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ABSTRACT

This expanded issue of the Research Review examines six alternatives to current patterns in the community college. In the first article, the authors offer guidelines for formulating institution-building capabilities, developing curricula, and designing a Personal Development program according to a Life Skills Education model. The second paper discusses verifiable objectives in terms of theories of instruction, management, and motivation. The third paper discusses a theory that allows for flexibility and stimulates autonomous decision making on the part of administrators, community, students, and faculty. The fourth article points out that, despite the "open-door" commitment of 2-year colleges, their curricula lead to a closed system of limited space, measured time, rigidity, and narrowly fixed teaching procedures. The fifth article is a discussion of alternative enrollment-attendance patterns. Moving from the special focus on students to a proposal for faculty, students, and community people, the final article makes a strong plea for a radical redefinition of the school. (Author/CA)

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DEVELOPMENT OF LIFE SKILLS CURRICULA IN COMMUNITY JUNIOR COLLEGES by Winthrop R. Adkins and Frank G. Jennings	Page 2
--	------------------

OBJECTIVES, MOTIVATIONS, AND ACHIEVEMENTS by Albert A. Canfield	Page 6
---	------------------

COLLEGE OF THE WHOLE EARTH by Martin J. Cohen	Page 8
---	------------------

EQUAL ACCESS TO WHAT? by William M. Birenbaum	Page 10
---	-------------------

ALTERNATIVE ENROLLMENT-ATTENDANCE PATTERNS by Dorothy M. Knoell	Page 12
---	-------------------

THE MASTER PLAN: WELCOME TO THE FACTORY by Warren Friedman and Rue Wallace	Page 14
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ONE INSTITUTION: SIX ALTERNATIVES

Introduction

This expanded issue of the Research Review examines six alternatives to current patterns in the community college. Each paper points to similar needs—the same needs that have become contemporary gospel but still hinge on the theoretical, the ultimate, the yet-to-be implemented. Each paper also looks at today's community college from different perspectives, seeing divergent goals, and suggesting varied emphases.

A fairly negative view is taken by Winthrop Adkins and Frank Jennings, who describe New College. This "instant institution," founded on hope, enthusiasm, and good-feelings-for-all-mankind, ends in disillusionment and despair. However, they continue, if attention is paid to the clear definition of objectives, anticipation of problems, explicitly developed procedures, and well trained staffs, failure is not inevitable. The authors offer guidelines for formulating institution-building capabilities, developing curricula, and designing a Personal Development program according to a Life Skills Education model.

Albert Canfield's paper discusses verifiable objectives in terms of theories of instruction, management, and motivation. He suggests that, because of those concepts and the knowledge of training procedures, techniques for identifying key problems, and the ability to undertake organizational re-examination, education is in a unique position to "assume leadership in organizational effectiveness."

Martin Cohen's College of the Whole Earth, although the most visionary plan, still allows for flexibility and stimulates autonomous decision making on the part of administrators, community, students, and faculty. Each group is brought into the process of establishing the college as a viable center for gathering information about the community's needs and resources. The paper applies Buckminster Fuller's World Game to the relatively small community structure and extends it into educational institutions.

Changing from an emphasis on curricular designs and objectives, William Birenbaum's paper discusses community college students more directly. He points to the disparate perceptions of middle- and lower-class students, especially to the fact that "new" students, who have had the least prior academic success and the fewest educational and economic opportunities, are forced to make early vocational choices that limit them to specialized and compressed programs. Despite the "open-door" commitment of two-year colleges, their curricula lead to a closed system of limited space, measured time, rigidity, and narrowly fixed teaching procedures.

In her discussion of alternative enrollment-attendance patterns, Dorothy Knoell synthesizes the many findings about community college students, suggesting that student attrition "tends to reduce [the heterogeneity resulting from diverse abilities and backgrounds] . . . to what may be too low a level of student mix." Whatever the variability, however, there is considerable deviation from standard attendance patterns among two-year college students, deviation that points to the necessity for alternative patterns. She proposes ten such alternatives for the many students who do not succeed in "regular" programs.

Moving from the special focus on students to a proposal for faculty, students, and community people, Warren Friedman and Rue Wallace make a strong plea for a radical redefinition of the school. They propose the political use of an institutional voice to build links between school and community and further suggest a "forum for real dialogue" concerning educational functions, with the school as a focus for community problem solving. They stress the necessity for a combined effort by the schools to force certain events.

One institution: six alternatives. These approaches, of course, do not represent the views of all educators or, necessarily, the views of the staff of the ERIC Clearinghouse for Junior Colleges. They do, however, provide new and interesting perceptions of today's community college.

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Special Projects Coordinator

DEVELOPMENT OF LIFE SKILLS CURRICULA IN COMMUNITY JUNIOR COLLEGES

This story of the establishment of New College is not true in any one of its details. It is quite accurate, however, as a description of what is now taking place on many junior college campuses about to become operational.

ITEM: Three years ago the Regents announced to the press that a new community college would be established on the four acres of abandoned waterfront property of Seaport. The school would serve the immediate community of the downtown area, tightly packed enclaves of Italians, Irish, and Blacks. Secondly, it would welcome all the children of the poor from other depressed neighborhoods of the city. The announcement on TV and in the press resounded with the rhetoric of humanistic innovation:

The city is a learning laboratory . . . All who are to be affected by the consequence of educational decisions would participate in some meaningful way in their formulation and enactment . . . No student . . . who would wish to enter the school's programs would be debarred . . . the teaching staff would represent the populations to be served . . . the life styles of the total community would be respected, celebrated, and supported . . . a new kind of curriculum structure . . . would be developed . . . it would be task-specific, person-specific, a rich and virile blend of the humanities, the sciences, and the marketplace . . . the American Dream of equality of educational opportunity with the school as a fail-safe ladder to social betterment would be enhanced and elaborated to include something that could only be called "equality of educational results." THERE WOULD BE NO CASTOFFS HERE . . . no dropout, no man or woman would be denied [his or her] warranted success.

ITEM: Two months after the Regents' announcement, a search committee made up of community leaders, church leaders, labor leaders, and the mayor's press secretary reported that Dr. Able, a young sociologist with a Peace Corps background and a history of success as a change agent in Appalachia, had been chosen president of New College.

ITEM: In the fall of the first year, Able introduced to the public his administrative planning group, which included high school students and young, unemployed adults, several history teachers, two employers, several technical specialists, a human relations officer from the police force, and an emeritus professor of education. Shortly thereafter,

a twenty-six page document, the plan for the development of the college, was released.

ITEM: The following spring, the Board of Trustees of New College announced that applications would be accepted on a first-come-first-served basis, with no high school diploma required. Cooperative work-study education would be the central thrust. The curriculum would be tailored to the needs of the individual student by active advisement and counseling. New College would be a gateway and a channel into the upper reaches of both higher education and the professions. More important, New College would be in and of its home community—a service agency *par excellence*, a clearinghouse for civic issues, a common ground where diverse groups could meet to discover and deal with common problems.

ITEM: New College opened the following fall with five hundred students. Orientation was a two-week retreat in which the resident faculty and a student cadre briefed the newcomers about openness, freedom, and opportunity. There were “rap” sessions, encounter groups, interactive planning meetings, affective marathons, and chalk-talks about information flow and governance. The academic calendar described the rhythms of work and study. Administration-faculty-student task forces on curriculum, student life, decision making, and community participation were established and began to confront conflicts and hammer out policy. The academic year began with enthusiasm, great releases of energy, and optimism.

Troubles were not long in coming. The temporary quarters were found to be cramped and inadequate. Student and faculty definitions of curricular “relevance” and “standards” began to diverge and polarize the groups. Long-standing ethnic suspicions erupted in open confrontation and occasional violence. Community groups took to the press with charges that they had not been fully consulted. Science and shop equipment failed to arrive. Work stations could not be found in the community. Students complained about two-hour commuting time and inadequate transportation. Faculty pronounced their offices noisy and their workload too great to tutor and counsel the many students who lacked adequate communication and study skills. The drop-out rate began to rise alarmingly. All-college meetings were held; the president’s office was occupied and reoccupied; a student underground newspaper mysteriously appeared with accusations of boring courses unrelated to student needs, violations of the spirit of the retreat, little consultation with students, and insufficient concern for their welfare. Administrators were heard to say, “I spend my time putting out fires. I can’t remember when last I had a chance to think where we’re headed.”

