

ED 327 260

JC 910 076

AUTHOR Clagett, Craig A.; Huntington, Robin B.
 TITLE Environmental Scanning: Assessing Local Business Training Needs.
 PUB DATE 13 Nov 90
 NOTE 15p.; Paper was presented at the Annual Meeting of the Maryland Association for Institutional Research (1st, Bowie, MD, November 13, 1987).
 PUB TYPE Reports - Research/Technical (143) -- Information Analyses (070)

EDRS PRICE MF01/PC01 Plus Postage.
 DESCRIPTORS *College Planning; Community Colleges; Economic Climate; Economic Impact; *Educational Environment; Environmental Influences; *Futures (of Society); *Institutional Research; Job Skills; Job Training; Long Range Planning; *Needs Assessment; School Business Relationship; Social Influences; *Trend Analysis; Two Year Colleges
 IDENTIFIERS *Environmental Scanning; Prince Georges Community College MD

ABSTRACT

Environmental scanning (ES) is a formal process of assessing trends and forecasting events which can influence an institution so that the potential challenges and opportunities can be effectively anticipated during strategic planning activities. The goal of ES is the implementation of proactive, anticipatory policies that will be robust under a variety of futures. This two-part report provides an introduction to ES and presents the results of a collaborative business needs assessment conducted by Prince George's Community College (PGCC) in Maryland. Part 1 describes: the role of ES activities in the college setting; the relationship of ES and strategic planning; two alternate approaches to ES (the committee approach and the institutional research and planning model); six environmental variables which should be monitored in ES (demographic, economic, legal-political, organizational-competitive, socio-cultural, and technological); data and information sources for ES (including local and national sources); and dissemination of ES findings. Part two describes a study conducted by PGCC to assess area employee educational and training needs through a mail survey of area businesses. Among the findings reported (from 182 business responding for a 4% survey response rate) are the following: (1) employee oral communications, writing skills, and interpersonal relations were most in need of improvement; (2) over one-third of respondents indicated a need for improved employee skills in collections/accounts receivable and developing marketing plans; and (3) most employers preferred open enrollment courses offered at existing college locations. (JMC)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED327260

ENVIRONMENTAL SCANNING: ASSESSING LOCAL BUSINESS TRAINING NEEDS

*presented at the first annual meeting of the
Maryland Association for Institutional Research*

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

C. A. Clagett

November 13, 1987

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as
received from the person or organization
originating it.

Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.

Craig A. Clagett
Prince George's Community College

Robin B. Huntington
University of Maryland

JC910076

**ENVIRONMENTAL SCANNING:
ASSESSING LOCAL BUSINESS TRAINING NEEDS**

There is increasing interest in environmental scanning among colleges and universities of all types and sizes. Because our institutions have been heavily involved in scanning activities, we have been asked to share our views and experiences with the members of the Maryland Association for Institutional Research. More specifically, we were asked to present an introduction to environmental scanning, and to share the lessons and findings of a collaborative business needs assessment conducted by our institutions. Accordingly, this paper summarizing our perspectives is divided into two parts.

A PRIMER ON ENVIRONMENTAL SCANNING

In these changing times, institutions must be prepared to adapt to their environment if they are to prosper. Colleges and universities are little different from commercial enterprises in this regard. The corporate technique of environmental scanning--a formal process of assessing trends and forecasting events in the institutional environment in order to evaluate the challenges and opportunities they may present--is increasingly being used by colleges and universities. Sessions at meetings of the Society for College and University Planning document the spreading interest in scanning, and lead us to the following conclusions concerning the current state of higher education scanning:

1. We are completely convinced of the value of a formal environmental scanning process, one that forces college decisionmakers to look at issues they might otherwise overlook or ignore.
2. We agree that the implementation of proactive, anticipatory policies is the goal--policies that will be robust under a variety of futures.
3. We applaud the recognition that uncertainty must be explicitly addressed, and the emphasis that forecasts are not predictions, that they are transitory, and that they are used to develop alternative futures.
4. We are intrigued by the use of cross-impact analysis in the generation of alternative scenarios, although we have reservations about its complexity and difficulty.

5. We argue that the ultimate criterion for judging the value of a formal scan is that it result in policies that could not have been developed without having gone through the process.

