ABSTRACT
        A process to assess a college's external environment
and audit its internal environment in order to pursue options
available to postsecondary education is described. Essentially the
concept is one of matching opportunities in the external environment
with institutional strengths as determined by an internal audit.
Strategic planning must consider a critical analysis of forces,
trends, and their effects, and must be firmly based on demographic,
social, political, and economic data sets. Data are the foundation
upon which to build the multi-year institution or system plan.
Institutions pass through various stages of development and have
different characteristics of organizational functioning. Stages of
organizational development are identified as: emergence, growth,
development, regeneration, and decline. Types of organizational
functioning can be listed as hierarchical, Theory X; collegial,
Theory Y; and political, collective bargaining. In addition, tools of
strategic planning can be labeled as needs asse. ment, trend
analysis, environmental scanning, and market analysis. The challenge
to postsecondary institutions is to diagnose where they are with
regard to the first two dimensions and develop elements of strategic
planning appropriate for their context. The purpose of the external
environment assessment is to formulate assumptions that guide the
institutional decision-making process, particularly in the areas of
goal setting and human resource development, and to identify
strengths, weaknesses, opportunities, and threats in the external
environment. It is recommended that management information systems
include the integration of data on the external environment and
internal operations of institutions, such as registration,
scheduling, and student aid. (SW)

ED218993

ENTREPRENEURSHIP THROUGH

STRATEGIC PLANNING, MANAGEMENT, AND EVALUATION

by

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The February 28, 1977, issue of The Chronicle of Higher Education contained

an article entitled "Where Are the Leaders in Higher Education?" The author

alleges that the modern collegial context has caused the disappearance of the

statesman leader in preference to the institutional manager. Arthur Levine

asserts that the "single-minded concern with surviving must give way to a commit-

ment to thriving. The accent must shift from persisting to prospering."[1] Brent

Knight, President of Triton College, suggests the way to cope with the challenges

of the 80's is through strategic planning, marketing, and an entrepreneurial atti-

tude.[2]

This article will describe a process to assess a college's external environ-

ment and audit its internal environment in order to pursue options available to

poastsecondary education. Parts of the process were developed and used at the 1981

Snowmass Institute on Strategic Planning and Management on July 5-10 and at an

American Council on Education Leadership Seminar on "Strategic Planning Techniques

for Massachusetts Postsecondary Education" presented in conjunction with The

Council of Public Presidents and Chancellors and the Chancellor's Office of the

Massachusetts Board of Regents on November 30-December 1, 1981.

The Maturation of the Concept of Strategic Planning

During the post World War II years instiutional planning had a focus on acquiring more resources and building facilities for the increased number of students resulting from the equal right demand for access to postsecondary education. Planning in postsecondary education during the 1960s was undertaken in response to immediate needs with minimum regard to the future. During the 1970s the influx of traditional 18 to 22 year old students began to stabilize. Many private and public senior institutions began to experience the impact of a broad range of demographic, social, political, and economic forces. As a result, organizations such as The Council of Independent Colleges (formerly The Council for the Advancement of Small Colleges), the Academy for Educational Development, and the American Association cf State Colleges and Universities launched programs relating to comprehensive institutional planning. These projects, and others like it, stressed the need to assess the external environment. The literature began to reflect descriptions of institutional planning processes including some way to assess the external environment. Numerous persons began to add clarity to the concept of strategic planning.[3] Essentially the concept is one of matching opportunities in the external environment with institutional strengths as determined by an internal audit.

External Environment Assessment

Tools for external environment assessment include policy analysis, needs assessment, trend analysis, environmental scanning, and market analysis.

Ahmann indicates that needs assessment is a generic term to describe a process "for determining the discrepancy between existing and desired levels of attainment with respect to specific educational goals."[4] He describes types of needs assessment and the state of the art which has shifted from informal to formal, systematic efforts beginning in the early 1970s attributable primarily to the accountability movement stimulated by federal legislation. Vlahos traces

2

several changes in needs assessment techniques including its application to
perceptions of the community and business and industry.[5]

Trend analysis consists of the systematic review of comparable data over
time in order to determine direction. Environmental scanning consists of periodic
sampling of data which may ultimately form the foundation of trends. An example
of such a scan is the College Entrance Examination Board study indicating that
36 percent of the population between the ages of 16 and 65, more than 40 million
Americans, are in a career transition status.[6] Research by the College Board,
however, indicates that only about ¼ of the 58,400,000 persons in postsecondary
education are enrolled in colleges and universities.

