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ABSTRACT

Based on the assumption that an institution's sensitivity to societal needs is a function of its sophistication in planning, this report proposes a model for trend monitoring and analysis designed to improve responsiveness to changes in training requirements precipitated by industrial research and development. As background, the report first examines recent developments in strategic planning for higher education, including efforts of college consortia to extend the focus of planning from the institution to the region and various paradigms used by educational researchers to identify and assess trends in an institution's internal and external environments. The proposed model, referred to as the Trend and Environmental Impact Analysis Program, is then presented. This model entails the cooperation of college consortia and private industries in carrying out two planning functions: (1) the monitoring of a comprehensive set of publications by professional abstractors as a means of identifying and tracking technological developments; and (2) the incorporation of an analysis of this information into strategic curricular planning. The report concludes with a rationale for including industry in cooperative educational planning, based on an examination of the growing involvement of business and government in educational programs. Diagrams and a bibliography are included. (JP)

ENVIRONMENTAL TREND ANALYSIS AND STRATEGIC DECISION MAKING: A NEW ROLE FOR COLLEGIATE COOPERATION

by

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As I began to think about this presentation, I started to recall memories about consortial activities. In the late 1960s I became familiar with and involved in consortial and bilateral arrangements while serving as an Assistant Dean and Assistant Professor in the College of Education at Temple University. In the early 1970s, I served as Academic Dean and Vice President of Academic Affairs of a small institution in North Carolina which was a member of the Charlotte Area Educational Consortium. CAEC had eleven member institutions including three two-year colleges and eight senior institutions. Four colleges were public institutions and seven were private.

During that period of time I served as Chairperson of the CAEC Committee on Department and Area Programs. I designed and ran two conferences built upon the theme "The Quality Revolution." The theme was obtained from the book The Necessary Revolution in Higher Education by Francis Keppel, former United States Assistant Secretary of Health, Education, and Welfare. He states,

> The first revolution in American education was a revolution in quantity. Everyone was to be provided the chance for an education of some sort. That revolution is almost won in the schools, and is on its way in higher education. The second revolution is equality of opportunity. That revolution is under way. The next turn of the wheel must be a revolution in quality.[1]

"The Quality Revolution: Learner Centered Reform in Higher Education" was cosponsored with The Institute for Undergraduate Curriculum Reform and held on April 21-22, 1975. "The Quality Reform: Footsteps Into The Future" was held on March 30, 1976. Although CAEC did a number of exciting things, no other projects were as productive as these two conferences. They formed the groundswell of several subsequent conferences and other projects.

Between February 1975 and September 1977 I served as Executive Director of the Consortium for Health Education in Northwest Ohio. CHENO is composed of Bowling Green State University, the Medical College of Ohio, and the University of Toledo. Each of these institutions is a "free standing" institution with its own nine-member Board of Trustees reporting directly to

the Ohio Board of Regents. The University of Toledo is an urban university of approximately 16,000 FTE students and is intended to serve primarily the urban needs of the Toledo area. Bowling Green State University is intended to serve a wide range of academic needs to approximately 16,000 FTE students in a residential setting. The Medical College of Ohio is intended to serve as the health science center of the twenty counties in Northwest Ohio through programs in medicine, nursing, and allied health.

While serving as CHENO's Executive Director, I served as 1 of 2 representatives from Northwest Ohio on a State-Wide Regional Medical Program Planning Advisory Committee of the Ohio Board of Regents. This committee met several times, changed its name to the Area Health Education Centers Advisory Council, and ultimately submitted to the Bureau of Health Manpower a proposal to plan and develop the Ohio Consortium of Area Health Education Centers. The Consortium is to be a joint venture by the seven colleges and schools of medicine and the five established Health education networks. DHEW funded a one-year planning project starting September 1978 for $626,000. Since then I have been able to monitor the progress of the AHECs as Chairperson of the Plan Development Committee of an eight county Health Systems Agency.

On April 18, 1977, I presented a paper entitled "From Autonomy to Regional Systems: Multi-Institutional Responses to Societal Problems and Implications For Intermural Planning" at the Institutional Development Workshop by The Council for Interinstitutional Leadership Conference on Alternative Futures for Post-Secondary Cooperation. In that paper I listed a number of society's unmet needs and described how institutions of postsecondary education could be responsive to these needs in the voluntary cooperation mode as opposed to the involuntary coordination mode. The paper also described a number of institutional development projects and the characteristics and principles that were emerging from these projects. The projects were developed by The Council for

the Advancement of Small Colleges, The Academy for Educational Development, The American Association of State Colleges and Universities, The University Council for Educational Administration, and the Center for Educational Research and Innovation of the Organization for Economic Co-operation and Development. An effort was made to interpret insights gained from projects which had a focus on the development of intramural planning, management, and evaluation systems to the intermural context. Since Spring of 1977, the projects sponsored by the above-listed organizations have been completed and other projects and research have been added to the knowledge base. This paper will review this background and elaborate on what may be one of the most important roles consortia can play in the 1980s.

The future of any institution, including postsecondary education, rests on the degree to which it meets the needs of the society of which it is a part. As society changes, so must postsecondary education change. The way in which an institution is responsive to societal needs is a function, for the most part, of its sophistication in planning. As critical as comprehensive planning is to an institution, however, only a small number "have effectively developed a plan based on sound data about themselves and their setting which is revised at least annually and upon which the institution's leadership acts daily."[2]

The evolution of planning is worthy of some comment. William A. Shoemaker, former Vice President for Research for the Council for the Advancement of Small Colleges, developed a list of "College Personnel Attitudes and Planning Practices" as a result of extensive involvement in an Institutional Research and Planning Project (1972-75) and the Planning and Data System Project (1975-79). His list begins with status quo and incrementalism attitudes, moves through multi-year fiscal planning and institutional research practices, and extends to the systematic and informed collegial model.