6. We are concerned that the models being advocated are often extremely costly in time and effort and thus may discourage scanning activities at many institutions.

Should Colleges Do Environmental Scanning?

Why should an institution invest scarce resources in a formal scanning process? An effective scan will improve the quality of college planning and decisionmaking, by alerting those leading the organization to challenges and opportunities in its environment. Specific uses of environmental scanning results might include: the assessment phase of strategic planning, unit operational planning, marketing plan development, accreditation self-study reports, fundraising and proposal writing, lobbying, and public relations.

Environmental Scanning and Strategic Planning

Planning without scanning invites trouble. An institution must plan for changes in its environment if it is to prosper. The strategic planning process can be described as follows. The assessment stage includes a **situation analysis** to describe the institution's current status and position, an **environmental scan** to identify external threats and opportunities, and an **internal appraisal** to identify institutional strengths and weaknesses. Plan development includes the **strategic master plan** to identify strategies and allocate resources to achieve institutional goals (which should reflect the college's mission and the conclusions from strategic assessment), and an **operational plan** to identify unit objectives and action plans to accomplish collegewide goals. Implementation includes **monitoring** to ensure unit performance of operational action plans. Finally, evaluation includes preparation of an **outcomes report** to measure achievement of institutional goals. This brief summary of the strategic planning process highlights the key role of assessment, of which environmental scanning is an essential element.

Two Alternative Scanning Approaches

Scanning at American colleges and universities tends to take one of two approaches. The literature commonly discusses the committee approach, with committee members responsible for scanning a particular aspect of the environment using a variety of sources, often preparing written abstracts then used to develop strategic implications to guide planning. This is a costly approach, involving top people--as it must if it is to be most effective.

This committee process can be beneficial for an institution that has not recently examined its external environment in a formal way.

The committee approach can become quite elaborate. For example, a college might implement a comprehensive scanning process consisting of systematically examining assumptions about the future of the institutional environment and then using the results to develop organizational strategies. This might involve as many as 30 college administrators, faculty, and staff in a Delphi panel, asked to forecast trends and events relevant to the college's future. Three rounds of Delphi surveys are commonly conducted to identify and forecast the probability of events and trends occurring, and to assess the positive and negative consequences of each event or trend on the institution. Panel members might forecast such trends as the number of industries in their region using robots by 1995 and 2000. The rationale is that the decisionmakers, by participating in the forecasting, will "own" the analysis and thus find it credible for developing policy options. However, decisionmakers may reach the opposite conclusion. Asking panel members to forecast as many as a hundred such trend levels and event probabilities--a charge far beyond the participants' expertise in almost all instances--can undermine rather than increase the credibility of the process, since each panel member knows how weakly based his or her own forecasts are. In any case, the multiple-round Delphi process is very time-consuming, and often leads to participant burn-out and even drop-out. Even if followed through to completion and effective in terms of enlightening people and helping form policy options, the process cannot be described as efficient.

An alternative approach to environmental scanning is to assign the task to the institutional research and planning office, with top management brought in at the policy analysis stage. The planning or research shop can confront decisionmakers with provocative yet credible futures based on a scan of expert sources, and the top managers can deliberate on possible impacts on the institution and on developing appropriate policy options, rather than investing scarce professional time in a structured scanning process. Top management, through their routine reading, will be familiar with many of the issues raised by the formal scan, and the annual or biennial scanning report presented at a formal planning meeting can raise the key issues for focused discussion. In a sense, this makes the research office the champion of scanning, with the function of keeping external factors visible to decisionmakers. While there may be some danger in thus "bureaucratizing" scanning as a separate activity--executive players' perceptions are important--the losses may be offset by the much greater cost efficiency of this approach. Indeed, this is the easiest approach from an institutional standpoint and may be the only method that gains adequate backing. However, a commitment to active dissemination of the findings is essential for this approach to be effective. Otherwise, useful information may remain unread

and unused. The institutional-research-based approach has been successful at several institutions, even when conducted by a single individual. The "solo scanning" approach must be comprehensive, however. At least six environmental contexts should be monitored:

Demographic: The decline in high school graduates, reaching its national nadir in the early 1990s, will be accompanied in most areas with increases in older populations. In addition to the shifting age composition, other population trends to be monitored for their institutional implications include changes in ethnic composition and household characteristics.

