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## SWOT ANALYSIS: A MANAGEMENT TOOL FOR INITIATING NEW PROGRAMS IN VOCATIONAL SCHOOLS

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### ABSTRACT

The SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis has been a useful tool for industry. This article proposes the application of the SWOT tool for use as a decision-making aid as new vocational programs are planned.

The process of utilizing the SWOT approach requires an internal survey of strengths and weaknesses of the program and an external survey of threats and opportunities. Structured internal and external examinations are unique in the world of curriculum planning and development.

Educational examples using the SWOT analysis are provided by the authors. It is a useful way of examining current environmental conditions around program offerings. An insight into the wide range of the potential applications of SWOT is also an intended outcome of this paper.

## SWOT ANALYSIS: A MANAGEMENT TOOL FOR INITIATING NEW PROGRAMS IN VOCATIONAL SCHOOLS

The external environment has a profound impact on educational institutions. During this final decade of the twentieth century, America's institutions, economy, society, political structures, and even individual lifestyles are poised for new changes. Recent shifts from an industrial to an information-based society and from a manufacturing to a service-oriented economy has significantly impacted the demands made on vocational

program offerings (Martin, 1989). Vocational programs in comprehensive schools generally cover a broad spectrum of service areas, but they provide fewer overall programs within each of these areas than are provided in either vocational or specialty schools (Weber, 1989). Existing programs, and those planned for the future irrespective of the type of school, should be based on a careful consideration of future trends in society.

Vocational administrators should become initiators in shaping the future of their institutions. Strategies must be developed to ensure that institutions will be responsible to the needs of the people in the year 2000 and beyond. To do so requires<sup>3</sup>/<sub>4</sub>among other things<sup>3</sup>/<sub>4</sub>an examination of not only the individual college environment but also the external environment (Brodhead, 1991). The Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis (also referred to as the TOWS analysis in some management texts), provides a framework for educational administrators to focus better on serving the needs of their communities.

Although originally intended for use in business applications, the idea of using this tool in educational settings is not altogether new. For example, Gorski (1991) suggested this approach to increase minority enrollment in community and other regional colleges. Management tools originally intended for industry can frequently be tailored for application in education due to fundamental similarities in the administrative duties of the respective chief executive officers.

SWOT is a simple, easy to understand technique. It can be used in formulating strategies and policies for the administrator, however, it is by no means an end in itself. The purpose of this paper is to demonstrate how SWOT can be used by administrators to analyze and initiate new program offerings in vocational education.

### SWOT IN THE PRESENT CONTEXT

SWOT analysis can be simply understood as the examination of an organization's internal strengths and weaknesses, and its environments, opportunities, and threats. It is a general tool designed to be used in the preliminary stages of decision-making and as a precursor to strategic planning in various kinds of applications (Johnson et al., 1989; Bartol et al., 1991). When correctly applied, it is possible for a vocational school to get an overall picture of its present situation in relation to its community, other colleges, and the industries its students will enter. An understanding of the external factors, (comprised of threats and opportunities), coupled with an internal examination of strengths and weaknesses assists in forming a vision of the future. Such foresight would translate to initiating competent programs or replacing redundant, irrelevant programs with innovative and relevant ones.

The first step in a SWOT analysis is to make a worksheet by drawing a cross, creating four sectors<sup>3</sup>/<sub>4</sub>one each for strengths, weaknesses, opportunities, and threats. An outline of a worksheet is shown in Figure 1. The next step is to list specific items related to the problem at hand, under the appropriate heading in the worksheet. It is best to limit the list to 10 or fewer points per heading and to avoid over-generalizations (Johnson et al., 1989).

Potential Internal Strengths	Potential Internal Weaknesses
1.	1.
2.	2.
3.	3.
4.	4.
S	W
O	T

Potential External Opportunities	Potential External Threats
1.	1.

2.	2.
3.	3.
4.	4.

Figure 1. A SWOT worksheet

SWOTs can be performed by the individual administrator or in groups. Group techniques are particularly effective in providing structure, objectivity, clarity and focus to discussions about strategy which might otherwise tend to wander or else be strongly influenced by politics and personalities (Glass, 1991). Sabie (1991) noted that when working in groups in educational settings, three distinct attitudes emerge among teachers depending on their years of service. Teachers having 0-6 years of experience tend to be the most participative and receptive to new ideas.

The SWOT should cover all of the following areas, each of which may be a source of strengths, weaknesses, opportunities or threats:

*Internal environment of the institution*

1. faculty and staff
2. classrooms, laboratories and facilities (the learning environment)
3. current students
4. operating budget
5. various committees
6. research programs

*External environment of the institution*

1. prospective employers of graduates
2. parents and families of students
3. competing colleges
4. preparatory high schools
5. population demographics
6. funding agencies

**THE INTERNAL SURVEY OF WEAKNESSES AND STRENGTHS**

Historically, administrators seek to attract students to their college programs by increased promotional and advertisement efforts without paying any heed to their institution's strengths and weaknesses. If, indeed, such internal audits are carried out, areas requiring some changes reveal themselves. Furthermore, the potential and possibilities for new services and programs may also emerge. Making a list of internal weaknesses could reveal areas that can be changed to improve the college, also some things that are beyond control. Examples of inherent weaknesses are quite numerous. A few are listed as follows: low staff and faculty morale; poor building infrastructure; sub-standard laboratory and workshop facilities; scarce instructional resources; and even the location of the institution within the community.