The second year began without a retreat and with the admission of an additional 700 students. The promised new facilities had not even been planned. Classes increased in size; some started at eight in the morning; some ended at eleven at night. A quarter of the original faculty either left or were asked to look elsewhere. The new faculty were appalled at the looseness of the operation, the arrogance of the students, and the low academic standards. The generation gap yawned at the gate of New College. The ancient town-gown conflict was reenacted. This was neither what the Regents had sought nor what the city fathers had planned. This was not what the parents of the ethnic groups had expected from their school. This was not the way to a “real college,” to a new life.

ITEM: Dr. Able left eagerly for a far better post at the end of the academic year. His successor, slightly older, left a career as a military educator and is busy bringing “orderly order” out of “romantic chaos,” as he described the curriculum and operation on his first day. Scores of students were encouraged to go out—or drop out—to work before engaging in “serious study.” Again the faculty turned over. New College now expects to meet all certification requirements within the severe time limits that have been placed on it for the remaining students. Liberal education will be available to those who can profit from it; for those who cannot, cooperative work-study education will meet their instructional needs. Thus a new educational institution is formed. In a few years it will be no better than others, but no worse than most.

The Instant Institution

The preceding paragraphs display the tragi-comic fate of far too many “instant institutions.” The pattern was similar in the War on Poverty and, with variations, even in the industrial sphere. New College would have suffered similar consequences even if it had been conceived and created under simpler conditions and on a more traditional model. The scenarios for the development of new educational institutions have been agonizingly similar: too many contradictory and ill-defined objectives, too little anticipation of problems, too few explicitly developed plans for growth by stages, inadequately trained or inexperienced staff to plan and implement the development, and, worst of all, too little time.

Deliberate institution building is a modern and peculiarly American phenomenon. Modern times demand new educational institutions to meet recently discovered socioeconomic problems of a society in deep trouble. Historically, American optimists have been willing to tackle the impossible without the European’s sense that institutions, like men, cannot be made excellent in one generation—academic or genetic. In a sense, our institution-creating ambitions are our strength, but when we ignore the necessity of using fully our technological and managerial know-how in achieving them, they are also our weakness.

There can be no denying that we must have people-changing institutions, new schools that can give generous assurance that anyone can be prepared to live a better life and that most of our social and political ills can be assuaged by the actions of an informed, engaged, and receptive citizenry. We need schools at all levels to help create such citizens—from nurseries to universities and educational service centers for life-long learning and doing. The present community junior college in this country is, for all practical purposes, a new institution—one of the newest [8, 9]. It must be multi-purpose, flexible in operation, and a major integrating force between institutions and people. The opportunity for innovation has been seen by many; the realization has seldom been achieved.

We are convinced that perhaps the major reason society has not yet been able to build community colleges sufficiently stable and innovative to meet the peculiarly difficult educational needs of their clientele is that no one yet fully realizes that to do so requires a special capability. It has been assumed that ambition to deal with great needs, faith in progress, hard work, liberal thought, and vigorous leadership will by themselves accomplish the task—imagine if we

built skyscrapers that way, or prepared to wage war, or launched moonshots!

What Kind of Institution-Building Capability Must We Have?

The development of a community college is a complex process [3, 4]. It requires a carefully defined set of compatible objectives; a well-conceived, detailed plan for development; judiciously selected and expensive resources; and above all, the systematic body of knowledge and trained manpower to create and manage them all. We are convinced that little progress in institution development will occur until we have a cadre of new kinds of specialists, trained in the design, development, and management of new institutions — organizational architects, engineers, and manager-builders. Second, there must be better theory, models, and systems, a reservoir of literature by experts—in short, the base for a new technology.

One looks in vain today for university programs that train institution-development specialists or for a systematic body of literature on problems of the development of a new educational organization. Departments of educational administration are too often oriented to the problems of maintenance, not development; to finance and to physical plant, not to students and communities; to the *existing* institution, not the new. To be sure, graduate schools have begun to introduce programs and courses in change-agency. Though still provisional, the orientation is to be the identification of strong agents for change within existing organizations and the better use of existing resources [5, 7]. While this is also important, deserving academic attention in these times of organizational obsolescence, we contend that the tasks of *new*-institution development are considerably different. At the risk of seeming to underestimate the difficulty of maintaining existing schools, it is a little like developing a cadre of interior design specialists before one has even thought of developing architects and engineers.

Producing change in existing institutions requires many of the same planning, design, negotiating, and management skills. Yet a new institution requires a great many other skills of a different order [2]. It is one thing to react creatively to visible negative feedback within an organization; it is quite another to start from scratch in building, under pressure of time, new systems that exist only in the imagination. Both kinds of specialist are needed: those who can design and guide the growth of a fragile fledgling institution, and those who can help create new possibilities for excellence in human development in existing ones.

We are persuaded that the need for educational developers should have been felt long ago by the graduate schools of education and the funding sources, and we urge most strongly that those committed to the viability of the community college begin now to put in their orders for these specialists. The creation of new graduate programs to supply professionals at the master's and doctoral level, trained in educational planning, development, and management, would have several beneficial side-effects. It would require the creation and assembly of a body of relevant knowledge and expertise and would stimulate the delineation of theories, models, and systems necessary for the task. Inevitably, professional interest groups and associations would be born. A good start would be to bring together those who have

"paid the price" by actually living through the rigors of such an effort. By now, there should be a number of former administrators of new community colleges, training centers, and other educational institutions who have learned a great deal from their errors and experiences and who would make good use of the chance to systematize their hard-won knowledge. While the development of institutions will never be totally smooth and predictable because of the complexity of the task, the capability for developing detailed plans (with their alternative fail-safe strategies) that are staged for optimum growth will greatly improve the chances that institutional intentions become stable operations. Given processes for constant monitoring and evaluation, an emphasis on performance, and flexible methods of governance, an institutional base can be created for the effective education of productive citizens.

What Kind of Curriculum Could Be Developed?

Inevitably, one of the problems faced by the new breed of development specialists is the creation of a curriculum designed to meet the unique needs of the community college population. It is not enough to have a smoothly developing institution; the basic program must provide the student with the necessary knowledge, skill, and experience to attain his occupational and educational goals. One of the problems at New College was that the rhetoric about curricular relevance was not matched by institutional performance. The high dropout rate recalled the high national rate of attrition — not surprising when one considers the diverse educational problems presented by the heterogeneous community college population.

There are the familiar students who suffer the peculiar status problem of rejection by four-year colleges. There are the high-aspiring, educationally disadvantaged groups with serious need for viable direction and sufficient academic tools to take them on the way. There are the technology-oriented sons of parents made practical by the depression of the '30s who want to learn today's equivalent of a trade with no nonsense. Some want mainly a moratorium on adult work-life or something vaguely better than they could get merely with a high school diploma. Most are in cultural transition from the lower classes to some level in the middle. Opportunity, however vaguely defined, is the principal expectation from two years of attendance.

We will not attempt to discuss fully the curricular alternatives that will enable the multi-purpose community college to deal with more widely differing student goals. We would, however, suggest that alternatives will likely be developed within three major domains: Technical Career Training (including paraprofessional), the Liberal Arts, and Personal Development. Students having disparate goals will take different programs comprised of varying proportions of each of the three main curriculum areas. Technical Career Training and the Liberal Arts are traditional in the present community college in one form or another; Personal Development represents a new curriculum area—"a third curriculum"—ripe for development. It is for this area that we should like to make some specific suggestions.

In many schools and colleges, personal development is thought to occur as an indirect result of exposure to various learning experiences, including interaction with mentors and peers. Special problems related to academic

difficulty, normal growth, or social and interpersonal conflicts are dealt with, if at all, on a crisis basis by trained counselors. With the admission of the disadvantaged, who lack many of the opportunities described by Stroudbeck [8] for learning how to deal with personal development in our culture of achievement, it has become increasingly clear that the community college must offer more effective preventive methods than counseling and advisement for making the transition from adolescence to adulthood, from ghetto to the world of work, from school to employment. The recent legitimization of affective and social objectives in addition to cognitive ones for systematically developed curricula has turned the attention of educators to finding ways of enhancing student learning of "urban survival skills" and "human relations skills," as well as the more common "study skills." These we have designated "Personal Development." Unfortunately, program development in this area has been haphazard and limited in imagination and scope.