Economic: Economic conditions may affect not only students' ability to pay (with implications for tuition schedules and financial aid) but interest in attending college. Trends in local, state, and federal governmental revenues may affect institutional funding levels. Changing industrial patterns may alter local occupational demand, with programmatic implications. Changes in tax policy may impact on philanthropic contributions.

Legal-political: Educational institutions inevitably participate in local, state, and federal political processes. Public institutions must be intimately involved in budgetary politics, but private colleges also participate in politics, from financial aid issues to town-and-gown relations. Colleges must be attuned to how changes in other contexts may have political ramifications. The national educational accountability movement is largely a political phenomenon.

Organizational-competitive: In addition to governmental and political actors, colleges and universities interact with many other organizations. The quality of institutional relationships with other higher education institutions, secondary schools, business and industry groups, professional associations, accrediting agencies, and other organizations can directly affect achievement of college goals. Scanning in this context must also include assessment of the competition, not just other colleges but public schools' adult education offerings and corporate training programs.

Socio-cultural: Changing cultural attitudes and behavior have programmatic and marketing implications for colleges. Dual income families, increased female workforce participation, multiple career changes, and, in general, more heterogeneous lifestyles, have colleges adjusting schedules, providing child care, and developing innovative delivery modes.

Technological: Changing technology affects both what colleges teach and how they teach it. New programs in information systems, robotics, and the like are the obvious manifestations, but equally important are the new ways instruction is being delivered. Interactive videodiscs, cable and satellite communication, and other information technologies may portend new roles for faculty and new relationships with students. Office automation (e.g., microcomputers) has altered the manner in which even the most routine campus tasks are performed. Half of today's labor force works with computers or computerized machinery. Unless people have sufficient education and initiative to take advantage of the new kinds of work, they may fall out of the mainstream economy.

Identifying these six contexts for environmental scanning encourages a comprehensive approach sensitive to the diversity and turbulence of factors affecting colleges today. The solo scanner must include all of them in his or her efforts; an incomplete scan can mislead an institution into a false sense of security. Most colleges track demographic and economic trends, but many pay insufficient attention to the legal-political and organizational environments.

Sources of information for keeping on top of environmental trends are numerous and varied. Several sources will be identified below, starting with national trends and getting successively more localized.

National sources. The fundamental source is the Bureau of the Census of the Department of Commerce. To keep up with Census information, subscribe to its Monthly Product Announcement and Census and You. Also obtain their telephone contact list of staff specialists; we have found them extremely professional and helpful. Also available is CENDATA, the Bureau's on-line data service. Other good sources of national data are American Demographics magazine, and especially its monthly bulletin The Numbers News. If we had to limit ourselves to only one national source and had limited time to devote to scanning, The Numbers News would be our choice. National sources with a focus on education include The Chronicle of Higher Education, and the American Council on Education's Cooperative Institutional Research Program.

State sources. Official state agencies can provide a wealth of useful planning information. Maryland's state planning office, for example, makes Census and other data available on diskettes as well as in printed reports. They publish a data center newsletter with both analysis and product announcements. In addition to periodic population projections, Office of State Planning publications of particular usefulness include public school

enrollment projections and jurisdiction migration flow trends. The latter publication was especially useful in explaining enrollment growth during a period when overall county population did not change. Another source of population data is the state Center for Health Statistics. The Maryland Chamber of Commerce issued a publication that identified over 50 issues of "utmost concern" to the Maryland business community. In one convenient source, the environmental scanner gains a perspective on what's important to area businesses. While not a substitute for personal interaction with industry leaders, such publications can be good background material to sensitize college planners to the positions of a major constituency. For solo scanners, such shortcuts are invaluable.

Metropolitan area sources. Colleges in or near major metropolitan areas can benefit from many municipal, association, and private sources. City agencies often provide data similar to that available from state governments, but for a more focussed geographic area. Local governments sometimes cooperate in planning endeavors that produce valuable data for college scanners. For example, the Metropolitan Washington Council of Governments produces cooperative population and economic forecasts and issues a regional newsletter. Professional business organizations, such as the Washington/Baltimore Regional Association, are a good source of industrial and economic information. Some local chapters of the United Way prepare planning reports of high quality. The United Way of Central Maryland, for example, has produced an environmental scanning report available in a 37-page booklet or a slide program with tape narration. Large cities may have private research firms that produce reports available to the public. Local research firms in Washington, for example, have issued reports from changing lifestyles to financial projections for local jurisdictions. Finally, larger cities often have their own magazines and business periodicals as well as major newspapers, all of which provide a continuous source of relevant scanning information.