Market analysis consists of obtaining detailed information about markets
or market segments served or unserved by the institution. Market analysis is
an organized effort to identify the relationship between specific wants and needs
of people and the way the institution meets or could meet them. Market analysis,
is, in its simplest description, a more coherent way to plan institutional re-
sponses to conditions within the College's service area.[7]

The project by the American Association of State Colleges and Universities
uses a cross-influence matrix of 12 societal trends and 12 values to bring
planning assumptions into focus before setting 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, interdependence,
pluralism, localism, ethics, knowledge, quality, goals and foresight. The 10 goal
areas are finance, students, research and development, public service, facilities,
faculty, curricula, administration, resources, and athletics.[8]

Another way to categorize data about a college's service area is by industry.
The list of industries could include textiles, auto, shipbuilding, mining, elec-
tronics, telecommunications, biotechnology, health care, insurance, and education.[9]

Information analyzed by the Bureau of the Census includes social indicators

such as population and the family; health and nutrition; housing and the environ-

ment; transportation; public safety; education and training; work; social

security, and welfare; income and productivity; social participation; culture,

leisure and use of time.[10]   The project by the Academy for Educational Development

used the categories of demographic trends, social expectations, economic trends,

and governmental planning.[11]

The purpose of the external environment assessment is (1) to formulate

assumptions which guide the institutional decision-making process, particularly

in the areas of goal setting and human resource development, and (2) to identify

strengths, weaknesses, opportunities, and threats in the external environment.

The heart of an institution is its certificate and degree programs. Faculty

actively participating in gathering and analyzing data about the external environ-

ment keep curricula current and relevant. These data can be fed into the insti-

tutional strategic planning process which includes the specification of assumptions.

A 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 pre-
> cision it is allowed in subsequent planning. The greater the un-
> certainty 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 effective-
> ness 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 deci-
> sion about inclusion or exclusion of a specific proposition at the
> institutional or department levels rests on whether or not the
> assumption has a direct bearing on setting goals and objectives
> at that level.

Institutions and systems vary in their ability and capacity to collect and

analyze data about their external environment. Regardless of degree of sophisti-

cation, judgments are made relative to the strengths, weaknesses, opportunities,

and threats in the external environment. An institution can focus more clearly

on each of these through the SWOT exercise. Using whatever data base is available,

impressionistic through hard data, an institution or system can list strengths, weaknesses, opportunities, and threats in the external environment. Data from one source indicate that change in the number of high school graduates between 1979 and 1995 will range from a decline of 59% in Washington D.C. to an increase of 58% in Utah. Eleven states will experience a decline of more than 30% in the number of high school graduates during that period.[12] It should be noted that an increase of 58% in Utah is not necessarily a strength. It is conceivable that some of the 11 states anticipating enrollment declines in excess of 30% would contract with Utah for the delivery of educational services. The same could hold for developing nations.

Each strength, weakness, opportunity, and threat can be labeled demographic, economic, social or political. The purpose of this analysis is to gain insights into which of several options an institution or system will choose in charting a course of action over the next several years. Bowen indicates that colleges experienced enrollment declines in 1934, 1944, and 1952 and suggests four options: (1) redirect resources toward higher quality, (2) redirect resources toward research and public service, (3) redirect resources toward new student clientele, and (4) retrenchment.[13] Campuses can prioritize these options based on the analysis.

Internal Audit

Institutions pass through various stages of development and have different characteristics of organizational functioning. Stages of organizational development are listed as emergence, growth, development, regeneration, and decline.[14] In addition, an institution can be viewed as being comprised of several major areas such as (1) planning, research, and evaluation; (2) enrollment, retention, and financial aid; (3) academic and student programs; (4) personnel management and development; (5) fiscal resources management and development; and (6) reporting and outcomes analysis.

Each of the above-listed areas is an aggregate of functions within the institution. For example, "planning, research, and evaluation" consists of (1) the capability for external environment assessment, (2) the institutional planning process, (3) institutional research, (4) management information system, (5) institutional self-studies, and (6) the annual evaluation process. As was indicated in the previous section, external environment assessment is a function, for the most part, of an institution's capacity to use the tools of (a) needs assessment, (b) market analysis, (c) trend analysis, and (d) environmental scanning. This type of detail can yield an evaluation format for diagnosing stage of institutional development as displayed in FIGURE 1.