An ambitious, systematic method for developing a Personal Development curriculum, called Life Skills Education, has been devised over the past several years by one of the authors [1]. The basic model was developed first for disadvantaged blacks in an urban vocational training center, and later in Canada. In the past two years, the underlying Problem-Centered Structured Inquiry model has been further refined in projects at Teachers College through applications to the affective and social problems of beginning teachers. Recent work has indicated that the basic model is an effective way both to help students deal with their problems in living and to help teachers learn some of the more difficult skills of teaching.

In brief, Life Skills Education is a problem-centered, experience-based curriculum model, using small-group methods, that provides an opportunity for the student to acquire new experience, knowledge, and skill as he gains practice in solving problems in living. The Life Skills curriculum model has the following characteristics:

1. It focuses on specific psychological and social problems experienced by most people in a given target population in training, on the job, in the family, in personal development, and in the community.
2. It takes full advantage of the positive peer relationships of adolescents and adults by maximizing group activities in areas of common concern through discussion and structured learning experiences in small groups of ten to twelve students.
3. It builds on students' present experience, knowledge, and skills and provides a means for improving problem-solving ability while promoting the acquisition of new experience, knowledge, and skills.
4. It provides students with alternative ways of perceiving and resolving life problems on a preventive basis and encourages them to make conscious, informed choices about their personal values and objectives.
5. It is structured to permit the group to deal with one problem at a time and to experience success and cumulative progress in resolving an increasing number of related problems.
6. It requires students to engage actively in exploring their environment and provides a means of reflecting on their experiences and setting and implementing new goals.
7. It demonstrates the utility of knowledge and the value of learning by reading, study, and research as well as by discussion and experience.

8. It engages the group in applying both their accumulated and their newly acquired knowledge to real and simulated life problems and provides an opportunity for trial and practice.

When properly developed, the Life Skills Curriculum provides in effect a course of study for achieving many counseling and teaching goals by dealing with both cognitive and emotional aspects of personal problems and by integrating inductive and deductive modes of learning.

The development of Life Skills curriculum units is basically a two-part process: (1) a systematic method for deriving behavioral objectives from model problems in living met by a target population such as the community college student—the "what" of the curriculum; and (2) the design and development of sequential learning experiences following the four-stage problem-solving model—the "how"—for helping students acquire the necessary knowledge and skill to deal more effectively with the problems in behavioral terms. Deriving the syllabus from the actual problems faced by students insures that the curriculum will be relevant to their perceived needs and that motivation will be high. The structured problem-solving method *starts by highlighting the problem, dignifies what the group already knows about it, provides multi-level and multi-media resources to help them find what they need to know, and gives them an opportunity to translate their knowledge from insight to action.** After several lesson cycles, students begin to acquire, in addition to specific knowledge and skill, a basic problem-solving strategy that can be generalized to other problems for which no programs are already available.

The creation of such a curriculum requires careful assessment of problems, a clear understanding of both the model and the characteristics of the target population, analytical skill and imagination in design and development, and sufficient lead-time and resources for enough cycles of development, trial, evaluation, and modification to insure that units in fact do what they are intended to do.

Examples of learning units or lesson series appropriate for the community college student are: how to choose, find, get, hold, and advance in a job; how to express and present oneself effectively in a group; how to budget time effectively; how to deal with marital conflict; how to cope with the social demands of training and work; how to get the most out of a community college experience.

It is not difficult to imagine other problems that could be programed in a Personal Development curriculum. The students have to deal with all the stresses and strains of socio-economic mobility, as well as with all the life problems encountered by a continuing learner, a potential multiple-career worker, a family man, and a citizen in a rapidly changing society. A preventive program of Life Skills Education would help students cope with dilemmas they will inevitably face and thus minimize the chance that problems will become so severe that they must drop out or fail to take maximum advantage of their learning and employment opportunities.

Once again, however, new kinds of development specialists and sufficient time and resources are required to insure

*See Reference [1] for a more detailed description of the Life Skills Education model than can be presented here.

that curriculum plans are well designed, developed, tested, modified, and installed. Life Skills Developers and the teacher-counselors called Life Skills Educators who will administer the program will have to be trained in specifically designed university graduate-degree programs.

Given adequately trained program developers and sufficient time, such programs as Life Skills Education will be an important way to insure that the personal development needs of students will be met in community colleges. The ability to cope effectively with immediate personal problems allows a fuller concentration on learning opportunities in other areas, such as Technical Career Training and the Humanities. If the "third curriculum" can in fact be developed to accomplish its intended job, it can help the student integrate what he is learning in occupational training, liberal arts, etc., and thereby create the truly unique institution the community college has always promised to be.

Conclusion

We are persuaded that the community college must make more aggressive demands on the graduate schools of education (with the assistance of funding sources) for the new kinds of development specialists we have described: the macro-developers of institutions and the micro-developers of unique curriculums. Given such personnel resources and the appropriate framework, systems, and knowledge, the patterns of New College can be avoided and the community college will have a chance to live up to its promise of helping to make real the American dream of equality of opportunity through education.

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BIBLIOGRAPHY

1. Adkins, Winthrop R. "Life Skills-Structured Counseling for the Disadvantaged." *Personnel and Guidance Journal*. 49:2, 1970.
2. Adkins, Winthrop R. and Sidney Rosenberg. "Mapping the Development of Experimental-Demonstration Training Organization" (in press).
3. Cohen, Arthur M. *Dateline '79: Heretical Concepts for the Community College*. Beverly Hills, Calif.: Glencoe Press, 1969.
4. Jennings, Frank G. "The Two Year Stretch: Junior Colleges in America." *Change in Higher Education*. March-April, 1970.
5. March, James G. *Handbook of Organizations*. Chicago: Rand McNally, 1965.
6. Medsker, Leland L. *The Junior College: Progress and Prospect*. New York: McGraw-Hill, 1960.
7. Miles, Matthew B. *Innovation in Education*. New York: Teachers College Bureau of Publications, 1964.
8. Strodbeck, F. L. "The Hidden Curriculum of the Middle Class Home." In Hunnicutt, C. William (ed.), *Urban Education and Cultural Deprivation*. Syracuse, N.Y.: Syracuse University Press, 1964.
9. Trent, James W. and Leland L. Medsker. *Beyond High School*. San Francisco: Jossey-Bass, 1968.

OBJECTIVES,

MOTIVATIONS,

AND ACHIEVEMENT

The current emphasis on verifiable objectives (sometimes called behavioral objectives or performance objectives) is generally attributed to the continuing and major impact of Mager's *Preparing Instructional Objectives* [2]. Such an emphasis within instruction is similar to the emphasis within management, namely, *management by objectives*, that is ascribed to Odiorne's *Management Decisions by Objectives* [5]. A third area of thought, and perhaps the most powerful unifying concept, concerns contemporary motivational concepts centering on achievement needs and has been formulated by McClelland in his *The Achieving Society* [3].

In all three cases—instruction, management, and motivation theory—the approach has shifted from an emphasis on the activity or process to the results of that activity in relation to some specific objectives. Each of the three concepts is now reasonably well documented by substantive research, comment, and study—so well, in fact, that no one of them could be adequately described in a paper of this size. Nonetheless, all three should be considered and their reinforcing implications suggested.

Briefly, the stream of conceptual development in management has followed a relatively clear path in the past decade or so. Among the earlier and more significant entries in the field of management were CPM (Critical Path Method) and PERT (Program Evaluation and Review Technique). As a corollary to these systems, with their elegant acronyms, a group of highly sophisticated mathematical procedures emerged, each designed to permit the application of decision and queueing theories to a variety of management problems. In their evolution, it became evident that the development and analysis of such decision options often required the extraordinary computational powers of the high-speed digital computer. The current hot letters are, of course, PPBS (Program Planning and Budgeting System). Some efforts to make use of the full gamut of objectives, targets, interactions, checkpoints, and deadlines have drowned in their own paper trails. Others suffer because no general agreement can be reached on the basic objectives and consequent work or output units.

