clusters—one educational and the other psychological—mean to continuing adult education. Not too few ideas but which of them to use seems now the challenge of adult education. Ours is a time of extraordinary opportunity for adult education.

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*With claims that work should provide personal enjoyment if not autonomy, the new triangle of work, leisure, and satisfaction seeks new meaning One example is expressed in the distinction made between job and work by some contemporary philosophers Thomas Green, among this group, says, "Paradoxical as it may seem, the problem of leisure in the modern sense will be resolved only in a leisure society in which the opportunities are multiplied and the possibilities maximized for every man to find a work " And, further, he says, "If we accept the distinction between work and job, between making a living and having a work to do, then we shall see immediately that it is simply finding a work independently of job that is the problem of leisure When the performance of a job corresponds to the fulfillment of a work, then there is no problem of leisure. And when a person who has a job has also found a work to do independently of that job, then there is no problem of leisure. A realistic and educationally practical formulation of the problem of leisure is readily available if only we are willing to sacrifice the assumption that a man's work and his job are in any sense identical."

Such a refinement may not be accepted by very many. It will mean little to the unemployed, the poorly paid, or to those who remain trapped in jobs they abhor But the message of the refinement holds that the options available and the longer life expectancy of modern society suggest that many people will seek their enjoyment from a broader meaning of what constitutes work, of which part is done on the job and part on leisure time. More mid-career shifts, the more than occasional estrangement of sons from fathers, the resurgence of handcrafts, and the rise of interest in hand-work in contrast to head-work, all indicate this distinction between job and true work is not alone the interest of philosophers.

New efforts explode. New interests abound in the nontraditional student. Certainly at workshops like this one we are sorting things out. So we need not repeat over and over what we should be doing. What we need to study together and act upon is where the trend lines are, along which change will surely come.

First, we will not want to go off by ourselves. If nothing else, our theme connotes relationships, mergers. We cannot wholly correct what happens in childhood. But we can understand it. The college student, trying to assert self-development as an aim, must be helped with it Or the person with no college experience, seeing a ring of uncertain prestige, worth, and possibility draw more tightly, needs our attention for programs which in no way may resemble any we have today. Moreover, to become an adult on a full diet of schooling, with little if any work experience along the way, is a liability well within the scope of our interest. So we ought to see adult education as an expeditionary force, going out to see what the front lines look like, then to come back and share its observations with the common culture.

Second, we must identify and understand the influence of the whole learning space—to include the workplace, the home, the community. At conference after conference educators accuse themselves of not perceiving very well the nature of the community, of employment, of education, of family, of marriage. Perhaps our problem is that we cannot understand one without the others, and that our way of trying to do it is even less well conceived. Whatever happens, we will no doubt see a new merging of the boundaries of education and work, for young and old alike, even more likely, we will see them overlap.

Third, we will need to better link our efforts with industry. We seem to know how to tie in with the elite professions. Perhaps the reasons why this happens might help us chart fresh approaches to the industrial world. Industry has awakened to the manner in which employees now seek more satisfaction from their jobs. It also is exploring why workers want to influence the production process. Industry's search leads straight to educators, even into providing education itself. And, since altering work and non work roles normally requires financial and emotional support, educators need at least the sympathy, if not the direct backing, of industry.

Fourth, we must turn the expected decline of conventional student enrollments into a permanent acceptance of the adult learner. The people are ready. I hope we are. They seem now to disentangle the idea of success from work, and from the affluence that results from work. They attend more now to their hunger to be close to people, to know neighborliness again. And people, more and more of them, are saying now that no job should be without some element that fosters continuous learning.

Fifth, we must adjust to the current swing of popular interest toward the older person. Even as older people themselves speak out more stridently, American society seems now to sense that the increasing proportions of older people in the population, but who are employed in smaller and smaller numbers, (now down to about 25% of the work force), represents a trend that also, unfortunately, measures the human decline in social usefulness and in personal worth and dignity. We have a large task to welcome older people as a major constituency of education—but recognizing that they possess, and should find opportunities for, a range of interests as challenging as their grandchildren. Some will be searching for a second career. Some will want to re-train for para-professional roles. Others will convert leisure to a true work. These steps, taken into conjunction with governmental and industrial centers will create a respect for the growing proportion of older people in the society.