County sources. Commuter schools, especially community colleges with lower district tuition and thus concentrated service areas, need county-level data. County government planning offices, economic development corporations, and local chambers of commerce are all sources of county data and forecasts. Scanners also need to be alert for one-time events and commissions that can produce valuable information. For example, the county executive and local business leaders in Prince George's County, Maryland, initiated a Strategic Planning Group for the county that produced a 45-page report with analysis and strategies for issues in education, public safety, employment, and public service financial stability.

The above discussion is meant to be suggestive of what may be available for the solo scanner. By locating and using existing trend reports and forecasts, a meaningful environmental scan can be done by a single energetic researcher.

Dissemination of Scanning Findings

The most thorough environmental scan is of little value if decisionmakers are not made aware of its findings. Effective dissemination of scanning results is a key part of the process. This is especially important for the solo scanner, since the involvement of top people assumed in the committee approach is largely absent.

Dissemination for a college completing its first major scan might follow the following pattern. The first step would involve a formal briefing presented to the college's planning council, president's cabinet, or equivalent top administrative group. This provides for important feedback to the scanner, and may initiate additional work before any further dissemination. Once top management is satisfied with the scanning results, a series of formal presentations to college groups is recommended. These would include, first, the governing board of trustees or regents, and then the faculty senate and classified staff organization. A series of written reports with the detailed data supporting the major briefing findings should be distributed to the administrative staff, and available to others on request. If the college publishes a Master Plan or similar document, environmental scanning findings make an ideal chapter preceding the strategic plan itself. Finally, a two-or-three page memo summarizing the scanning highlights should be circulated among all employees of the college.

Effective dissemination requires that the scanner think in terms of simple communication. While the scanning process may involve sifting through thousands of pages of material and hundreds of hours of interviews and conversations, the final message that gets through will necessarily be brief.

Environmental scanning is too important to effective planning to be avoided due to cost reasons. Colleges, no less than corporations and governments, need to understand what is happening in the environment in which they exist. This section of our paper has attempted to show how scanning can be accomplished in a cost-efficient manner; indeed, it argues one person can do a valuable scan by identifying the right sources and by disseminating the results effectively. The solo scanner can contribute to institutional effectiveness and enhance his or her own professional development at the same time.

LOCAL BUSINESS NEEDS ASSESSMENT SURVEY

Postsecondary educational institutions have an important role to play in supporting economic development. In Prince George's County, Maryland, the local Chamber of Commerce, anxious to assist

county business development, initiated discussions with two local colleges leading to a collaborative project to assess employee educational and training needs. Representatives from the Chamber of Commerce, University of Maryland University College, and Prince George's Community College met several times over the summer of 1987 to plan a survey of county businesses aimed at identifying the training and professional development activities desired most by county business leaders. In this section we describe the genesis and findings of this collaborative project.

An initial concern in the design of the study was ascertaining the number of businesses operating in Prince George's County. One source, based on universe files and thus not subject to sampling error, was County Business Patterns. This annual publication of the U.S. Bureau of the Census presents data on number of establishments, total employment, and payroll on an establishment basis, classified by the principal economic activity at each individual location. An establishment is defined as a single physical location where business is conducted or where services or industrial operations are performed. Each location of a multilocation firm active during the year (presence of payroll in any quarter) is counted as an establishment. All wage and salary employment covered by FICA is included; employment totally exempt from FICA--primarily government and self-employed workers--is excluded. Establishment size designations are measured by paid employment in the pay period including March 12th. The federal Standard Industrial Classification (SIC) is used to categorize firms by principal economic activity. Unclassified establishments, typically new businesses, include establishments that cannot be classified in any major industry group due to insufficient information.