In each of these management concepts, the emphasis has tended to remain on the charting of the courses and the monitoring of activity, not necessarily on the clarification or definition of the organizational goals themselves. Odiorne, however, identifies three essential activities for the organization: (1) accomplishing routine objectives—the day-to-day business of the organization; (2) solving problems—correcting out-of-control situations or performances that fall outside acceptable limits for specific operating results; and (3) innovation—the development and use of new approaches.

A common analogy to illustrate these points relates to a buildings and grounds department and might read: (1) cut the grass (routine), (2) rid the grass of weeds (problem solving), and (3) replace the sod with artificial turf (innovation). By concentrating energies on the identification, clarification, and communication of mutually accepted and carefully defined objectives, Odiorne and many of his

clients have found that applying PERT or the PPBS concept follows quite naturally.

As for the instruction side, Mager opted for instructional objectives that could be verified by learner performance. He proposed that the learner's learning should be evident to both teacher and learner, mutually understood, and concretely defined. He also asked that the definition include clear statements describing the conditions under which the performance would occur and a precise description of the standard or acceptable level of performance. Some find such clearly differentiated goals or purposes for learning too restrictive and more or less reject out of hand the notion of verifiable outcomes. With a little reflection, however, it will be clear that the concepts of Mager could virtually be deduced from the concepts of management by objectives—or *vice versa*. Despite this, it is rare to find administrators pressing for management by objectives within their own structure while, at the same time, encouraging their faculties to adopt the performance-objectives approach to instruction.

Meanwhile, a great mass of data on achievement motivation has been accumulating. McClelland and several other investigators have formulated, implemented, and verified the contribution of the achievement motivation in essentially entrepreneurial environments. Learning would appear to be, essentially, an entrepreneurial activity.

The articulation or consolidation of these concepts (management by objectives, performance objectives, and achievement motivation) has yet to be fully achieved. The concepts of instructional and managerial objectives that divert attention from personal qualities and their relationship to activities inside or out of procedural or policy limits have yet to emerge. Yet it is clear that the motivation to achieve excellence or to achieve some moderately difficult goal is an extremely powerful force—for both the individual and the organization. The potential power resulting from a congruence of an output-oriented management emphasis (instructional and organizational) with the achievement (output) motivation emphasis of the social scientist seems evident. Without such articulation, we are likely to have organizational leadership attempting to establish specific goals for achievement while the personnel who must achieve these objectives view their roles, their jobs, and their tasks with widely differing personal motivations.

Several questions remain. There is, for example, the question of whether or not the people now in the organization can be trained, educated, shaped, developed, or changed to understand, endorse, and apply any of these concepts. There is an abundance of data to indicate that people can and will learn to make use of performance objectives in the development of instructional procedures or in their instructional strategies. Similarly, there is considerable evidence that people can and will apply the concepts of management by objectives. The question about which we generally have the least knowledge has to do with teaching people achievement motivation. McClelland [3, 4] gives a qualified affirmative, and in *Teaching Achievement Motivation*, Alschuler [1] gives an even stronger and more vigorous affirmative.

In a very real sense, then, the stage is ready. We have the means for total institutional articulation within our grasp. We currently have the resources and the know-how to move ahead in all three fields. Accordingly, it is here

proposed that instruction, management, and motivation be merged in a process that involves people in goal setting, carefully defining what is expected to happen, monitoring progress, permitting the individual considerable latitude to follow the behavior style that produces the best results for him (within policy guidelines, of course), and managing by exception those performances outside acceptable limits.

In management, this would free the manager from status or progress reports and show-and-tell sessions at staff meetings and would allow the administrator to devote his energies to individuals with problems the moment such problems become evident. The parallel in instruction is to free the teacher from the often laborious outpouring of content, group contact, etc., and allow him to facilitate progress toward some goal defined for the individual student—all within the framework of achievement rather than power, achievement rather than friendship, achievement rather than bureaucratic conformity. In a sense the question is: "If we have something to achieve, can we agree that we are successful when it *has* been achieved?" Not uncommonly we pretend that to be the case but, in reality, the race often goes to him who runs most stylishly.

Along with administrators, faculty, and students, could we involve the person seeking a goal in the goal-setting process itself—assuring that the goals were reasonably difficult and obtainable, establishing limits of performance acceptability in a joint discussion, and letting the individual achieve the goals in his own way, within broad policy limits? If his performance falls outside acceptable limits, discussion would concentrate on healthful correction and/or improvement in the identification and elimination of problems—not on placing blame, analyzing personal quality limitations, or on other annoying gambits in a preoccupation with the hows rather than the whys or whats of achievement.

While we might hope that we will all be innovative, most of us tend to be well occupied, if not fully satisfied, with routine work and periodic problem-solving forays. For the innovator (often the strong achievement-motivated person), we need to provide an environment within which his ideas and suggestions are not perceived as criticisms or attacks on the existing order. This is really not difficult, if the emphasis is on achieving results rather than on the consequences of behavioral style—be it for power, friendship, likability, or avoidance.

As McClelland's research continues to be verified by investigators in several other fields, as the concepts inherent in and related to the notion of performance-verifiable instructional objectives are more widely accepted, and as the adoption of a management-by-objectives approach widens, the congruence of the three separate concepts occurs automatically.

If we become preoccupied with what we are trying to achieve, remarkable things may occur. Committees, for example, are presently likely to discover that their objective is to discuss and exchange views in a particular domain of issues. They disregard any implications or consequences their discussions might have for goals or objectives relevant to them or to the organization. Committees *ought* to meet for a specific objective, be formed because a group is likely to be more effective than an individual, be encouraged to concentrate on a single objective, and be disbanded when they either achieve the objective or concur that they cannot reach it.

Individuals within the organization *can* establish moderately difficult goals for themselves, *can* be expected to work in their own style to achieve them, and generally *do* have access to individual or *ad hoc* groups to help them if a problem remains or a change seems indicated. Most people in education—trustees, administrators, faculty, and students—are genuinely determined to improve their effectiveness, to achieve more in less time, to function effectively, etc. This determination, directed toward instructional and organizational efficiency and effectiveness, united with and facilitated by our growing understanding of human motivational needs, offers a powerful potential for personal improvement through an organizational commitment to ends rather than means. We may well find that success, elusive as it is, is less in the being than in the becoming.

It is evident that we now have the concepts, the training procedures and the materials for producing massive organizational improvements; consensual techniques* for identifying and clarifying problems; and participative techniques to assure that individual goals are *really* individual goals rather than organizational expectations or administrative assignments. We have the theoretical and operational foundations to move into a total organizational re-examination and to defer any further propensities to engage in the futile preoccupation with processes, addiction to which comes so easily.

I predict that education, because of its dedication to human values and its commitment to the service of people, will assume leadership in organizational effectiveness within this decade. Our counterparts in business and government who have the same desire and hope cannot do so because only we have the wide range of objectives and the specific motivation to make such an alternative a reality.

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*Materials and procedures on a consensus technique are available from Dr. Clayton Lafferty, Human Synergistics, Suite 1022, Executive Plaza, Detroit, Michigan 48226.

BIBLIOGRAPHY

1. Alschuler, Alfred S.; Tabor, Diane; and McIntyre, James. *Teaching Achievement Motivation*. Middletown, Conn.: Education Ventures, 1970.
2. Mager, Robert F. *Preparing Instructional Objectives*. Palo Alto, Calif.: Fearon Publishers, 1962.
3. McClelland, D. C. *The Achieving Society*. New York: The Free Press, 1961.
4. McClelland, D. C.; Atkinson, J. W.; Clark, R. A.; and Lowell, E. L. *The Achievement Motive*. New York: Appleton-Century-Crofts, 1953.
5. Odiorne, George S. *Management Decisions by Objectives*. Englewood Cliffs, N.J.: Prentice-Hall, 1969.

COLLEGE OF

THE WHOLE EARTH

There are great needs in the world — for food, power, energy, water, and material resources; for equitable distribution of the resources so that everyone in the world will be able to lead and continue to lead a healthful and successful life. The increase in human population on the earth strains these resources and threatens the ecological balance of all other animal and plant life. Increasingly rapid development of the economies of the world for the benefit of people yields inefficiencies in the distribution and use of the resources, which then show up as pollution of the environment. This development also leads to conflict for access to the finite resources. If the world is to develop peacefully and in harmony with the natural forces that sustain it, these conflicts must be resolved and the inefficiencies reduced—*all over the world and for all humanity*.