Sixth, we must strive for a new way of using the schools and colleges. Tradition, with all the rise of non-traditional students and programs, still insists that we go early to school for what society says is needed, or to get something we want. Then we depart to another world—the real world we say—to return infrequently if at all. We accept schooling like childhood. it ends in due course. Learning from the leaders of community education. our institutions might become more everyday parts of entire lives, where one's true work might be fashioned and encouraged. Perhaps we could imaginatively enlarge the idea of the adjunct faculty. Surely we can invite older people to view the wide range of institutions—which include the libraries, museums, and art centers—as homes away from home, asking them also to help with undone tutoring, and campus and public service tasks, as paid workers or volunteers. As a recent survey of retirees summarized, what they like most about retirement is, in their words, the "leisure to be busy." Another author defines the role of the "avocational acadamician"—one whose job does not match his intellectual attainments, and who needs an educational institution as an avocational workplace.[4]

Seventh, we must devise better ways to help people chart their instincts for changes in careers and family pursuits. Employers assist people on how to move ahead on their jobs, or how best to prepare for retiring from them. Counselors and pastors assist people who live in troubled marriages. But where do you go to talk over a substantial change in one's life, a whole new chapter in career and family and education? It seems difficult to know where to take private questions about what these yearnings may require—a rise of courage, the need for sympathy, financial aids, the plan itself, how to start, when to take charge, and to feel good about it. Among other duties, the trained life insurance agent knows skillfully how to help a family make a plan in the event of death. Should we do less in helping people make plans in the event of life?

Ourselves

Finally, in this caveat entitled "ourselves," it seems certain that adult educators, as they more closely observe what work and leisure mean to people, will have to search for wisdom, to become philosophers. No doubt we will be able to judge how adaptive or not the human character can be. But what we cannot do is to know the inner-most thoughts of people about what fate has dealt them, a job they only pretend they like, a hum-drum place in life, a plan that failed, a dream that died.

So we who would search for the wisdom of adulthood will need to expect it of ourselves. If we believe in continuous learning, then we should be its best examples. If we believe that people should listen to their yearnings, then we should listen to our own. If we believe in leisure as basic to human aspiration, then we should risk it for ourselves.

Notes

1. Daniel Yankelovich, "Angry Workers, Happy Grads," **Psychology Today**, December, 1974, p. 85.
2. David Gottlieb, "Work and Families," **The Journal of Higher Education**, Vol. XLV, October, 1974, o. 541.
3. Amitai Etzioni, "The Search for Political Meaning," **The Center Magazine**, a publication of the Center for the Study of Democratic Institutions, March/April, 1972, p. 5.
4. Loring M. Thompson, "Higher Education: From Occupation to Way of Life," **Planning for Higher Education**, Vol. 3, No. 4, August, 1974.

Report of the Concurrent Workshop on Adult Learners

Charles Claar

Workshop Leaders:

Sister Jean Thomas
Trocaire College

Mr. Gino Canale
Associate Vice President for Continuing Education
Broome Community College

Mr. Charles Claar (Chairperson)
Associate Dean for Continuing Education and Community Services
Genesee Community College

Mr. Kenneth Witt
Director of Special Programs
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The workshop began with an overview of trends in Continuing Education for the next 15 years. Information was presented concerning the projected decline in enrollment of 18-year old students and the greater emphasis on the adult learner in continuing education. The characteristics of the mature adult were presented and many of the challenges which face the professionals in continuing education were discussed.

The participants of the workshop were broken into smaller "buzz" sessions which addressed themselves to the expectations of the adult learner in the college setting. Each of these buzz groups reported their findings to the total group. These expectations were discussed at length. In the second session, the workshop leaders presented a matrix which categorized the adult expectations into 13 groups. These include:

a) fear
b) academic integration
c) ivory tower syndrome
d) motivation
e) training
f) immediacy
g) sensitivity
h) self-fulfillment
i) challenge
j) socialization
k) services

These categories were to be discussed as they related to:

a) peers
b) employer
c) family
d) faculty
e) academic discipline
f) classmates
g) self

Four buzz groups were formed to determine how adult expectations can be met in each of the areas as presented. These expectations were then reported back to the total group.

The central focus of Group 1 dealt with the fear of the adult student. This fear was largely attributed to negative self-concept on the part of the adult learner. This negative self-concept often leads the adult student to fear the instructor. Ways of easing fears of adults were presented as follows:

1) Creating a situation which the adult student can meet on a one-to-one basis with the instructor.
2) Institutional commitment which would provide time for the adult student to meet individually with the professionals of the institution
3) Taking a particular interest in the adult student and determining that student's progress over an extended period of time.

Group 2 focused on motivation as it related to the college institution.