According to County Business Patterns, a total of 11,592 establishments were operating in Prince George's County in 1984. These locations employed 187,838 workers. (An additional 21,905 civilian federal employees were working in the county. For security reasons, employees of the CIA, NSA, and FBI were excluded from this total.) Most establishments had few employees; indeed, two-thirds of all employment locations had fewer than ten employees. The mailing list used for the survey provided a more recent breakout of county businesses. According to the mailing list provided by the private mailing list broker, a total of 15,125 business locations were active in Prince George's County in 1987. The basic source of the data was non-residential phone listings, supplemented by several file overlays to provide an up-to-date and informative data set. No part of the file was more than a year old. The fifteen thousand figure included each location of firms with multiple sites in the county. Retail trade, services, professional services (health, legal, educational, etc.), and construction firms were most populous on both the 1984 and 1987 lists.

Methodology

Because the resources the three collaborating institutions had available for this project were limited, a one-shot mail survey was conducted rather than a more expensive research design employing personal or telephone interviewing. The time frame precluded a follow-up mailing to nonrespondents. Using this less-than-desirable research design, the research team hoped for a ten percent return. A sample size of 5,000 was chosen in anticipation of 500 usable responses. The large mailing was also valued for its marketing benefits; even nonrespondents would be alerted to the eagerness of the three institutions to serve their employee training needs.

The vast majority of business locations in the county employed fewer than ten people. Because the research team wanted to analyze the survey responses by size of firm, all locations with ten or more employees were included in the sample, with the balance randomly selected from those with fewer than ten:

Business Size (Number of Employees)	Number in Population	Number in Sample
0 - 9	14,634	4,509
10 - 49	272	272
50 - 99	84	84
100 - 249	89	89
250 - 499	23	23
500 - 999	8	8
1,000 & more	15	15
Totals	15,125	5,000

The PGCC Office of Institutional Research and Analysis oversaw development of the survey questionnaire. The basic research questions guiding instrument design were:

1. What types of management and employee development training are most needed by county businesses?
2. To what extent are county businesses already involved in formal training programs?
3. What is the preferred format for training?
4. What can local educational institutions do to promote business success in the county?
5. Do the responses to the above questions vary by firm size or industry?

The final four-page questionnaire contained 17 questions and was prepared for printing in booklet form using Ventura Publisher desktop publishing software.

Limitations

A total of 182 businesses had responded to the survey by the time analysis commenced. This response rate of about four percent raised questions about how representative the respondents were of the population of businesses in the county. Significance tests were run which indicated that the respondents, in terms of size and industrial classification, were not what would have been expected by chance. Respondents with more employees were more likely to have responded than those with smaller workforces, even after adjusting for the sampling procedure. The pattern of respondents by industry was also biased, with construction firms overrepresented and retail firms underrepresented. The profile of respondent characteristics suggested that firms new to the county may have been underrepresented. (Because population data were unavailable, significance tests were not run on this variable.) While the respondents were a diverse group, generalizations of the findings of this study to the larger population of all county businesses were not warranted. The conclusions from the survey appropriately applied only to the businesses that responded.

Without a telephone follow-up of nonrespondents, precluded by time and cost constraints, we did not know in what other ways the respondents may have differed from the nonrespondents. It was hoped that Chamber of Commerce sponsorship (the questionnaires were mailed in Chamber envelopes with a Chamber cover letter) would elicit a higher response. One could conjecture that the sampling of business locations, which included individual sites of larger multilocation firms, might have had a dampening effect. A small branch location might have interpreted the questionnaire as more appropriate for central office completion. Small businesses (90 percent of the sample had fewer than ten employees) might not have immediately seen the relevance of the survey to their needs. This interpretation was supported by the finding that more large companies and fewer small companies responded than would have been expected by chance.

Findings

In this section, the major findings of the survey are highlighted. The purpose is to illustrate the kinds of information that can be learned from a survey of this type.

Existing Educational and Training Activities

Nearly three of every five respondents indicated that their employees had participated in some form of formal education or training within the last year. Most training was done out-of-house, as only 37 percent of the respondents had formal in-house training programs. Over three-fifths of the respondents indicated a willingness to financially support employee professional development, primarily through reimbursing employees who complete courses. Twenty-five respondents (14 percent) indicated a willingness to pay for employee training through a contract arrangement.