A program conducted by John D. Millett, Executive Vice President for the

COLLEGE PERSONNEL ATTITUDES AND PLANNING PRACTICES

1. ☐ Status-Quo - things are fine the way they are: the college, the programs, the teaching, the environment.

2. ☐ Incrementalism - we only have to do more or less of the same things.

3. ☐ Budgeting is Planning - analysis of budget in intricate detail and some selective incrementalism.

4. ☐ Anticipating Next Year's Crisis - some "pruning" of branches as awareness of selective resource allocation develops.

5. ☐ Multi-Year Fiscal Planning - 2 to 20 year budgets that attempt to match income and expenditures.

6. ☐ Single-Source Planning - done by the aggressive (or) intelligent (or) ambitious president, dean, or business manager. The "plan" is usually in his or her head.

7. ☐ Oligarchy Planning - the President's Cabinet, perhaps including token faculty and students, try to "look ahead" for the institution.

8. ☐ Institutional Research - the ad hoc collection of new analytic and planning information to make planning a little more rational.

9. ☐ Department Analysis - the development of some isolated academic and support department unit costs and productivity measures.

10. ☐ Comparative Data - moving from intra-institutional analysis to inter-institutional comparisons to "red flag" areas requiring further analysis.

11. ☐ Inter-Departmental Systems - recognition of the interdependence of departmental functions (e.g., admissions, programs, attrition).

12. ☐ Comprehensive and Comparative Data - hard and soft information available on each critical area and function, and comparative wherever possible.

13. ☐ Program Objective Concept - departmental accountability for department and institutional goal attainment, resource use, and productivity.

14. ☐ Systematic and Informed Collegial Model - broad participation in organized departmental and institutional planning process producing multi-year (5-year) budget that is reviewed annually.

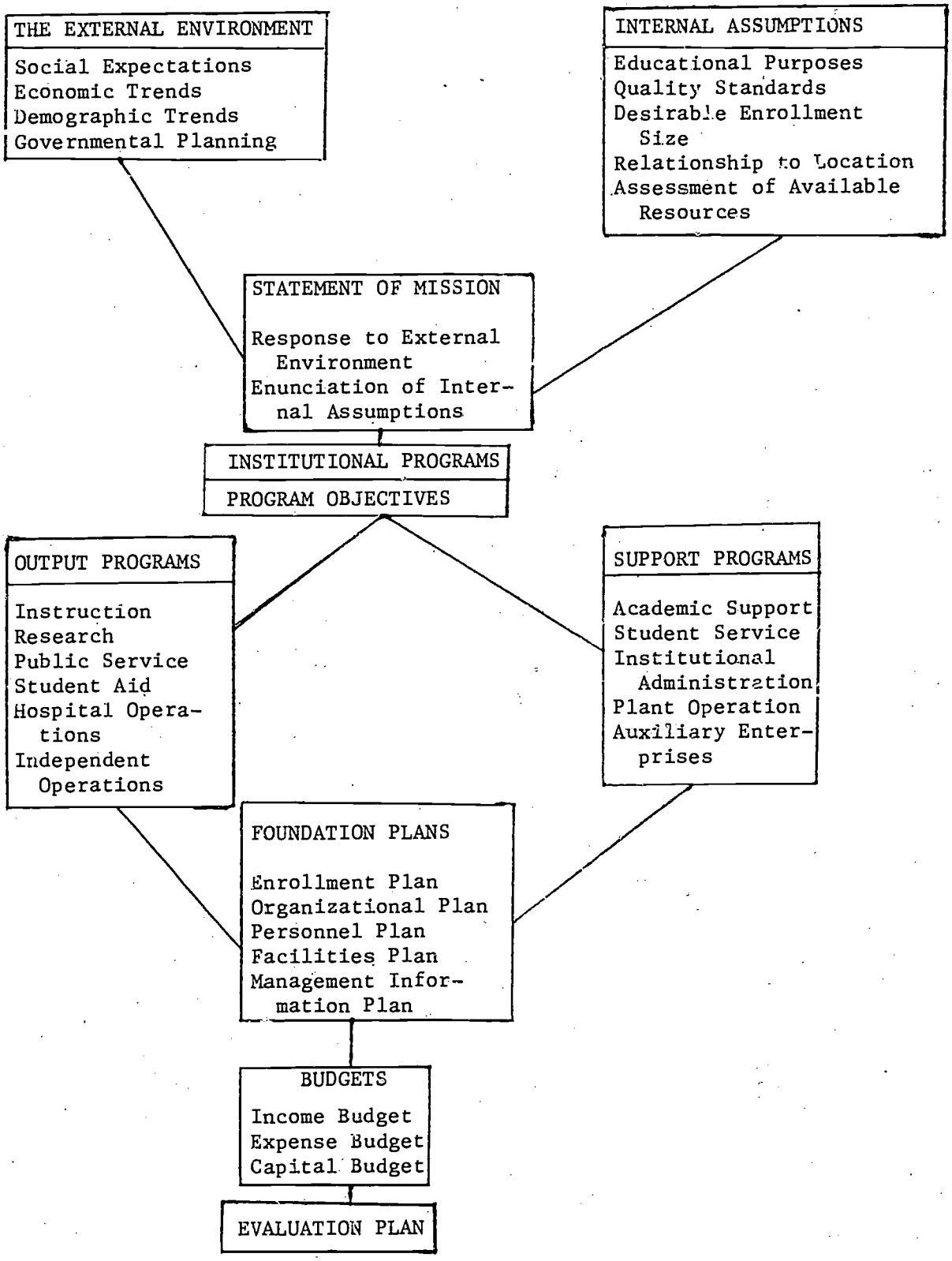
William A. Shoemaker
CASC Vice President for Research
September, 1977