1) It was felt by this group that it is the responsibility of the college to encourage students to enter education who did not come voluntarily.
2) It is also important for the student to know who the class instructor is prior to the beginning of a semester.
3) There is a need for an institutional commitment for alternative methods of instruction both in and out of the college setting.
4) There needs to be a willingness to refer the adult student to agencies in the community and to consider granting credit for the other institutional agencies involved.
5) The importance of counseling adult students—counseling responsibilities must also be clearly defined within the departments of the college.

Group 3 focused on sensitivity as it related to the instructor.

1) It is expremely important for the instructor to be sensitive to the feelings of a student. Selection of instructors who are most sensitive to the overall needs of the students is very important. Providing orientation for instructors who will be teaching the adult learner and continued evaluation of instructors working with adult groups is a necessary component of adult education.

Group 4 focused on socialization of the adult student as it related to classmates, peers, family, and faculty

1) Counseling is of particular importance. Counselors should make contact with the adult learner in the community long before the student comes to the college. The adult has an initial fear of school and the process of making a decision as to whether to attend can be very lengthy.
2) It was also suggested that the term "counselor" may turn the adult learner off and another term should be substituted for that function

In summarizing the workshop, Gino Canale suggested that the expectations of the adult student may very well be barriers which prevent the adult from enrolling in a college program. He went on to point out the importance of pre-term orientation sessions with the adult learner. This provides on opportunity for the student to get acquainted with the institution, to ask questions, to obtain academic advisement, and to make a personal contact with someone at the college. Mr. Canale also indicated that it was extremely important for college publications to appeal to the adult learner. This would include a catalog for the part-time student, a definition of terms in the catalog, breaking the degree programs into segments which are usable by the adult learner, making publications attractive and readable to the adult students, providing clearly defined expectations for college courses, creating a climate in which the student could feel free to openly discuss problems, making withdrawal policies more flexible for the adult learner, and simplifying the admissions form for part-time students. Mr. Canale suggested that Continuing Education is a lattice as opposed to a ladder. The traditional education has been viewed in terms of vertical mobility rather than in terms of horizontal mobility which provides an ease for changing direction. In conclusion Mr. Canale stated that the Continuing Education function of a college should be the most student-centered operation in the educational institution.

Report of the Concurrent Workshop on Organization

Frederick P. Gardner

To view the adult student as client, the community college administrator is faced with conflicting approaches. The administrator must find a way to recognize and treat the part time student as a person rather than as a part of a person as dictated by budget officers who think in terms of "full time equivalents." It is not adequate to think of the part-time student as one-third of a person simply because he takes one course instead of three.

The **autonomy** of continuing education units among the community colleges varies from very weak to moderately so according to our colleagues. It was seen as of interest to the older student to find ways to provide that student with a program unique to his needs. Among most community college administrators concerned with this problem the feeling was expressed that too often the curriculum and the instructor in it were not able to specifically tailor their programs to meet the needs of the adult student.

The importance of adjunct faculty in the community college was discussed at some length. Again autonomy was central to the issue. The "union view" was that only full time professors could adequately meet the needs of part-time students. Others, more administratively oriented, saw the role of adjunct faculty as people able to provide unique, practical educational experiences for the part time student. It was agreed that in the various disciplines it was best to have a balance of full-time and part time faculty personnel. The union versus administrative argument was not solved.

The community colleges are a vital part of the social and cultural fiber of the American experience. To see them continue to reach the community in realistic terms is vital. The future of our society, and to a related extent, its community colleges, resides in the ability of its faculty to understand not only the disciplinary aspects of the learning experience but on the ability to chart the course of events in the classroom. The teacher and the students should be free to define the term "community". They are "us"!

Community colleges as organizations should be free to react to needs at the local level. Too often colleges are the product of the centralizing influence of the state capital and the conforming factors implicit in academic credentials. In the future, the adult student will require a college responsive not only to **his** general but his particular educational needs. This implies a degree of relative autonomy for the continuing education administrator at the community college.

American life has been institutionalized. We expect much of institutions such as churches, family and industry. Our attitude toward schools as institutions is reflected by our support. The support of the community college idea, in the minds of our citizens, is about to go beyond the obvious two years beyond high school. The implications of this for organizational response at the community college is both obvious and profound.

The important aspect of the community college impact on the curriculum is that it reflects the needs of particular students rather than those who seek credentials at a slower pace. The leaders of the continuing education units seemed to sense the need for a different but equivalent curriculum. It can be expected that this nation's community colleges will become deeply involved in credit and non-credit activities for community-based adults in the next few years. Further it is not unlikely to conclude that part time study will be the normal procedure rather than the exception. When this happens the continuing education units will become the "establishment" and have to find ways to recapture their position as non-traditional educators.