Types of Training Needed

Employee skills most in need of improvement were oral communications, interpersonal relations, and writing. A majority of the respondents indicated a strong need for training in each of these areas. Over a third of the respondents indicated a strong need for training in microcomputer usage and word processing. The mean rating for each type of employee development, based on a five-point scale (from 1 signifying not needed to 5 for strongest need), were as follows:

Mean Ratings of Employee Development Needs

Oral communications skills	3.7
Interpersonal relations	3.6
Writing skills	3.4
Microcomputer skills	2.9
Word processing skills	2.8

Training in collections and accounts receivable was strongly needed by two of every five respondents. Developing marketing and business plans, and training in general business accounting, were items of strong interest to over a third of the respondents. Three in ten expressed a strong need for updated training in personnel law and business tax law. Only four percent felt a strong need for instruction in import/export procedures. Mean ratings for these management-oriented training areas were as follows:

Mean Ratings of Management Training Needs

Collections/accounts receivable	3.0
Designing marketing plans	3.0
General business accounting	2.9
Developing a business plan	2.8
Personnel/hiring law	2.8
Business tax law	2.7
Import/export procedures	1.4

Desired Characteristics of Future Training

The format for training most favored by the respondents was open-enrollment courses offered weekday evenings at existing college campuses or centers. The respondents did not reveal a strong preference for credit versus noncredit coursework. While 46 percent indicated some form of noncredit training was preferable, 27 percent favored credit classes with the remaining 27 percent having no preference either way. Eighteen percent of the respondents favored courses specifically tailored to their needs (as opposed to open-enrollment courses); nine percent preferred courses delivered on-site at their place of business. Fifty-seven percent preferred courses offered on weekday evenings. The next most popular time was Saturday mornings, checked by 21 percent.

Contingency Table Analysis

Several crosstabulations were performed to see if respondent answers varied systematically by firm size, industry classification, or other variables. For most questions, no relationships were found. However, businesses that had formal in-house training programs were more likely than those that didn't to express needs for employee development in interpersonal relations, oral and written communication skills, personnel law, and development of marketing plans. Larger firms expressed a stronger need for microcomputer training than those with fewer employees.

Responses to Open-ended Questions

Respondents were asked to indicate how local educational institutions could help them improve their business performance, in terms of specific training or (more generally) the education provided college graduates in their employ. A complete listing of employer comments was compiled, but several themes stood out. Basic reading, writing, and speaking skills were mentioned repeatedly, as needed and lacking in many job applicants. Also mentioned frequently was development of a "work ethic," with punctuality, motivation, proper dress and attitude, and willingness to work hard specifically cited. Customer relations, dealing with the public, and other interpersonal relations skills were areas of concern common to many respondents. Finally, several employers argued for more practical experience and less "theory" in the curriculum.

Summary of Survey Findings

A total of 182 Prince George's County business establishments responded to a survey to assess local business educational and

training needs. The survey discovered a diverse set of respondent needs and preferences for training. However, several patterns emerged from the analysis:

Employee training was valued by county businesspeople. Nearly three-fifths of the responding firms said their employees had participated in formal training programs during the previous year; over a third of the respondents had formal in-house training programs. Over half said they would financially support employee professional development.

Employee skills most in need of improvement were oral and written communication and interpersonal relations. Written comments expressed a desire for greater commitment to the "work ethic" among new employees.

Over a third of the respondents expressed a need for improvement in collections/accounts receivable, developing marketing and business plans, and general accounting.

Most respondents preferred open enrollment courses offered at existing college locations, with weekday evenings and Saturday mornings the more popular times. Less than a fifth were interested in courses specifically designed for their needs, offered at their place of business. Only a fourth of the respondents indicated college credit was important, with nearly half preferring noncredit courses and the rest not having a preference.

Based on the responses of this limited sample of county businesses, it appeared that the community college and the university's continuing education/professional development division were well positioned to meet local employee training needs. The two institutions together offered credit and noncredit open enrollment courses in most of the subject areas mentioned by the respondents, taught in format in accord with respondent preferences. In addition, the survey elicited several leads which yielded contract training arrangements for both institutions.

CONCLUSIONS

In this paper we have attempted to demonstrate the usefulness of a formal environmental scanning effort, with an emphasis on a cost-efficient approach feasible for most institutions. We have also discussed the benefits and limitations of a collaborative survey to assess local business training needs. We encourage others to conduct scanning activities and to report, in settings such as this one, both the positive and negative lessons learned.