Environmental scanning activities in higher education were described in forums at the 1986 annual meetings of the American Association for Higher Education (AAHE), the Association for Institutional Research (AIR), and the Society of College and University Planning (SCUP). The forums were held to determine the extent of environmental scanning activities in U.S. higher education and to form networks of individuals interested in adapting the techniques to their schools. Environmental scanning is increasingly being used by colleges to promote planning. The major benefit of an environmental scanning/forecasting system is to provide critical information for strategic planning. Such a system allows the institution to detect social, economic, technological, and political trends and potential events that define the context of the future. In turn, decision-makers can anticipate what is happening in the state, region, nation, and world that will affect the nature and quality of the institution and its educational programs. Summaries of environmental scanning activities at 15 colleges and 3 additional projects/systems are provided, based on descriptions by individuals who attended the 1986 forums. Plans for sessions on environmental scanning at the 1987 annual meetings of AAHE, AIR, and SCUP are also described. (SW)
Environmental Scanning Activities in Higher Education

As Reported at the 1986 Annual Meetings of AAHE, AIR, and SCUP

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Environmental scanning is a technique increasingly used by colleges and universities in their planning processes. Brown and Weiner (1985) defined environmental scanning as "a kind of radar to scan the world systematically and signal the new, the unexpected, the major and the minor (p. ix)." Aguilar (1967) defined scanning as the systematic collection of external information in order to (1) lessen the randomness of information flowing into the organization and (2) provide early warnings for managers of changing external conditions. More specifically, Coates (1985) has identified the objectives of an environmental scanning system as including:

- detecting scientific, technical, economic, social, and political interactions and other elements important to the organization;
- defining the potential threats, opportunities, or potential changes for the organization implied by those events;
- promoting a future orientation in management and staff;
- alerting management and staff to trends which are converging, diverging, speeding up, slowing down, or interacting (pp. 2-13, 14).

The major benefit of an environmental scanning/forecasting system to an institution is in providing critical information for strategic planning (Cope, 1981; Kotler and Murphy, 1981; and Keller, 1983). Such a system allows the institution to detect social, technological, economic, and political trends and potential events which define the context of the future. In turn, decision
makers can anticipate what is happening in the state, region, nation, and world that will affect the nature and quality of the institution and its educational programs.

There are a number of ancillary benefits. For example, participants in the system begin to examine all information with the question, "What are the implications of this article (lecture, radio/TV program) for my department/college?" Indeed, this subtle outcome—the development of an active orientation to the external environment and to the future—may well be an outcome which is as important as any other. Moreover, in interacting with colleagues in program areas or on the environmental scanning abstracts evaluation committee, this future orientation is not only reinforced, but team building is enhanced (Morrison, 1985).

In order to ascertain the extent of environmental scanning activities in American higher education and to form networks of individuals interested in adapting the techniques to their own institutions, forums on this topic were held at the 1986 annual meetings of the American Association for Higher Education (AAHE), the Association for Institutional Research (AIR), and the Society of College and University Planning (SCUP) (Morrison, March, 1986; June, 1986, 1986). The purpose of this paper is to report those environmental scanning activities as described by individuals attending these forums, and to describe plans for sessions focusing on environmental scanning at the 1987 annual meeting of those associations.

Reports

Kathleen K. Bissonnette (West Virginia) and Jeffrey E. Dutton (SUNY Buffalo) have developed the Higher Education Media Scan (HEMS) Reference System, a system designed to meet the specific issue-related information retrieval needs of administrators by providing easy access to bibliographic entries on major
articles published in current volumes of *The Chronicle of Higher Education*, *Academe*, *Higher Education and National Affairs*, *Change*, the *ERIC-ASHE* series, and *New Directions for Institutional Research*. Each article included in the data base is described by keywords. Entries are retrievable by these same keywords. Users can also add institutional and area-specific publication entries. HEMS is contained on IBM compatible disks. The developers are interested in obtaining volunteers who would agree to systematically review other information resources to put on the HEMS system. For further information, call Kathy Bissonnete (304-293-4906) or Jeff Dutton (716-636-2791).