Academy for Educational Development, is an elaboration of the systematic and informed collegial model. During the three calendar years 1976 through 1978, AED undertook a project to assist sixty colleges and universities in the management of change.[3] The model calls for specification of external environmental assumptions such as (1) social expectations, (2) economic trends, (3) demographic trends, and (4) governmental planning as well as the specification of internal assumptions relating to (1) educational purposes, (2) quality standards, (3) desirable enrollment size, (4) relationship to location, and (5) assessment of available resources. From these two sets of assumptions are derived the statement of mission, goals and objectives for output and support programs, foundation plans, budgets, and the evaluation plan.

In a recently completed doctoral dissertation on Comprehensive Institutional Planning Systems In Selected Two-Year Colleges by Steven Van Ausdle, it was concluded that effective planning requires the development and utilization of an adequate planning information system about both the internal aspects of the institution and its external environment. Examples of external information requirements include local, state and national economic trends; projected student needs, employment and career opportunities; social priorities; and student aid programs.[4]

Because of anticipation of unprecendented change in societal trends and values in the 1980s, the Resource Center for Planned Change of the American Association of State Colleges and Universities developed A Futures Creating Paradigm as a way of planning futures and bringing planning assumptions into focus. The project uses a cross-influence matrix of 12 societal trends and 12 values to determine goals in 10 areas. The 12 societal trends are population, government, global affairs, environment, energy, economy, science and technology, human settlements, work, life style, women and participation. The 12 societal values are change, freedom, equality, leisure, foresight, pluralism,

THE PLANNING PROCESS IN HIGHER EDUCATION



localism, responsibility, knowledge, quality, goals, and interdependence. The 10 goal areas are finance, students, research and development, public service, facilities, faculty, curricula, administration, resources, and athletics.[5]

Several institutions have made progress with the Futures Creating Paradigm including Indiana State University, Indiana University of Pennsylvania, the University of Maine at Farmington, Boston State College, Valley City State College, and North Carolina Central University. Two other models worthy of examination include the University of Wisconsin and West Virginia University. Wisconsin is a state-wide model with the coordinating unit and individual campuses participating in specifying assumptions. The West Virginia University model includes assumptions and objectives and is published in Academic Planning: Four Institutional Case Studies by the National Center for Higher Education Management Systems.[6] Other examples of intramural planning models which include trend analysis are documented elsewhere.[7]

North Central Technical College reviewed a number of planning models. The College defined the term "assumption" and generated a list of categories for arraying assumptions. The definition of assumption is as follows:

> An assumption is a proposition describing future conditions, some of which the institution has little control over. The level of certainty assigned to an assumption determines the level of precision it is allowed in subsequent planning. The greater the uncertainty about the assumption the greater must be the range of flexibility/hedging/options the institution retains against the non-assumed condition. Raising the certainty level of an assumption yields greater planning precision, better long term goal effectiveness and improved cost efficiency and program effectiveness. A planning assumption proposition can be internal to the institution or external to it. One criterion which is used in making a decision about inclusion or exclusion of a specific proposition at the institutional or cost center levels rests on whether or not the assumption has a direct bearing on setting goals and objectives at that level.

The list of categories for stating assumptions is as follows:

1. Assumptions about the societal context within which NCTC exists.
2. Assumptions about external agencies
3. Assumptions about institutional leadership/management
4. Assumptions about NCTC programs (existing and potential)
5. Assumptions about potential students and enrollment
6. Assumptions about student services
7. Assumptions about staffing and professional development
8. Assumptions about physical plant
9. Assumptions about equipment
10. Assumptions about fiscal resources

Planning assumptions about the societal context in which an institution exists can focus on such issues of health, energy, transportation, lifelong training, quality of worklife, leisure, credentializing such as licensure and certification and program and institutional accreditation. Planning assumptions about external agencies can focus on the relationship between an institution and state and local governance, higher education as a system, articulation, and communication. Planning assumptions about existing and potential programs include new credit and non-credit programs growing out of needs analysis or market segmentation studies, use of advisory committees, and instructional development and support. Selected examples of institutional assumptions are as follows:

It is assumed that equal educational opportunity as a right of all persons will be a dominant theme of federal and state legislation in the years ahead. This will mandate a focus on "packaging" higher education programs as we shift from the 20th century goal of "education for all" to the 21st century goal of "education for each". It will necessitate careful attention to remedial education, programs to overcome academic deficiencies as well as developmental education, programs to develop the diverse talents of students.

We have moved from an era of thinking about education as something given in the early years of youth and lasting throughout life to thinking about education as occurring throughout a life span." It is assumed this trend will

continue as an increasing number of Americans anticipate job or career changes, states mandate continuing professional education, and lifetime learning is viewed as a basic social right as well as an economic necessity.