The goals need to be stated for all humanity, for the world is one great inter-related system. Buckminster Fuller, in his ideas for a World Game, has suggested that we look at the earth as a closed and finite system, that we examine what is there and what is needed, and attempt to formulate plans to achieve our goals for the whole world.

He suggests that scientists, planners, and world leaders gather knowledge of the needs and resources of the earth, develop their ideas, and test their plans against our best understanding of worldwide industrial and economic processes. He suggests further that knowledge of all plans and results of all tests be made available worldwide, so that people themselves will be able to witness and evaluate the evolution of the world plans.

While that work proceeds, each community will continue to need information and guidance concerning its own life and its part in the whole. In a sense, that need for knowledge calls for a form of World Game within each community, for an educational institution within each community to research, organize, and present to the community information about itself and its workings. The institution must be in and of the community it studies, as the World Game is in and of the world.

The community college as an institution has a unique relationship with its community. In many ways, it is already charged with the well-being of the entire community; it accepts all students who come, without prejudice for or against past activities and without limitations on the recognition of present abilities; it exists in and for its community and has no great obligations outside its geographic area.

College of the Whole Earth

This paper suggests a radical change in the self-image, direction, and goals of the community college. It describes a plan for a new college, unlike any that now exist, whose goal is to create a center for information *about* the community available to everyone *in* the community, by assuming as its primary function the collection, tabulation, and dissemination of information for and about the community or district in which it functions.

Several reasons underlie this proposal for an alternative model: the community, as defined by the district boundaries of the community college, is of suitable size for intensive surveys of needs and resources. All the information sought by such surveys may be found within the district, within commuting distance of the college and of the students' homes. The economies of such communities are

complex enough to enable the survey staff to consider each community as a microcosm, a sub-system of the whole earth. Thus to learn to deal with a whole earth system, students will start by dealing with a smaller, but whole, system—one of manageable size with which they are intimately related.

This model proposes to make the college an important center for providing information about the community and for planning its future, and to accomplish this through the cooperative work of students, the guidance of the faculty, and the help of the material resources of the college.

Ivan Illich, among others, has proposed that schools (in his term) "disestablish" themselves.* In referring to the public schools, for example, he suggests that compulsory attendance be abolished and that certificates of graduation from school not be required for people to obtain jobs. He proposes a "school that is not a school," where people have access to the information and tools that they think they need, but where they are not subject to curricular or certification requirements or limited in the time during which they may use them.

This proposal for an alternative to the community college attempts to meet Illich's specifications and, in doing so, perform a needed service for its students and community. This alternative, which we call the "College of the Whole Earth," is an offshoot of the community college as we now know it. It performs, however, certain functions we do not ordinarily associate with community colleges and is organized in a different fashion.

The College of the Whole Earth is related to today's community college insofar as it exists in and for its community. It accepts all students who want to attend and who are eighteen years of age or have graduated from secondary school. It has a recognizable physical plant, faculty, and staff, all of which, however, are to perform many functions different from those they now exercise. The curriculum of the new college is also different from any we now know. Since the college does not certify people for jobs or for transfer to other institutions of learning, it does not structure its curriculum to meet the needs of employers, accrediting agencies, or universities. Instead, it defines its own ends and recognizes itself as its own chief resource, produces most of its own texts and instructional aids, and makes them available throughout the district. Indeed, these are among its most important functions.

The overall goal of the college is to become a center for information about the community and for the articulation of alternative futures for the community. In doing this, it hopes to help the community as a whole not only to define but also to achieve its goals. It regards the entire district as its constituency—all the people in it, not just the students who attend. This educational institution has, in fact, done many things. It has truly "disestablished" itself. It does its best to work for the success of its whole community. It does not regard itself as the only path to success, nor does it insist that any specific individuals succeed. It recognizes that it has in its tools, instruments, space, buildings, and knowledgeable and concerned people, a uniquely valuable inventory of resources. It works to make its inventory available to the whole community and sets as its goal the success of all the people both in its own community and in the world. It structures all its programs and the use of all

its tools and resources to achieve those goals, while recognizing that its most valuable resource is the energy and dedication of the young people of its community. Thus it strives to inform and lead them, through care and sensitivity to their particular needs and the needs of all life. The college works for the success of its community through foresighted, cooperative use of resources, without benefiting at the expense of any other community. It does this because it realizes that the whole earth is one system and that the earth and all its life are dependent on finite quantities of physical resources.

The general goals of the College of the Whole Earth are to make people confident in the technologies on which their life is based and to make them knowledgeable about the world's work processes. Its specific goals are to produce extensive documentation on the resources and the trends in the needs for and uses of resources in the community; to engage its students in the collection of data about community resources and their tabulation, transformation, and presentation; and to make the information visible to the community in the form of charts and by animation on films, slides, and television programs. Students, teachers, and the lay community share in learning how to define their objectives and to work cooperatively. They learn about the world as it is and about trends in the needs and resource use of their world. They are responsible to each other and learn how to solve their problems together. They are able to do their work and present finished documentation of it to others. They are competent at the research needed to find out answers to their questions and can create readily comprehensible displays of the data they collect and the work they do. They understand their community and the world as dynamic processes, how they are related and how they change. In summary, the College of the Whole Earth regards itself as part of its community and its community as part of the whole world.

The institution itself should show several results from the changes in goals and functions suggested above. First, the students and faculty of the college will learn much about both the community and the world in which they live. Second, the college will demonstrate beyond question its relevance to the community and the world. Not only are its intentions laudable, but it is also closely involved with many other activities and institutions at home and abroad. It is in constant contact with nearby colleges and universities, with local business and industries, with the utilities of its community and region, with local, regional, and national service industries, and with civic leaders and planners at all levels. Third, the college would begin to recognize itself as its own best resource. In its own right, it is a producer of educational media and software for the use of the whole community. It assumes the dignity of a self-determining organization, defining its own ends and processes. Fourth, the college may actually help to solve some problems for its own community and to work out prototype solutions to problems for the whole earth.

The program and curriculum proposed here differ greatly from those mentioned in the December-January 1970-71 issue of *Junior College Journal*, although they share some of the same goals. The program is not directly vocational, nor does it envision merely the addition of a course in human ecology to the present curriculum and instructional format.

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*Illich, Ivan. "Education Without Schools: How It Can Be Done." In *New York Review of Books*, N.Y. 15(12):25-31, 1971. (Special Supplement)

EQUAL ACCESS

TO WHAT?

The junior college is presently the great white hope for the democratization of educational opportunity beyond the twelfth grade. This hope arises in an urban society, beset by poverty and race discrimination, in which a large disadvantaged class is the main source of political pressure. Ironically, the extension of educational opportunity to this class comes at a time when middle-class youth, traditionally college-bound, express far-reaching doubt about the prevalent values of American society and education.

Institutionalizing People

Beginning with kindergarten or grade one, if we assume observance of the law, Americans go to school for at least twelve or thirteen years, and potentially, among the "highest achieving," for twenty-one years or more.

Elementary, junior high, and secondary schools, colleges, and graduate and professional schools all classify young Americans by age and certain assumptions about their learning capacities. We assume that almost everybody is ready, willing, and able to learn essentially the same things at the same time, despite human variability, different environments, and different teaching capacities of institutions. We further assume that we know what *all* people—irrespective of place and time—should learn.

A serious dislocation, however, has arisen among young American students, their environments, and the schools in which they are institutionalized. Does the two-year college really represent a break in the existing patterns, a promising new approach to this problem?

The Job Equation

America's manpower needs, combined with popular political readings of the demands of the poor, the blacks, the Spanish-speaking (and perhaps even of the upset middle-class collegians), suggest an equation between the main purpose of higher education and preparing the young for jobs. This equation embodies political conclusions about keeping things cool. The equation is:

$$\frac{\text{Jobs}}{\text{Domestic Tranquility}} = \frac{\text{New Students}}{\text{College}}$$

By this equation, we intend to convey that just as an abundance of jobs tends to produce domestic tranquility, so will a constant flow of new students into college. Through the achievement of a simple economic result, the colleges and universities function as basic law-enforcement agencies for the whole society.