By adding scale and more specific criteria, an institution can diagnose with some accuracy the stage of institutional development. For example, if an institution is unfamiliar or only vaguely familiar with the literature on needs assessment, it should score a "0". If the institution participated in a needs assessment or critically analyzed several needs assessment instruments or studies, it could be ranked "1". Conducting one or more needs assessments yields a "2" and critically evaluating data from needs assessments nets a "3". Feeding the data back into the planning process merits a "4". To score a "5", the institution fed the data into the planning process, implemented change, and evaluated the results.

Such an approach can be taken for each function. Because most of an institution's resources are in direct support of certificate and degree programs, evaluation of them deserves special attention. Certificate and degree programs

15

can be evaluated on the basis of quality, centrality, and market viability. Quality is a function of faculty, students, library holdings, support services, program characteristics, program advisory committees, and other variables. Centrality relates to the degree of closeness to the central mission of the institution. An institution can evaluate the quality of its programs on the basis of the above

FIGURE 1

EVALUATION FORMAT FOR

DIAGNOSING STAGE OF INSTITUTIONAL DEVELOPMENT

Institution _____

	5	4	3.	2.	1	0

I. Planning, Research and Evaluation
   1. External Environment
      a. Needs Assessment
      b. Market Analysis
      c. Trend Analysis
      d. Environmental Scanning
   2. Planning Process
      a. Institutional Goals
      b. Specific Objectives
   3. Institutional Research
   4. Management Information System
   5. Institutional Self-Study
   6. Annual Evaluation Process

II. Enrollment, Retention, and Financial Aid
   1. Manual of operations for admissions
   2. Inquiry System
   3. Marketing plan
   4. Communication tools
   5. Professional development
   6. Faculty understanding
   7. Manual of operations for financial aid
   8. Enrollment projections

III. Program Development (Academic and Student)

   1. Student characteristics
   2. Identifying outcomes
   3. Certificate and degree programs
   4. Career planning
   5. Guidance/placement
   6. Non-traditional options
   7. Curricular patterns
   8. Community education

IV. Personnel Management and Development

   1. Policies/practices
   2. Institution organization
   3. Professional development
   4. Management development
   5. Interpersonal skills
   6. Sense of community
   7. Staff management
   8. Advisory committees

		5	4	3	2	1	0

V. Fiscal Resources Management and Development

1. Cash flow analysis
2. Budget planning systems
3. Budget control
4. Donor cultivation
5. Planning college revenues
6. Gift record keeping system
7. Cost effectiveness
8. Proposal development/grants administration

VI. Reporting and Outcomes Analysis

1. Internal communications mechanisms
2. External communications mechanisms
3. Output analysis system
4. Impact analysis system

KEY:

5	Outstanding, far exceeds reasonable expectations
4	Good, generally exceeds reasonable expectations
3	Satisfactory
2	Doubtful, generally falls short of reasonable expectations
1	Unsatisfactory, totally inadequate
0	Non-existant

criteria and divide them into three equal groups labeled high, medium, and low quality. The institution can then divide its programs in a similar way based on centrality and array them in the matrix in FIGURE 2.

The next step is to rank the programs on market viability. Market viability is defined as demand in the market place, competition, and comparative advantage. The external environment assessment plays a major role in this step. Programs in cell 1 of the Q/C Matrix are distributed in cells 1, 4, and 7 in the Q/C – Market Viability Matrix in FIGURE 3. Programs in cells 2, 4, and 5 of the Q/C Matrix are distributed in cells 2, 5, and 8 of the Q/C – MV Matrix. Programs from cells 3, 6, 7, 8, and 9 of the Q/C Matrix are distributed in cells 3, 6, and 9 of the Q/C – MV Matrix. This technique can be extended to include support programs. The diagnostic information can lead to a variety of continuation decisions as well as discontinuation of programs.

Matching and Integration

- Strategic planning and management is essentially the matching of opportunities in the external environment with institutional strengths. Demographic data indicating a decline in the number of high school graduates, which might be listed as a "threat", can be balanced against the "opportunity" of accessing more of the 36% of the population between the ages of 16 and 65 who are in career transition. The social expectation force of equality of opportunity to a quality education and the political/economic forces of the right to retraining and to continuing education will yield additional lifelong learners who will be offered education and training by one of several postsecondary education providers.

Programs of high quality, centrality, and market viability should not be deprived of the resources necessary to insure their maximum impact on the institution's service area. Programs of low quality, centrality, and market viability should yield to programs designed to take advantage of opportunities in the external environment such as retraining the unemployed[16] or technology transfer.[17]

FIGURE 2

QUALITY/CENTRALITY MATRIX

Program Quality

A Marketing Approach to Program Development (Washington, D.C.:   Council
    for the Advancement of Small Colleges, 1978).