The United States is likely to retain an unchallengeable competitive advantage only in products and techniques that are at the very forefront of technological development or that require a high integrated market for their creation.

It is assumed that the procedure for measuring educational accomplishments will change in dramatic ways. The system of amassing largely time-related academic units to reach the required total for a degree will yield to different output measures related to levels of competency in reference to designated bodies of knowledge and sets of skills.

What is being suggested is that institutions of postsecondary education must develop planning processes that not only take into consideration a variety of environments in the future, but the probability of alternative environments, if they are to accomplish what is expected of them. Planning processes in postsecondary education must shift from operational and project planning to strategic planning, from intramural to extramural or intermural planning. This will require a process to deal with trend analysis, a way to specify assumptions about future alternative conditions before setting institutional and program/departmental goals and objectives. The issue of trend analysis is of such importance that the American Association of Higher Education launched a trend-awareness project in 1978 and the American Vocational Association adopted a resolution at its 1979 Convention to create a task force to develop a mechanism for determining the directions of changes in vocational education.

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Corporate planning appears to be at a more advanced stage than planning in postsecondary education. In 1967, the Institute of Life Insurance conducted a Future Outlook Study to assess significant social and political trends because it seemed clear that reactive styles were not appropriate in times of rapid change. One result of the Future Outlook Study was a call for an ongoing mechanism to be established by which the business could keep abreast

of emerging ideas and social changes that might affect its operating environment. In 1970, an early-warning system called the Trend Analysis Program (TAP) was designed and put into place. TAP continues to operate as a program of the American Council of Life Insurance, formed in 1976 by a merger of the Institute of Life Insurance and the American Life Insurance Association.[9]

Time will not permit a detailed discussion of trend analysis efforts. If your interests lie in this area I can suggest several things to pursue. The Center for Futures Research of the University of Southern California is participating in its Seventh Annual Twenty Year Forecast on The Future of Innovation in America and is also conducting a number of workshops on Futures Research Techniques for Planners and Managers. Second, Technology Futures, Inc., and The Industrial Management Center, Inc., are conducting a number of technology forecasting courses. Third, the Office of Technology Assessment is an analytical agency of the United States Congress intended to help Congress deal with the new and unique kinds of issues that confront our increasingly complex interdependent, high technology society.

My purpose today is to pull together ideas from a range of sources to present a model that can be used by postsecondary education to deal with trend analysis. Higher education exists in and interacts with an environment comprised of a broad range of institutions which attempt to impact on the quality of life. These institutions include elementary and secondary education, human services, government, housing, transportation, and cultural type organizations. Because postsecondary education is a primary source of education and training, institutions of higher education need some way of monitoring trends and translating trends into educational/training programs. What are the trends in science and technology, business and economics, social and cultural values, and government and politics which have implications for secondary and postsecondary

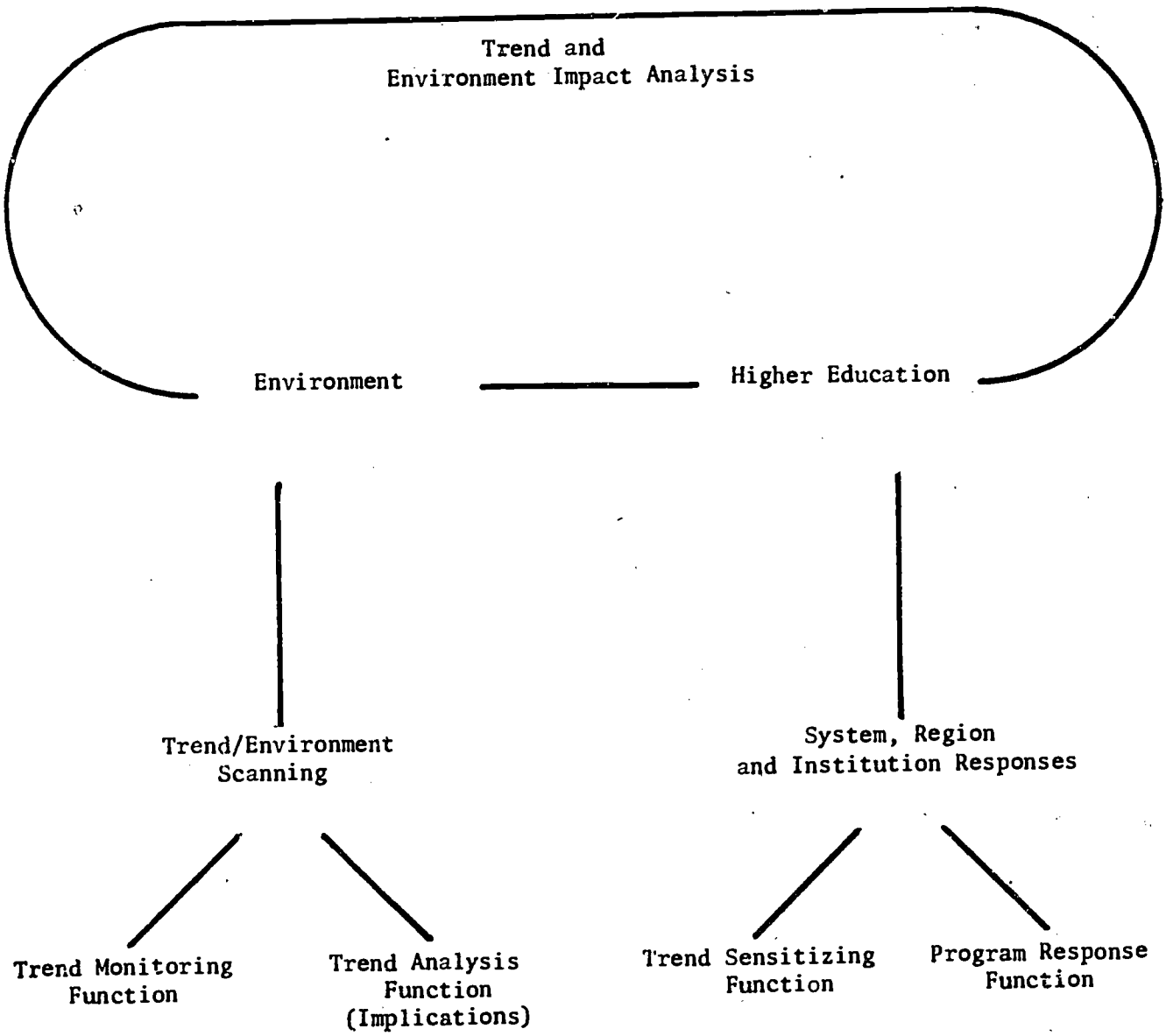
education? What are the trends in communications and what are the implications for occupationally related programs? What are the trends in research and development in science and technology and what are the implications for education and training of this nation's labor force?