Job preparation has always been a central purpose of the university. The elitism of the European models most widely emulated in this country was defined mainly by the job categories on which their curricula concentrated and by their preconceptions about who should have access to them. Still, the academics have always maintained that other purposes of higher education are at least as important as making the young employable.

Most middle-class students admitted to our colleges are not expected to make, nor do they make, career choices during the first year—many do not do so even in the second or third. Despite graduate school pressure, most are still subjected to various packaged versions of the "liberal arts," through which they are supposedly "liberated"—better prepared to make intelligent and informed career choices.

The technology, career, and vocational programs unique to the two-year college are usually not meant to appeal to the traditional college student. These options are designed especially for the new students—the ones heretofore not admitted. The specialized and compressed nature of these programs (sixty to seventy credit hours, twenty to twenty-four courses) compels the student to decide which one he will enter before he gets in. There is no time to "waste"; if a student expects to be a mechanical engineer's assistant or a dental assistant, sixty to seventy credit hours of study over two years is barely enough time, say the professionals, in which to prepare. According to the American Association for the Advancement of Science, most such college programs provide three to four "liberal arts" courses during the two years. Invariably, one or two of these are required English composition. The student is also often required to take one course in American history or government. In such a pedantic and constrictive fashion are the keys to our culture, to the treasures of our civilization, placed in the hands of these students! Such ineptness is our educational

response to the assertions often made by these students that "black is beautiful," that the Vietnam War is immoral, or that the administration of American justice is corrupt!

Students with the least prior academic success, who most often have grown up in urban ghetto settings where they have the fewest opportunities to see what America claims it is, are encouraged to make the earliest choice of lifework. And they must make this choice knowing that their options are already severely limited by their prior failures, which the system has defined—and often rigged.

The Subversion of Change

The two-year colleges have opened the door to higher education to thousands of young Americans. They have brought technology within the pale of "higher learning." In achieving these significant results, the junior colleges have also served as a filter, precluding education beyond grade thirteen for those "not qualified," thus enabling the Establishment to avoid facing the full impact of democracy of access to its estate.

The curricula of the so-called "comprehensive" two-year colleges reflect conservative expectations and external pressures. The terminal career programs embody—quite imperfectly—the expectations of industrial and technological employers. The liberal arts transfer programs embody—also unsatisfactorily—the demands and values of the faculties in the upper-division and four-year colleges offering grades fifteen and sixteen and the graduate and professional schools beyond. *Far from upsetting the status quo of American higher education, the junior colleges shore it up. Far from contributing something new and substantial, the two-year colleges strengthen the status quo in a higher educational system desperately in need of reform. There is a real and present danger that the expansion of the two-year colleges along present lines may serve mainly to subvert and postpone urgently needed changes in our higher education.*

Open to Closed

Formal education in the United States stands for a closed, rigid view of the conditions essential for learning.

Learning space is closed. Learning, according to the prevailing view, happens only on the campus, in the school, in the classroom.

Learning time is closed. Learning time is graded, knowledge itself measured by the credit-hour. It is assumed that there is an exact learning time for everything and for everybody.

The standards used to measure the learning ability and the learning needs of people are closed. These standards, enforced by institutional power, segregate people according to class, race, and the educational version of who in America is entitled to achieve what.

Teaching methods and curricular prescriptions are closed. The compartmentalization of knowledge and teachers and the vesting of monopoly powers in the departments virtually preclude any quality control over education as well as any competition in the shaping of programs or in the evaluation of results.

Nationally, we are in the paradoxical position of opening the door wider to tightly closed, institutionalized educa-

tional opportunities. New students, more diverse than ever before, are being poured into a narrow funnel, into educational institutions rigid and "uptight" in the face of the challenge.

Our political rhetoric remains committed to an open society, but our schools seem geared to the accommodation of a pre-urban, pre-Berkeley, pre-Martin Luther King America.

Closed to Open

The dynamism of the new knowledge, present-day politics, and the economics of financing education all point persuasively toward more open versions of learning places, time, programs, and systems.

The boundary line drawn at the age of eighteen between lower and higher education is no longer tenable. Secondary and collegiate institutional resources must be regrouped. New institutional bases—staging grounds—need to be invented.

The relationship between learning and working, between thinking and acting, must be reconsidered. For many kinds of jobs, employers must assume a larger responsibility for educating future employees. The tensions now produced by our educational institutions between learning for employability and learning for many other purposes must be reduced. On this front, the schools may play an effective role in combatting the prejudices of status popularly held about certain jobs.

Our old assumptions about the education of plumbers and teachers—about what each is capable of learning or wants or needs to learn—are no longer acceptable. Plumbers and other blue-collar workers outnumber teachers, not only in the voting booths but also in the marketplace of American culture and in the home where American children are brought up. The democratization of access to education beyond grade twelve inevitably means that the technicians, the craftsmen, the paraprofessionals will in due course expect to have, and in fact will have, a completely new impact on the quality of American life. Education is the key to the noblest products of our civilization—to its great ideas, to its finest art, to the power for life it produces. Those now being encouraged to seek higher levels of learning will not long tolerate a denial of access to them.

The Issue

The separation of grades thirteen and fourteen is not the important issue. The issue is whether the expansion of the two-year colleges will enhance learning options, close the gaps between human diversity and institutional rigidity, and better equip American society to meet the changing tasks of educating its citizens.

The evidence to date is neither reassuring nor conclusive. The danger is that by 1975 or 1980, when 300 to 500 new two-year colleges will have been built and opened, and the enrollment in them will have risen from two to three, four, or five million, we may find them, like the dinosaur, no longer fit to survive.

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ALTERNATIVE ENROLLMENT-ATTENDANCE PATTERNS

The recent special report of the Carnegie Commission on Higher Education, *Less Time, More Options*, calls attention to a wide range of alternatives to the quite rigid structure of undergraduate enrollment patterns that characterize current higher education. For the community colleges, the report might well be titled *More Time, More Options*. Studies of the flow of students through the community colleges lead to the conclusion that most of these students need *more* time to complete associate degree programs than is now allotted in curriculum development, not *less*. A relatively small group of bright young students are attracted to community colleges. Having completed high school at an early age, they seek a brief, interim educational experience before enrolling in a residential college. Such students may well be able to fulfill most lower-division requirements in one year of college, particularly where good articulation exists among secondary schools, community colleges, and the senior institutions to which they transfer.

Community college students vary in abilities, interests, family backgrounds, values, goals and objectives, and readiness to undertake college-level courses when they enter. Student attrition, rather than the actual impact of the educational experience on the students, tends to reduce this heterogeneity to what may be too low a level of student mix. Community college students, unable or unwilling to adapt to the conventional enrollment pattern described in the college catalog and prescribed by faculty advisers, drop out for academic, financial, motivational, and various combinations of reasons.

Assumptions About Enrollment Patterns

Sometimes explicitly, but more often implicitly, curriculum developers and enrollment projectionists make certain assumptions about community college attendance patterns without citing validating data. These assumptions are made not only as a matter of administrative convenience or neatness, but also in the belief that full-time, day-time, continuous enrollment is "good" for all students. Were empirical data to show that students enroll in a variety of patterns that produce successful performance, the planners would probably devise techniques and administrative policies to force as many students as possible to conform to this different form of "regular" student enrollment pattern. The effort would be made less as a convenience to the curriculum planner or classroom scheduler than in the best educational interests of the students. Financial aid, scheduling of required courses, and, of course, academic advising relating to program may all be directed toward the college's goal of enrolling as many students as possible in a pattern of full-time, continuous attendance.

The curriculum developer works within an inflexible framework of a two-year, four-semester, sixty-plus unit program (or its counterpart in quarter units). He follows a required sequence, progressing from a freshman program dominated by courses in communication skills and general education, to a sophomore year in which the student concentrates on his major field if he is in an occupational program, or in courses required for graduation from the senior institution if he plans to transfer. The limiting assumptions are also made that students enroll directly after high school graduation and that they attend full-time four semesters without interruption (or until dropping out). All

other attendance patterns are viewed as deviations and nuisances even though students who deviate from the standard enrollment pattern tend to outnumber the "regular" students in many colleges.