**Lawrence A. Brown**, Lane Community College, reports that while they are not yet engaging in direct environmental scanning activities, they are in a planning phase. That is, they have conducted a campus wide general meeting attended by vice-presidents, deans, many department heads, and members of the faculty and staff. This was largely a brainstorming session in which they identified the range of areas in which they needed to gather environmental data and then identified specific kinds of data to monitor within each area. This process is being coordinated by Ms. Jake Aspinwall-Lamberts, Director of Institutional Research, Planning, and Evaluation.

**John D. Burton**, DePaul, reports that his office prepared an Environmental Scanning Databook February, 1985, in order to assist with the planning process. The topics included economic and demographic data on the Chicago and Illinois areas, student market data, and comparative institution profiles. Tables were produced in a loose-leaf format so they could be easily updated.

**Richard Clugston** and **Steven Schomberg** (Minnesota) conducted a workshop, "The 'Nine Nations' Approach to Trend Analysis in North America," at the NUCEA conference this past April. They have been requested to submit a book proposal on environmental scanning to Jossey-Bass and to describe the workshop for the
NUCEA journal. In addition, they with their colleague Ann Pflaum, have been conducting environmental scanning workshops for various units of the University of Minnesota.

Rick reports that the Minnesota State Planning Agency produces a newsletter, "Future Scans." The newsletter obtains scanning information from various individuals within and outside of the Agency as well as from the National Scanning Board of the Council of State Planning Agencies. Members of the University of Minnesota's External Scanning/Issues Management Group maintain a working relationship with the agency.

W. Donald Crump, University of Alabama, reports that the UA administration is committed to an environmental scanning process. Their task is to decide whether sources currently exist that the institution might tap or if they need to develop their own cadre of scanners. The planning council identified major trends in a workshop earlier this year. Plans are underway for a selected group of faculty members to judge the validity of these trends and assess their potential impact on university programs.

Martha L. Hesse (Michigan State University) reports using two existing environmental scanning networks in developing MSU's planning assumptions related to the external environment--the United Way of America and the American Council of Life Insurance Underwriters. Each network has products that are:

1. available in the spirit of public domain;
2. cover the same macro-environmental trends which are of interest to colleges and universities (i.e., economic, legal-political, social-demographic, technological);
3. scan many of the same primary sources in which we are interested; and
4. provide some degree of "raw data" as well as interpretative and integrative analyses.
Additionally, the United Way and the Life Insurance Council each have a process which is compatible not only with the other in terms of approach but is also compatible with the centrally initiated, decentralized, long-range and strategic planning model being implemented at MSU. The University, therefore, has elected to take advantage of the products available through the environmental scanning networks of both agencies.

For example, a MSU/local United Way relationship is being structured and negotiated. It includes metered access to the Human Care Network's, electronic data base, the commitment of MSU to share results of their scanning with the network, and the symbiotic tie of MSU planning information with United Way planning information through the service of the Assistant to the President on the local United Way Board of Directors. This relationship holds the potential of providing a structure for linking selected dimensions of environmental scanning together with other land-grant AAU institutions. Local United Ways provide access to a national organizational framework geographically available and consistent with the public service missions of land-grant institutions.

The Trend Analysis Program (TAP) as developed by the American Council of Life Insurance Underwriters is being adapted at MSU to provide a department/school and college/Major Administrative Unit (MAU) environmental scanning focus. While MSU does have a sanctioned set of university-level environmental assumptions, they are short range and applicable only indirectly to the departments and college levels of strategic planning. However, it is at the departmental level that the strategic thinking of those closest to and most influential on a particular discipline is best integrated into planning for the university as a whole. The TAP process adapts well to the collegial dialogue, "in house" expertise, and the academic governance system in place at MSU.

A faculty member in the MSU College of Business with national stature in
strategic planning for both profit and non-profit organizations will assist in the adaptation of the TAP to particular units and will design a pilot workshop for faculty participation in environmental scanning and analysis. Included in the design will be a component to formalize the approach to using the United Way environmental scanning data base. Specifically, a strategic issues group will be formed to scan, monitor, and analyze MSU's external environment not covered by United Way.

During the most recent planning cycle, department chairpersons and school directors were asked to formulate projections about selected data elements in the MSU institutional data base. Each unit was given five years of historical data relating to their students, courses, faculty/staff, and finances. On a 1-5 scale, ranging from significant decrease to significant increase, each unit was asked to project direction and magnitude of change through FX 1990. Subsequent to each unit's consideration of the characteristics, each college or MAU had articulated a similar projection for the entire college or MAU.