One response to these questions is a Trend and Environmental Impact Analysis Program. The Trend and Environmental Impact Analysis Program could include a Trend Monitoring Function and a Trend Analysis Function. The former would include a process to "diagnose" national, state, and regional trends while the latter would focus on specifying institutional program responses to such trends.

TEIAP is based on the assumption that new ideas and technology produce many important changes which affect institutions. Institutions can gain lead time for decision making if they can track ideas as they emerge and progress through the research and development sequence. For example, an article in a recent issue of Technology Review began, "The world population of robots used in industrial manufacturing is 17,500. Of these, 2,000 are in Europe, 2,500 in the U.S., and 13,000 in Japan."[10] Robot research and development will have tremendous implications for higher education as well as the industries using robots.[11] Robots could replace unskilled manpower used to assemble various products as well as technicians used in quality control. On the other hand, however, robots will have to be maintained, a new and emerging manpower need.

TEIAP is comprised of the monitoring and analysis functions as well as the sensitizing and response functions. (See FIGURE I) Business and industry and postsecondary education could both benefit if TEIAP were a collaborative effort. Monitors from business and industry and postsecondary education could review a comprehensive range of publications and systematically track various aspects of technological developments. The output of the monitors could be collected and analyzed to determine the implications for business and industry as well as the training component, thus a reduction in the lag between R & D

THE ENVIRONMENTAL CHANGE AND HIGHER EDUCATION RESPONSE CYCLE



and the training program functions. Program advisory committees do this to a limited extent at the present time. Program advisory committees, however, tend to be comprised of technicians and middle management personnel providing a specific operational service within the corporation. These persons are very useful providing feedback about the relevance of content of a particular program and the degree to which graduates possess desired competencies. They tend not to be knowledgeable about corporate strategic planning decisions.

Most of the two-year colleges are too small to undertake a comprehensive TEIAP effort. Therefore, consortial or statewide TEIAP networks would appear to yield greater dividends. College size, however, is not the only variable. At the first Business-Higher Education Forum conducted by the American Council on Education it was concluded that "Universities and Colleges lack sensitivity to the product and manpower needs of industry and business."[12] Consortial arrangements involving business and industry could not only reduce the lag between R & D and training program response functions, but also begin to remediate this difficiency and link more closely the world of work and the world of education.[13] TEIAP, in some form, could already exist within The Work-Education Consortium associated with the National Manpower Institute.[14]

The Trend Monitoring Function could be accomplished by abstractors screening documents and reports systematically about categories of information such as social/cultural, science and technology, political/government, and business/economics. The abstractors could be assigned agencies and specific periodicals to cover. The abstractors would present information according to some format which could include citation data, raw data, conclusion, recommendations and implications. The abstracts would be collected in a central location and periodically analyzed by a group of persons from the same or closely related disciplines in order to synthesize within discipline trends. A second level of synthesis would occur when interdisciplinary teams would review the products of the disciplinary teams.

The Trend Impact Analysis Function could be accomplished by teams of persons representing the corporate strategic decision-making process. The team can be comprised of persons "within" an institution or between and/or among organizations. These persons would interpret the output of the first and second level synthesis and translate it into a strategic plan of action.

The trend monitoring and impact analysis occur today in a limited sense. What is being proposed is that the process be formalized and incorporated into the institutional or consortial comprehensive planning process.

In the Fall of 1968, John W. Gardner, former Secretary of Health, Education and Welfare, strode to the podium at the annual meeting of the American Council on Education, and launched a double-barrelled assault on higher education for its lack of initiative in dealing with problems of urban life. He declared, "The colleges and universities of this country have not responded impressively to the urban crisis. They have been notable laggard...very few have pursued any aspect of the urban crisis with the intellectual rigor it requires. Even fewer have accepted the real world of the city on their doorstep as a laboratory in which they can advance those intellectual pursuits." The point that John Gardner was making is that if postsecondary education is truly doing its job, it has an impact on virtually every institution of society.