The students who deviate from the standard attendance pattern tend to (1) delay college until one or more years after high school graduation, sometimes to fulfill their military service obligations; (2) come under-prepared to enroll in required courses without extensive remediation; (3) be undecided about their occupational goals and uninterested in choosing one they view as possibly limiting their future options; (4) enroll on a part-time basis, probably in late afternoon or evening hours; and (5) drop out periodically before completing a two-year program, not always at the end of the term year. Other students will have begun their degree programs in four-year institutions, received technical training in the armed services, or be skilled as a result of on-the-job training and experience between high school and college. While the system readily accommodates the ill-prepared community college students, accommodation is more difficult for the ones who come with special preparation as a result of training, experience, or sheer maturity.

The Case for Alternative Patterns

As many as two-thirds of the community colleges' students enroll with the initial intention of transferring to an institution awarding the baccalaureate degree. For reasons that are not at all clear, the number who *do* transfer is no more than half those intending to do so, and the degree of overlap in the two groups has never been established. Among the entrants intending to transfer, fully half need some type of remediation or special assistance to succeed in English composition and other basic skill courses required by the transfer institution. They probably lack foreign language, laboratory science, mathematics beyond algebra, and other "solids" that university freshmen will have completed in high school. Most of all, they tend to have an under-developed sense of their own academic potential, occupational interests, and personal values and goals. Attrition exceeds fifty per cent before the sophomore year, an undetermined percentage for failing grades (or a feeling of having done unsatisfactory work).

Community college students tend to come from families without a college-going tradition, one or both their parents being high school dropouts. Family incomes are modest, with little ability (or inclination) on the part of the parents to make financial sacrifices to send the children to college. While charging little or no tuition, community colleges nonetheless make certain financial demands on their students for transportation (few are served by public transportation), books and supplies, student fees, food and clothing, and other incidentals. Students must work to maintain themselves in college, often at considerable sacrifice to their studies. The consequent juggling of class and work schedules may weaken both academic performance and employment security.

A substantial portion of the community college student body comprises gainfully employed adults who seek upgrading, retraining, or simply collegiate-level education to become more effective as adults. They tend to be more highly motivated and better prepared for their studies than the young high school graduates who have not yet found themselves. Still, the adult students are seldom available for full-time, day-time programs of instruction, for enrolling in neatly arranged course sequences planned for regular,

full-time students. Under present procedures, they tend to enroll in freshman classes without regard to their special attainments and experiences in the world of work, although fully capable of advanced achievement in occupationally related courses.

The following alternatives to full-time, day-time, continuous enrollment may then be proposed, alternatives with a reasonable probability of meeting the needs of far more community college students than are now succeeding in "regular" programs.

1. Delayed college attendance with a guarantee of admission and financial aid, as needed, if the period between high school and college is spent in a program of supervised work experience or service, with counseling and remediation related to the planned college attendance
2. Concurrent course enrollment and supervised work experience, the latter for both credit and pay, with students spending two or three days each week off campus
3. Alternate terms devoted to study and work experience, the latter at an ever-increasing level of skill and closely allied to the student's occupational major, with permanent job placement at the end of the final term before the degree is granted
4. An "upside-down" sequence of courses, in which occupationally related courses are taught before general education, composition, and others usually required in the freshman year
5. One-plus-two-year program for "undecided" students in need of both remediation and extensive career counseling, the first year to be primarily exploratory and developmental
6. Planned leave of absence between the freshman and sophomore years to obtain intensive work experience in one or more jobs arranged by the college
7. Concurrent enrollment in the community college and the transfer institution during the last term before transfer, if possible, or during a summer term, if the transfer institution is not within commuting distance
8. One or more courses to be taken at neighborhood centers, via open-circuit television, by correspondence, or as independent study
9. Enrollment in one or two courses full-time for periods of three or six weeks, followed by a break for off-campus activity, after which full-time work in one or two new courses is undertaken
10. Courses taken to adults out on their jobs with released time given by the employer for their participation

Students learn best in ways that change as success is experienced and maturity is attained. In the case of academically weak students, formal coursework may be taken best in relatively small doses, reinforced by successful work experience. The assumption that students needing extensive remediation will learn best if they are scheduled to spend eight-hour days in classroom and laboratory instruction has never been tested. However, the wholesale failure of many community college remedial programs casts doubt on its validity. Students needing such remediation tend to have multiple education handicaps—families with income below the poverty line, poor public school preparation, language or other cultural disadvantage, physical or emotional handicaps, and/or lack of clearly defined interests

or motivation. Planned variation in workload, in type of activity, and in scheduling may produce a higher, more sustained level of performance on the part of the diverse community college student body than adherence to a single pattern of enrollment.

In the absence of systematic experimentation with different types of students, diverse attendance patterns are "messy" to administer and difficult to counsel about. Ultimately, however, the results of such diversity should produce better use of college facilities and personnel resources and, over time, greater student persistence toward occupational and degree goals. Students now elect a wide variety of attendance patterns with little or no guidance by the college and with infrequent evaluation of results. What is proposed is the systematic variation of attendance-enrollment patterns by the college over a period of time, with a concomitant evaluation of outcomes by the faculty, counselors, college planners, and the students themselves. The variations might be viewed as one possible formulation of the "open university" concept, uniquely suited to the community college with its emphasis on career education.

Enrollment projections for community colleges are for the most part based on an assumption of a single student type—a high school graduate, undistinguished by sex, who enrolls full-time in a day-time program of an indeterminate nature for an indefinite period of time. Under- and over-estimates of enrollment are frequently unexplained, since relevant data on student characteristics are lacking. The conversion to a structure of many and varied college attendance patterns extending beyond two years would undoubtedly create grave concern on the part of the enrollment projectionists. However, the present attrition rate in the community colleges is high enough that the advantage of neatness afforded by the full-time attendance pattern is scarcely sufficient. Instead, the systematic variation of such patterns should, in the long run, inspire the student to better performance and greater persistence.

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BIBLIOGRAPHY

1. Cross, K. Patricia. *The Junior College Student: A Research Description*. Princeton, Educational Testing Service, 1968.
2. Darley, John G. *Promise and Performance: A Study of Ability and Achievement in Higher Education*. University of California at Berkeley, Center for the Study of Higher Education, 1962.
3. Knoell, Dorothy M. and Leland L. Medsker. *From Junior to Senior College: A National Study of the Transfer Student*. Washington, D.C., American Council on Education, 1965.
4. *Less Time, More Options: Education Beyond the High School*. Hightstown, New Jersey, McGraw-Hill, 1971.
5. Trent, James W. and Leland L. Medsker. *Beyond High School*. University of California at Berkeley, Center for Research and Development in Higher Education, 1967.
6. *The Two-Year College and Its Students: An Empirical Report*. Iowa City, The American College Testing Program, Inc., 1969.

THE MASTER PLAN: WELCOME TO THE FACTORY*

Within the next twenty years, it is anticipated higher education will change its position from one favored by liberal financial funding to restructured federal, state, and local control. The implications of this change will affect the community junior college in several ways. There will be more emphasis on the vocational/technical training aspects of the junior college, with increasing use of educational hardware. Concurrently there will be a concentrated effort to co-ordinate national employment needs and appropriate educational training. The number of liberal arts and transfer courses will be reduced for lack of funds. Faculties will be reduced in number and their workloads increased.

What can emerge from this strategy is the organization of junior colleges, by local and state boards and by the federal government, as employment markets for large corporations, leading inevitably to increased corporate control over the programs, even the counseling of individual students—who will become workers, consumers, voters.

Master Planners who project the economic needs of the nation can abolish liberal education and institute vocational/technical education in its stead. But, if planners can restructure the school system so that liberal education is no longer an objective of the junior college, if it can do this without protest from the students and community, this is indeed a judgment on the work we, as teachers, have been doing.

The above trends also represent dehumanization of education in America and can be combatted only by teachers who are not isolated from their students and their communities. Teachers must be willing to struggle for a kind of education of such value to the students and community that any threat to it will be perceived as a threat to them. Education must not be Master Planned. Students must have a voice in the objectives and purposes for which they are being educated.