FIGURE 3

Q/C-MARKET VIABILITY MATRIX

Program Quality/Centrality

	High	Medium	Low
High	XXXX XXXX **1**	XXXX **2**	XXXX **3**
Medium	XXXX XXXX XXXX **4**	XXXX **5**	XXXX XXXX **6**
Low	XXXX **7**	X'XX **8**	XXXX **9**

Market Viability (vertical axis label)

A Marketing Approach to Program Development (Washington, D.C.: Council
for the Advancement of Small Colleges, 1978).

12

Programs between these two extremes must be dealt with individually. For example, programs with high centrality and market viability but medium or low in quality must be examined in terms of faculty, students, library holdings, support services, program characteristics, degree of active participation by program advisory commiteee, and other variables. It is possible that a program may be low in quality simply because it is in the early stages of development or integration such as robotics or rehabilitative engineering, programs which are multi disciplinary in nature.

Integration concepts extend beyond combining disciplines to interrelatedness between institutional planning, institutional research, the management information system, public relations, marketing, and d 'elopment or fund raising. Management information systems in the past have tended to focus on data elements relating to the internal operations of the institution such as registration, scheduling, class rosters, space utilization, grade reporting, student aid, payroll, budgeting, and other administrative applications. Data have been collected and grouped in files labeled student, personnel, financial, and space. Sometimes the data elements are similar for various reporting agencies and occasionally the independent files can be integrated to produce meaningful reports on topics such as program cost analysis and student longitudinal studies. Occasionally independent file reports or integrated file reports are synchronized with decision points in the annual planning/budgeting cycle but usually stop short of strategic planning. Management information systems of the future must include the integration of internal and external
18
data sets.

In addition, integration goes beyond a single institution. It extends to how an institution fits into a larger system of providers of postsecondary education services.
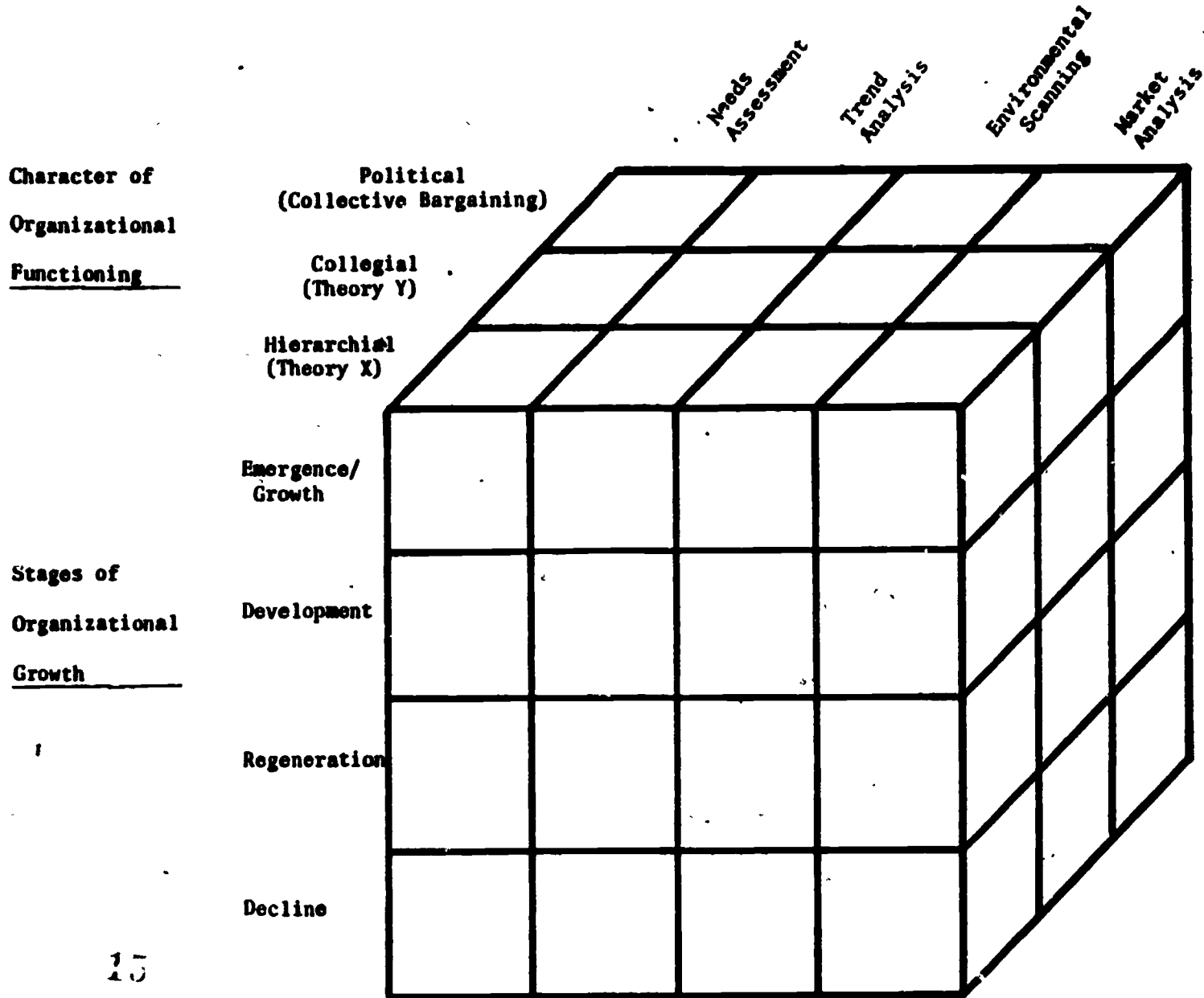
Summary and Conclusions