Postsecondary education at one time stood as the giant oak as the primary source of knowledge/information generation and transmission. Postsecondary education had exclusive right on a monopoly. Since an early study published in 1961 by the American Council on Education, business and industry had become involved in education and training in a big way.[15] An article in the October 1978 issue of the American Association of Higher Education Bulletin begins as follows:[16]

> An extensive education and training system exists in private industry and government. The National Conference Board, for example, reports that in the single recession year of 1975 the nation's 7,500 largest private employers spent over $2 billion on employee education--as much as the

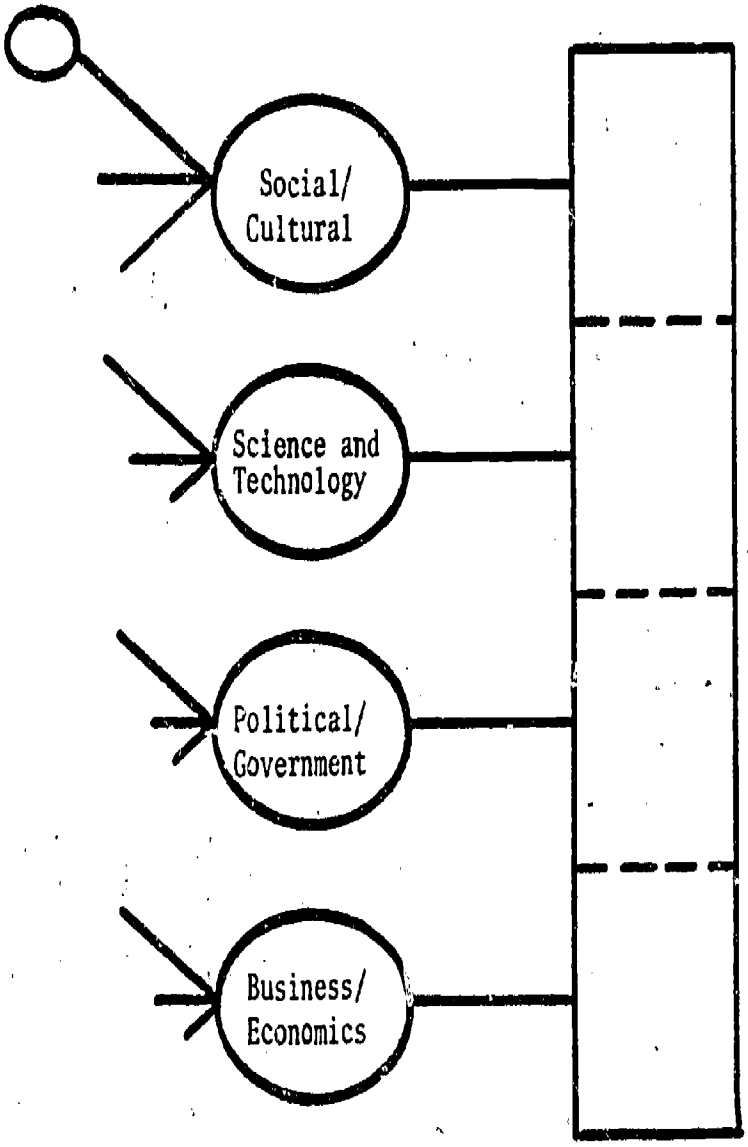
Trend Impact Analysis Function

Trend Monitoring Function

Abstractors

Disciplinary
Abstract
Synthesis
Groups

Interdisciplinary
Abstract
Interdigitation
Committee



Organizations

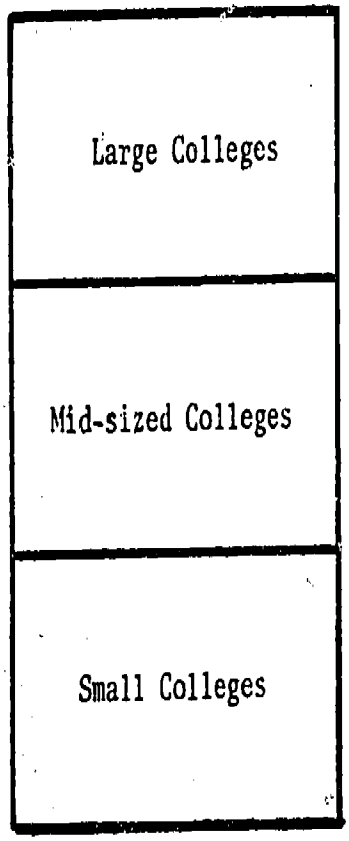
Chief Institutional Officers

Academic Officers

Student Affairs Officers

Business Officers

Others



recent annual totals of all contributions from all sources to colleges and universities. And while college and university-based education is stabilizing and/or declining, the training and development sector in business, industry, and government is expanding rapidly.

Several years ago Kenneth Boulding gave us a warning by drawing an analogy between higher education and that other industry in decline--the railroads. The problem, he said, was that railroad managers did not view themselves as part of a larger transportation system, but simply as manager of an isolated segment, the railroads.

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An article in The New York Times begins as follows:

Last year the American Telephone and Telegraph company spent $700 million on education programs for its employees, or more than three times the $213 million annual budget of the Massachusetts Institute of Technology.

Sixteen courses run by McGraw-Hill for its employees have been approved for college credit by the New York State Department of Education. At Honeywell, Inc., in Minneapolis more than 3,500 employees enrolled this year in 183 courses ranging from solar heating and cooling to women in business.

The introduction to an article in the May 1980 issue of the

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Training and Development Journal is as follows:

Industry spends on employee education more than six times the amount appropriated by all the states for all of higher education! If money is power, then industry occupies a power position in continuing education.