This process is designed to be an essential link between the external environmental scanning activities and the internal perceptions as related to the full strategic context within which planning will continue for MSU. Thus, projections based on a unit's current commitments and future intentions when compared, contrasted (and enlightened) with data and information from the environmental scanning process provide a strong basis for purposive decisions that not only respond to but also create the future for Michigan State University.

Robert H. Glover and Michael R. Mills, University of Hartford, report that the Office of Planning and Institutional Research has regularly monitored student pricing and faculty salary levels at comparable institutions and tracked demographic trends in their primary market states for the last five years. They
maintain this information in Lotus 1-2-3 worksheets. In addition, they monitor HEPI and CPI trends and conduct occasional bibliographic searches and/or analyses of financial aid, financial resources and expenses, curricula, and faculty and staff benefits at other institutions.

The University of Hartford initiated a strategic planning process in 1985-86. Environmental scanning, although an element of the process, was not as systematic or comprehensive as they would have liked. Nevertheless, the process did identify several key issues they will analyze through issues management task forces, including enrollment management, academic computing, and information services. Another task force will focus on assumptions and trends, a vital piece of the continuing strategic planning process.

Joel D. Lapin, Catonsville (Maryland) Community College, has prepared an External Environmental Forecast for use in the institution's planning and development office. The forecast presents information from a variety of sources on the short and long-term future of areas of particular interest to the college e.g., national and local demographic and economic changes, including occupational growth and labor force projections; social and political climates and changes in the years ahead; and the current condition and future of higher education in Maryland and nationally. This 135 page report is in loose-leaf format for easy updating through periodic memos.

Lowell Lueck, Western Illinois University, reports that his president appointed a "futuristics" committee this past year charged with scanning the external environment for emerging trends and issues. The IR office gathered data on those trends identified in the scan and made projections on selected demographic trends. The results are fed into the strategic planning process and will be used as they implement current goals and objectives. Lowell has suggested a procedure next year to provide selected faculty with released time
from teaching to serve on the scanning committee and monitor emerging trends and issues. These people will be supervised by the director of institutional research and planning who will have the responsibility for training scanners and abstractors.

**Harold W. Lundy**, Grambling State University, reports that GSU implemented a strategic planning process in 1981 which includes environmental scanning. Although the university's Analytical Studies Team was initially responsible for environmental scanning, the Office of Planning and Analysis now coordinates the process.

**Tom Mecca**, Piedmont Technical College, reports that various faculty members on an irregular and ad hoc basis submit articles regarding trends/forecasts to his office. This material plus other material collected in his capacity as co-editor of Trend Digest are used as the basis for a notebook on trends and forecasts which is used in the ED QUEST process at his institution.

**Mark Meredith**, University of Colorado Central Office, reports that the recently initiated a strategic planning effort for all four campuses, one portion of which includes an environmental scan, facilitated by use of a consultant (Jack Bertram). Each campus is with completing charged their version of the scan and perform its own analysis of applications.

**James L. Morrison** (UNC-Chapel Hill) is currently consulting with the University of Georgia's Center for Continuing Education and the University of Alabama's Planning Council on incorporating an environmental scanning component into their strategic planning process. The Georgia Center project began last summer and is being written up as a case study for publication as a monograph; the Alabama project began this past January.

In addition, he is writing a manual (with Thomas V. Mecca) on methods and procedures of linking environmental scanning to strategic management (ED QUEST).
This manual was used in an all day workshop at the annual AACJC meeting last April in Orlando and in a day and a half workshop at SCUP 21. The manual is designed to explain and illustrate how to:

1. specify the nature of the institution in terms of mission components, strengths and weaknesses, and performance indicators;
2. establish an environmental scanning system to identify critical trends, events, and emerging issues;
3. identify and assess the impact of critical trends and events;
4. develop alternative visions (scenarios) of the future;
5. identify strategic policy options in response to these scenarios;
6. evaluate these options for robustness across scenarios;
7. incorporate these policies in the operational and strategic plans of the institution.