In looking at "community" as a concept, it seems critical to consider the individual student as well as the interests of those who might employ the student. After playing golf with those who hire the graduate and spending long evenings with students who seek degrees it can only be concluded that the needs of the adult student can only be met by knowing him as a person. Further, it was emphasized that each of us as administrators probably has more freedom than he uses.

Report of the Concurrent Workshop on Finance

Richard L. Rinehart

The preliminary registrations for the Seminar showed that only four people were specifically interested in the proposed workshop topics of budgeting, cost estimating, accounting, and general financial questions. At the same time there were registrants who indicated a desire to bring up specific questions and problems that were not included in the other workshops Because of this, this third workshop was modified to be an open or general problem session It began with some of the proposed topics and then broadened into the other areas of interest

The following observations statements of fact, and conclusions were developed by members of the group in response to questions from other members of the group

1 In dealing with business and industry, knowledge of their typical budgeting cycle is necessary for making continuing education plans Their budgeting cycle is typically six months out of phase with the fiscal year of a college This means that inputs regarding continuing education budgets should be worked out with training directors and other business officials during August and September for inclusion in their budget which would be approved in November and December It is most expeditious to arrange for projects that are operated during the first quarter of a calendar year which allows very little time between final approval and the beginning of the project This is because the revision to the budget could occur as economic conditions so indicate in the succeeding quarter of the calendar year

2 A series of specific suggestions were made regarding grants and other financial aid sources that relate to continuing education

3 It is considered to be absolutely necessary to market continuing education activities and philosophies within the college as well as in the community The various officials in the college need to understand and be sold on the general activities in the same way that people in the community must be

4 Continuing education directors should make regular visits with officials in community business organizations as well as with other related organizations and groups being served It is very helpful to develop the habit of making rather regular visits in order to develop effective relationships In other words, we shoud not wait until we have a problem before trying to talk to people

5 The representatives of business in the group stressed that the continuing education directors should simply ask about the methods in which decisions are made regarding projects and that they should be well-informed about the capabilities of the college

6 Recent research was presented by Robert Pennock that drew the conclusions The several existing patterns of organization can be effective in continuing education but the traditional organization of higher education does not lend itself to the necessary flexibility, most faculty members in higher education do not really understand the implications or need for continuing education as it is appropriately used in two-year colleges, adult education and continuing education does require financial autonomy and academic equivalence with the "day" staff organization of the college

7 It is necessary for the continuing education director to have his or her own expertise in marketing It is not sufficient or satisfactory to have to depend upon other individuals within the college for marketing skills

8 Good accounting practices are absolutely necessary in the post Watergate era This makes a special problem in continuing education but it is necessary

There were other extended discussions in sharing of information on specific types of community services and continuing education However, these are too numerous and specific to include in the Proceedings

Summary

In his summary, Dr. Alford stressed the importance of continuing educators "knowing the territory" Community contact, rather than contemplating the office ceiling, was seen as the way of gaining this end.

However, it is not enough that one know the community and it's needs, but also that one know their own institution and its resources There is no need in developing programs to meet needs for which the institution does not have the resources

Organization then becomes the next step in the delivery process The optimal organization is the one that most effectively brings together identified needs and identified resources The organization, thus, relates the external community with contacts to the internal operation of the college.

Finally, staff training and development for continuing educators was pointed out by Dr Alford as being absolutely essential for an effective continuing education unit

Evaluation

The conference evaluation attempted to elicit an action plan on the part of each of the participants. Four questions were asked. "Would I recommend participation in a replication of this conference to a colleague who had similar experience and interest to my own? Why? What one thing am I going to do back home as a result of participating in this conference? Why?"

The first question regarding replication was answered affirmatively by nearly all In answering why they would recommend the conference to a colleague, most felt that the comprehensive, pragmatic approach of the conference was very beneficial Additionally, several indicated the opportunity to share experiences with other colleges as being important. Another group felt it necessary that a wide range of individuals on their campuses share the concept of life-long learning, or continuing education They believed the conference to be a good introduction

Regarding the action plan for implementation on each individual's campus, nearly all agreed to do something The responses varied greatly, very possibly reflecting the place of continuing education on various campuses. Most emphasized activities of a pragmatic nature but several indicated they hoped to heighten an awareness of the role of continuing education with either their own staffs or higher levels of administration.

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