Industry is not only a major consumer of continuing education provided by others, it is also a major provider of continuing education, with large "in-house" training staffs and facilities. If competition is conflict, then industry is a source of conflict in continuing education, competing directly with other providers and pitting provider against provider as bidders for its continuing education dollars.

Robert Kost points out that industry's principal objective in continuing education is pragmatic: Continuing education should provide skills and knowledge that will improve employees' capabilities and be reflected in the quality of their performance and in their productivity. But industry is not so pragmatically profit-oriented that its concept of continuing education is totally restricted to task-related training; there is considerable support for Quality of Work Life programs, and the liberal arts as well as industrial arts.

Industry, Kost says, wants to cooperate with educational institutions, yet is not receiving the response it expects from academic sources, which is surprising in view of the widely-held assumption that such sources are securing college-credit equivalents, and some programs are even securing degree-granting accreditation.

Changes in the workplace include imbalances in types of manpower supply and demand. An assembly sponsored by the American Association of Community and Junior Colleges, the American Vocational Association, and the American Society for Training and Development called for a drive to end the shortage of skilled workers and recommended several specific recommendations:[19]

> The federal government should establish a policy on the development of human resources that designates lifelong education and training as an "absolutely necessary national investment."
>
> President Carter should call a White House conference to draw attention to the need for a national policy designed to increase the productivity of workers and to decrease unemployment.
>
> The new Department of Education should promote more communication between educational institutions and business on manpower issues.
>
> The major national associations concerned with occupational education and training should establish pilot projects to demonstrate that-together-education, business, and industry can produce skilled workers.
>
> A national program to define job markets and provide information on which to base cooperative training and education programs.
>
> A national commitment to continuing-education programs that would help workers upgrade their skills and attitudes and train for new positions.
>
> "Education-delivery systems," such as competency-based instruction, that allow students to enter and transfer to or from any high-school, post-high-school, military, labor, or industrial education program.
>
> A program to identify and publicize "effective working relationships" that education and industry have already established.

Organizations pass through various stages of growth and development. These stages have been characterized as (1) emergence, (2) growth, (3) maturity, (4) regeneration, and (5) decline.[20] It is becoming increasing clear that the strategies an organization uses are influencial by its position in a development sequence. Richard L. Nolan does an excellent job in tracing the stages of corporate development of computing/data processing activities.[21] Harold Taylor suggests that, "What is missing in the faculty debates about curriculum in the liberal arts colleges, and in the boardroom discussions of trustees and college

presidents, as they go through their agendas of economic defeat, is a renewed sense in the mission of the American college as an instrument of social change."[22] The exception to this general indictment of postsecondary institutions is the community college. Taylor writes, "The community college is now at the front edge of social change in the big cities, where it is politically clear that community education which matches the reality of community needs is a major source of strength in building the community itself."[23] Some of the involvement of two-year colleges is described in COMBASE.

In 1967, the editor of Daedalus, published a paper called "University Cities in the Year 2000."[24] Essentially he was suggesting that by the turn of the 21st Century, certain municipalities would be primarily "educational," in the broadest sense, just as certain cities are primarily "textile," "transportation," etc., in today's world. What he suggested is a consortium of ideas and programs that goes beyond the parochial view of "institution." When we get rid of the illusion that "higher education" is the exclusive domain of colleges, then we can ask a new set of questions about exciting terrain. For example, is it possible to conceive of a network of different organizations collaborating on region-wide programs on (1) career planning and development, (2) health promotion, or (3) the revolution in communications technology?

During the late 1960's and the 1970's, a number of municipalities participated in a process to establish and implement communal or state-wide goals. In an article in the March-April 1971 issue of City, Frederick B. Routh indicated that some 100 cities and three state governments had launched such an effort.[25] The first and largest of the major goals programs was that of Dallas, under way for nearly six years by 1971. This effort yielded a set of goals and subgoals in (1) the number of academic and career counselors employed by the Dallas Independent School District; (2) expansion of the Dallas County Junior College System and the Tarrant County Junior College System; and (3) use of television, radio, and other technology to assist all forms of continuing education. That

process continues today. The 1978 gift of the Dallas Foundation to Goals for Dallas was designated to support the publication Achieving the Goals for Dallas, 1978-83.[26] This sort of strategic planning is in the early stages of development and will undoubtedly continue in the 1980s. Intermural planning is so important that the Council of Educational Facility Planners has developed a Community Planning Assistance Kit.[27] This concept will probably be extended to Third World countries.

Kenneth E. Boulding suggests we are moving "Toward a Vintage Society." He writes:[28]

> The maturation of our society, for good or for ill, will dominate change during the next decades. In biological organisms, senescence or death is inevitable when the biological potential of the original cell is exausted. This does not have to happen in social organizations, or even total societies, because these structures are capable of a kind of social recombinant DNA. One sure sign of impending death for an organization or society is a fixed, uncritical worship of old ideas and ways that prevents adjustment to new situations. A society can restore its potential by replacing the old with the young in role structures and by developing "visions," renewals, and expansions of its original ideas.

Lloyd J. Averill is correct when he states the effective college in the 1980s is one that will engage in strategic, cooperative planning.