Planning, however defined, h__ ' focus on designing and shaping the
future as opposed to merely changing. Strategic planning must consider a
critical analysis of forces, trends, and their effects and must be firmly
based on demographic, social, political, and economic data sets. Data are the
foundation upon which to build the multi-year institution or system Plan, a
document containing a grand design representing intelligent anticipation of
activities and events carefully specified in advance to move from one point
to another. The data analysis process must strive to produce meaning as it
relates to efficiency and effectiveness of relating resources to institutional
goals and objectives. Planning, then, is critical analysis and requires the
development of an analytical capability to collect, array, and analyze a large
number of variables in an effort to portray a system of relationships, causality
in some cases.

Institutions pass through various stages of development and have different
characteristics of organizational functioning. Stages of organizational develop-
ment were listed as emergence, growth, development, regeneration, and decline.
Types of organizational functioning can be listed as hierarchial, Theory X;
collegial, Theory Y; and political, collective bargaining. In addition, tools
of strategic planning can be labeled needs assessment, trend analysis, environ-
mental scanning, and market analysis. These three dimensions form a model to
help assist institutions to diagnose where they are in the evolutionary process.
(See FIGURE 4) The challenge to postsecondary institutions is to diagnose where
they are with regard to the first two dimensions and develop elements of strate-
gic planning appropriate for their context. The challenge is to capitalize on
strengths, minimize weaknesses, take advantage of opportunities, and eliminate
or reduce threats. Strategic planning, management and evaluation holds the
potential for reviving the entrepreneurial spirit.

FIGURE 4
MODEL FOR CATEGORIZING DIMENSIONS OF STRATEGIC PLANNING
BY STAGE OF ORGANIZATIONAL GROWTH AND CHARACTER OF ORGANIZATIONAL FUNCTIONING

Tools of Strategic Planning

Needs Assessment

Trend Analysis

Environmental Scanning

Market Analysis

Character of

Organizational

Functioning

Political
(Collective Bargaining)

Collegial
(Theory Y)

Hierarchial
(Theory X)

Emergence/
Growth

Stages of

Organizational

Growth

Development

Regeneration

Decline

15

10

The entrepreneurial spirit or attitude, however, must be followed by entre-
preneurship. Michael Barker, director of policy studies for the Council of State
Planning Agencies, an affiliate of the National Governors Conference indicates that
companies listed in the Fortune 500 haven't produced a net employment gain in five
years. Eighty percent of the new jobs in this country are being created by establish-
ments that employ twenty or fewer people and are less than four years old. Small
company's start where the people who run them live. Everything suggests that post-
secondary education ought to focus "public service" development efforts on enhancing
the possibilities of start-ups.[19] Specific ways in which postsecondary education
can assist small business include (1) develop evaluation formats to assist small
business and industry to diagnose their stage of development; (2) assist business
and industry to understand their external environment; (3) assist them to conduct
an internal audit; (4) assist them to develop a strategic plan; (5) conduct special-
ized training programs on managerial, technical, and career centered topics; and
(6) assist them to prepare bids for federal and other contracts.

We have the tools, do we have the spirit and then are we willing to commit
the resources to dedicate our institutions as instruments of economic and social
change?

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