The Alternative

As teachers, we must do more than just defend a *status quo ante* of liberal arts and transfer courses to which we cannot, in fact, return. We must be critical of what and how we have been teaching. We must ask each other and ourselves whether we have acted as missionaries, bringing high culture, or science, or standard English to the "disadvantaged" masses (2).

We must cease being teacher-missionaries and become teacher-organizers. This means making a choice between working long, unrewarding, alienated hours as "learning-unit managers" (as current behavioristic jargon has it) and working long and challenging hours with students, segments of the community, and our colleagues in the educational industry. We must begin working with them to build an institution that serves people, not industry.

One way to build an institution different from what we now have is found in Boggs' proposal that the function of education be redefined "to make it responsive and accountable to the community" (1:31). She suggests that schools become centers of the community and that the "community itself with its needs and problems must become the curriculum of the schools" (1:31-32). She continues:

More specifically, the educational program or curriculum should *not* consist of subjects like English or Algebra or Geography. Instead the school must be structured into groups of youngsters meeting in workshops and working as teams. These teams are then encouraged (1) to *identify* the needs or problems of the community; (2) to *choose* a certain need or problem as a focus of activity; (3) to *plan a program* for its solution; and (4) to *carry out the steps* involved in the plan (1:32).

Traditional skills now taught in school would thus be learned, not as separate subjects, but as means of reaching socially relevant and desirable goals.

Such a redefinition of education is appealing, but it is easier said than done. For instance, how does a teacher find students sufficiently motivated to get the team off the ground and how, once it is off the ground, does he keep from despair and paralysis a small group facing a big problem? There must obviously be a series of intermediate steps before students, teachers, and community will believe enough in the possibilities of such a program to make it a reality.

A good beginning would be a public discussion on campus of trends in education, in which class positions and interests were clearly defined. This would have to be accompanied by education built around an analysis of "individualism" and its relation to class interest, property values, and the maintenance of power in this country. Again, as Boggs suggests: "American education, like American society, is based upon the philosophy of *individualism*. According to this philosophy, the ambitious individual of average or above-average ability from the lower and middle classes is constantly encouraged to climb up the social ladder out of his social class and community" (1:28).

The individualistic, opportunist orientation of American education has been ruinous to the American community, most obviously, of course, to the black community. In the classroom over the years it isolates children from one another, stifling their natural curiosity about one another as well as their potential for working together. (This process is what the education courses call "socialization.") In the end it not only upgrades out of the community those individuals who might be its natural leaders, fragmenting and weakening precisely those communities . . . in greatest need of strengthening, it also creates the "used" community, which is to be successively inherited by those poorer or darker in color, and which is therefore doomed from the outset to increasing deterioration (1:29-30).

During this period of initial public discussion, three points must be made clear:

1. People who control education have different interests from the students, their parents, and their teachers. One way to clarify this point is to show who pays for education and who profits. Statistics from California give at least a partial answer: Seven out of ten of the 270,000 young people (3) who graduate from California public and parochial high schools come from families with a total income under \$10,000—the income group that pays 55% of the state's taxes. Fewer than 10% of these young people, however, enroll in the state universities or colleges after high school graduation, whereas nearly 35% of the graduates from families earning over \$10,000 do enroll.

2. The present educational system will not significantly improve a student's future economic prospects (i.e., getting ahead is a fraud and a myth). For most working and lower-middle-class junior college students, upward mobility —

*This article has been abbreviated especially for the Review. The complete version is available from the New University Conference, 622 W. Diversey, Chicago, Illinois 60614.

interesting work, job security, more money than their parents, prestige—is one of the main purposes of a college education. It will remain one of the promises of the junior college and one of the hopes of the students until the transition from transfer to vo-tech programs is complete. At least two-thirds of the students who now register at Chicago City College campuses, for example, signify their intention to transfer to a four-year institution; only 10-15% actually do so (this figure is true nationwide as well as in Illinois); the average length of stay at a senior institution for those who do manage to get there is only two semesters.* Given that over 7 million students are in college today, that there clearly are not seven million jobs requiring a college education, that few if any junior college students get a four-year degree, and that the high number of degrees being granted means a college education does not insure a move up the social ladder — given all these facts, we can assume that junior colleges fail to provide students with significant upward mobility. Clearly the failure is becoming so blatant in our contracting economy that the myth of upward mobility is creating expectations feared by the Master Planners.

3. The only way to achieve the interests of students, teachers, and the community is through all three groups working together.

Within the context of these three points, student and faculty power struggles become class struggles, which, if explained carefully, will seem justified to most people and will educate both those participating and those looking on. The justification for these struggles should include the claim that, only if students and faculty have power, can or will the institution serve the community. Ultimately the goal of small struggles should be to build a base on campus large enough (1) to push the local administration to take an explicit political stand in service to the community, for instance, against the war and war-makers (for, as long as student deferments exist, this stand can be made real by the school's refusal to notify the draft board if a student drops), against manipulators, against specific polluters, against inflation by attacking some company's price increase, or (2) to form a "people's college administration," which, perhaps through a referendum, will speak for the school and take stands on controversial issues of concern for the community. This radical redefinition of the school and the political use of its institutional voice should polarize the community, cause allies to emerge, and make possible the building of links between the school and the community. Study of the community and careful thought should lead to a fairly accurate anticipation of the elements of any community that will emerge as sympathetic. (Of course, concurrent off-campus organizing to prepare an articulate nucleus of support is a good idea.) If the issues are carefully chosen and the supporters painstakingly educated, the opposition that will emerge in the community will probably be small.

*It should be noted that junior college students' failure to gain four-year degrees has little relation to their abilities. A process called "cooling out" by sociologists transforms the open-door admission policy into a "revolving door" policy — redefining students' aspirations by means of remedial courses, counseling courses, flunk-out policies, non-credit and non-transfer courses, etc., all serving to convince the student of his own personal failure and his need to lower his academic and occupational goals.

Initially a kind of attention-getting maneuver, a people's administration could develop into a coalition of students, faculty, and community people. It could provide a forum for real dialogue on the function and use of education, on the school as a focus for community problem solving, on the budget, and on a whole range of other relevant issues. Disgruntled faculty and students might very well be willing to "vote in" a slate of popular and committed "administrators" from their own ranks, who could then proclaim their existence, take a controversial and attention-attracting stand, and begin working toward making the institution serve the people. The new administration could take a public stand on the war, for instance, and set up a draft-counseling center for young men in the area. It could organize students and sympathetic faculty to set up a counter-counseling department to guide new students through the maze of bureaucratic red tape, prerequisites, requirements of other schools, good or bad teachers and classes, etc. It could work with parents in the school and in the community to set up child-care centers in such places as nearby homes, YMCA centers, coffee houses, and churches.

A people's administration could offer its own set of "adult education" courses in programs such as health, consumer education, pollution, ecologically-sound life styles, and an introduction to women's liberation. It could offer real history and sociology courses, which tell the truth about American power and social structures to those who need to know it most. It might promote music and drama activities. It could even sponsor a career day, centered around vocations for social change, to which health and social workers, teachers, ministers, nuns, priests, scientists, etc., could be invited to share their knowledge—what their work is really like, what the true economic relationships in the industry are, whose interests are being served, how insignificant are the much-heralded opportunities for advancement, and what workers in these fields are doing together to change the conditions. Participants in these courses might then initiate demands that these courses be given college credit. The possibilities are endless.

As the idea catches on, the creative energy released and thoughtfully channeled could build a truly viable alternative model for a community junior college and an organizational framework for a movement for radical change. Isolated, individual actions on any of these issues should not be discredited. Actions taken by a few teachers on one campus, or by one campus that is part of a larger system, may gain support from, or at least neutralize, some otherwise hostile turf. They can, however, make sense only in the context of a larger struggle—a struggle against education institutions across the country.

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BIBLIOGRAPHY

1. Boggs, Grace Lee. "Education: The Great Obsession." *Monthly Review*. September 1970.
2. McDermott, John. *The Laying On of Culture*. 1971. (Available from the New University Conference, 622 W. Diversey, Chicago, Illinois 60614, for \$0.25)
3. Research Organizing Cooperative. *Strike at San Francisco*. n.d. (Available from the New University Conference, for \$0.50)

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