FOOTNOTES

1 Francis Keppel, The Necessary Revolution in American Education (New York: Harper and Row, Publishers, 1966).

2 L. Richard Meeth, Quality Education for Less Money (San Francisco: Jossey-Bass, Inc., 1974), p. 2.

3 John D. Millett. Higher Education Planning: A Report of Experience and A Forecast of Strategies for Change (Washington, D.C.: Academy for Educational Development, 1978).

4 Steven LeRoy Van Ausdle, Comprehensive Institutional Planning Systems In Selected Two-Year Colleges (Columbus: The Ohio State University, 1980), p. 181.

5 A Futures Creating Paradigm: A Guide To Long-Range Planning From the Future For The Future (American Association of State Colleges and Universities, Resource Center for Planned Change, 1978).

6 Raymond N. Kieft, Academic Planning: Four Institutional Case Studies (Boulder: National Center for Higher Education Management Systems, 1978).

7 Warren H. Groff and Robert B. Fox, "Data as an Institutional Resource in a Planning, Management, and Evaluation System", a paper presented at College and University Systems Exchange, December 15, 1978. (Published in Proceedings and July 1979 issue of CAUSE/EFFECT).

Warren H. Groff and Robert B. Fox, "Key Data Elements in a Planning, Management and Evaluation Syllogistical Mode, a paper presented at the 25th Annual College and University Machine Records Conference, May 4-7, 1980. (Published in 1980 Conference Proceedings).

Warren H. Groff, "Trend Analysis As A Component of Comprehensive Institutional Planning", a paper presented at the workshop on Comprehensive Institutional Planning sponsored by the National Alliance of Postsecondary Education Institutions/Districts of the National Center for Research in Vocational Education, September 14-15, 1980.

8 AAHE Bulletin, November 1978, p. 11.

Update, January 1980, p. 16.

9 How TAP Works (Washington, D.C,: American Council of Life Insurance, 1978). TAP has produced reports on Aging and the Aged; The Employee; The Life Cycle; The International Scene; Frontier Technologies: Part One - Science and Health; Frontier Technologies: Part Two - Information Science; A Culture in Transformation: Toward A Different Societal Ethic; Transportation; Changing Residential Patterns and Housing; Planning; Death, Dying and Life Extension; and The Changing Nature of Work.

10
"Exploding Population of Automatic Workers," Technology Review, February 1980, pp. 78-80.

11
Jack Magarrell, "A 'Vital' Need for Robots Brings Boom in Research," The Chronicle of Higher Education, September 22, 1980, pp. 1 and 10.

12
T. M. Stauffer, "Summary of the First Meeting, Business-Higher Education Forum," (Washington: American Council on Education, January 26-27, 1979).

13
Willard Wertz, The Boundless Resource (New York: E. P. Dutton, 1976) and Dyckman W. Vermilye (ed.), Relating Work and Education (San Francisco: Jossey-Bass Inc., 1977).

14
National Manpower Institute
1211 Connecticut Avenue, N.W., Suite 301
Washington, D.C. 20036

15
Oscar N. Serbein, Educational Activities of Business (Washington, D.C.: American Council on Education, 1961).

16
Carolyne Davies and Austin Dougherty, "Our 14,000 Colleagues in Business, Industry and Government," AAHE Bulletin, October 1978, p. 7.

17
Stan Luxenberg, "Business Is Big In Education, Too," The New York Times, January 7, 1979, Section 13, p. 15.

18
Robert J. Kost, "Competition and Innovation in Continuing Education," Training and Development Journal, May 1980, pp. 48-67.

19
Beverly T. Watkins, "Drive to End Shortage of Skilled Workers Proposed by Educators and Industrialists," The Chronicle of Higher Education, March 24, 1980, p. 1.

1980 Assembly, Winspread, Racine, Wisconsin, March 12-14, 1980.

Memorandum from Roger Yarrington to Wingspread Assembly Participants, March 2, 1980.

Manpower shortages are predicted for the 1980s in the Futurist, June 1980, p. 2 and The Chronicle of Higher Education, July 28, 1980, p. 6.

20
Barrie G. James, "The Theory of the Corporate Life Cycle," Long Range Planning, June 1973. Cited in George A. Steiner and John B. Miner, Management Policy and Strategy (New York: Macmillan Publishing Co., Inc., 1977) pp. 83-88.

21
Richard L. Nolan, "Managing The Crises in Data Processing," Harvard Business Review, March-April 1979, pp. 115-126.

22
A Cooperative for the Advancement of Community-Based Postsecondary Education was formed in 1974 when ten community colleges joined together with a common interest in community-based education. Since that time, the membership has increased to 25. COMBASE is a consortium of community colleges voluntarily joined together for the purpose of sharing expertise and experience as well as identifying, validating, and employing exemplary practices in community-based, performance-oriented education.

23
Harold Taylor, "What Next?", Change, July-August, 1979, pp. 50-52.
24
Stephen R. Graubard, "University Cities in the Year 2000," Daedalas, 1967, pp. 817-822. Issue title: "Toward the Year 2000: Work in Progress."
25
Frederick B. Routh, "Goals for Dallas: More Participation than Power-Sharing," City, March-April 1971, pp. 49-53.
26
Achieving the Goals for Dallas, 1978-83, (1979) published by Goals for Dallas, 1309 Main Street, Dallas, Texas.
27
News, Academy for Educational Development, January 1980, pp. 1 and 7.
28
Kenneth E. Boulding, "Toward a Vintage Society," Technology Review, August/September, 1980, pp. 4-5.
29
Lloyd J. Averill, "The Effective College: Agenda for the 80's", Liberal Education, Spring 1980.