This past May, he conducted a day long environmental scanning workshop with some 60 North Carolina college and university presidents and/or their representatives. An advisory committee formed after the workshop requested him to write a brief concept paper on the structure and functioning of an environmental scanning consortium serving all institutions in North Carolina. Potential services of this consortium are to:

1. Establish the environmental scanning activity of the consortium through developing an environmental scanning taxonomy, recruiting and training scanners at member institutions, assigning scanners specific information resources for them to review and abstract those items which have implications for higher education, and instructing scanners how to submit their abstracts electronically to the consortium office in accordance with the taxonomy.

2. Assist presidents and planning staffs at member institutions as to how they may use the information in the data base to identify those critical trends
and events which form the contexts of their future.

3. Develop a monitoring capability of those trends identified at member institutions as important to their future. This would require gathering social and economic indicator data on state, regional, national and perhaps international levels so that member institutions could get this data on demand.

4. Develop expert forecasting capability to augment forecasting performed at member institutions.

5. Develop a capability of writing in-depth issue briefs on request from member institutions or of recommending experts who perform these tasks. These briefs would be available to any member of the consortium.

6. Publish a bimonthly newsletter summarizing the ongoing data collection activity of the consortium and highlighting those items of particular interest.

7. Sponsor annual conferences for volunteer scanners which would focus on the items in the data base, and provide examples of how this information is being used by member institutions in their planning process.

Richard Netzel, Metropolitan State College, reports that MSC is revising its planning process. Environmental scanning will be an important component contributing to the development of planning assumptions. Richard seeks cooperative arrangements for scanning to help in the process as well as to share in the collection and analysis of information.

William F. Roark, Georgia Southwestern, is a member of the University System of Georgia's Administrative Committee on Institutional Research and Planning, a committee concerned with information handling as well as research and planning methodologies. At Southwestern, Bill has prepared an environmental scan as part of the Three Year Action Plan.

Jack Sites, Brenau, is directing a "planning readiness" project designed to move a "non-planning institution" into a planning mode. Since the environmental
scanning component is critical to the overall success of the project, the "marketing group" is assisting administrators and institutional researchers with data collection and distribution. Jack is interested in methods and procedures of acquiring and incorporating data into the institutional plan.

Sally Sheppard, Cambrian College, is engaged in a continuous update of an employer data base for the college catchment area highlighting training needs and hiring forecasts. The data base is stored on a VAX mainframe and is accessed through POWERHOUSE software. She and her colleagues regularly scan: MacLean's, Saturday Night, Financial Past, Canadian Business, Business Week, Econoglobe, The Globe, Air-Mail, The Toronto Star, The Financial Post, and regional economic forecasts and professional journals.

Elizabeth Wroblewski, College of St. Catherine, reports that 20 people from different areas of the college have been engaged in environmental scanning and forecasting. They have, for example, used probability impact exercises to identify critical trends and potential events, and have developed scenarios of possible alternative futures for use in strategic planning. The college is currently refining their capacity for organizing, storing and retrieving scanning information.

Plans for 1987

Plans are underway to hold a variety of sessions concerning environmental scanning at the 1987 annual meetings of AAHE, AIR, and SCUP. This is to say, several proposals are currently under consideration by or have been approved by program committees of these organizations. For example, at AAHE (Chicago, March 1-4), there will be a four hour workshop, "On How to Study the Future of Your College..." which focuses on the use of information obtained through environmental scanning in planning for the future of a college. In addition, the AAHE Environmental Scanning Network will hold a two hour breakfast meeting
on Tuesday, March 3. At the AIR meeting (Kansas City, May 3-6), a one-day
preconference workshop on ED QUEST will be presented as well as a one-hour
session of the AIR Special Interest Group on Environmental Scanning. Finally,
several sessions have been proposed for SCUP 22 (to be held in Washington, D.C.,
July 23): (1) a description and history of two exemplary scanning programs—the
Trend Analysis Program of the American Council of Life Insurance and the United
Way of America Environmental Scanning Program, (2) a presentation of the use of
selected futures research techniques in the strategic planning activities of the
United Way of America, (3) a SCUP Environmental Scanning Network Breakfast and
(4) a 12 hour ED QUEST workshop. The SCUP program committee will make their
decisions on these proposals during February, 1987.

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