Seldom do weaknesses occur in isolation; strengths are present and need to be enlisted as well. Examples of potential strengths could be: (a) a reasonable tuition fee charged from students; (b) strong and dedicated faculty with a high morale; (c) articulation with other four-year colleges and universities which would enable students to transfer course credits; (d) a strong reputation for providing the training required to get entry-level employment; and (e) diversity among the student population.

Minority enrollment and retention is a particularly important emerging issue because vocational schools have a mission to education people from all sectors of society (Gorski, 1991). Demographic projections have

predicted a two- to four-fold accelerated growth of Hispanic and Afro-American population relative to the white majority, and this will be reflected in the number of job seekers (Crispell, 1990).

The assessment of strengths and weaknesses are also facilitated through surveys, focus groups, interviews with current and past students, and other knowledgeable sources. Once weaknesses and strengths are delineated, it would be appropriate to reconfirm these items. It should be recognized that different perceptions may exist depending on the representative group consulted. Figure 2 depicts an example using a SWOT analysis.

<i>BACKGROUND INFORMATION:</i> Consider a community technical college that is planning to add some new programs. Assume that, during previous brainstorming sessions, several ideas emerged and a program in laser technology is being strongly contemplated by the department chair and other faculty. The department or the chair and a select group of faculty could meet and conduct a SWOT analysis to help develop a strategy. The following points may appear on the worksheet.	
<u>Potential Internal Strengths</u>	<u>Potential Internal Weaknesses</u>
1) Existing electronics and electrical programs could provide some basics required for a laser technology program.	1) Current faculty are not well versed in laser technology.
2) Faculty who are enthusiastic and willing to go the extra mile to acquire knowledge and training in lasers.	2) Lack of sufficient space for the required extra equipment.
3) Sufficient funds to invest in high technology programs.	3) Current safety features are not adequate for handling potential hazards such as lasers.
4) Successful experiences in the past with new, dynamic programs, thus, expertise in dealing with change.	4) A faction in the faculty want a program in microprocessor technology rather than in laser technology.
W	S
O	T
<u>Potential External Opportunities</u>	<u>Potential External Threats</u>
1) Local area hospitals, metal industries and communication companies suffer from a critical shortage of laser technologists.	1) The technical college in a nearby county has already taken a lead and possesses the infrastructure to start a laser technology program any time soon.
2) State and nation-wide demand for laser technologists is projected to increase for the next 10 years.	2) Programming many not get approval from the board because of previous history of accidents of the college.
3) Local high school teachers' and students' enthusiasm for the proposed program could result in recruiting the best students.	3) Some efficient and cheaper alternatives to laser devices are appearing in recent literature which, if true, will not hold a bright future for prospective laser technologists.
4) Expert laser technologists in area hospitals and industries have offered to give their expertise on a part-time basis.	4) High school students in the area indicate a preference for business programs rather than technical ones.

Figure 2. Sample SWOT analysis used to consider the feasibility of initiating a laser technology program

### EXTERNAL SURVEY OF THREATS AND OPPORTUNITIES

The external look is complementary to the internal self-study in a SWOT analysis. National and regional influences<sup>3/4</sup>as well state and local concerns<sup>3/4</sup>are of paramount importance when deciding what new

programs need to be added or which existing ones need to be modified or removed. [Gilley et al. \(1986\)](#) identified ten fundamentals of institutions that are "on-the-move", one of which is the ability of institutions to maintain a close watch on their communities. Not only must administrators keep an eye on the community, but they must also play a leadership role by addressing relevant issues.

Information about the current business climate, demographic changes, and employment and high school graduation rates should be considered in this phase of the study. A multitude of sources include<sup>3/4</sup>but are not limited to<sup>3/4</sup>parents and community leaders, local newspapers, national news magazines, higher education journals, conferences, the local industrial advisory council, and local business contacts. Each of these is a potential source of highly valuable information.

Threats need to be ascertained. They come in various forms. Increasingly, restrictive budgets for vocational education are a rule rather than an exception. An anticipated cut in state or federal funding can have a significant impact on implementing a high-budget program. Nearby universities and other local area colleges may be planning some new changes to attract more students to their programs. In addition, a decreasing number of high school graduates in the region and surrounding areas may pose a considerable threat by way of reduced student demand for some planned programs.

An awareness of demographic changes in the local population can reveal potential opportunities to address new issues and pave the way for a more meaningful education. There could exist a pattern of preferences among the various minority or cultural groups. Public concern for the global environment is relatively new and this may represent an area of opportunity. Newer industries or businesses could emerge in the near future, seeking well-trained graduates.

It should be recognized that opportunities and threats are not absolute. What might at first seem to be an opportunity, may not emerge as such when considered against the resources of the organization or the expectations of society. The greatest challenge in the SWOT method could probably be to make a correct judgment that would benefit both the institution and the community.

### **DRAWBACKS OF SWOT**

SWOTs usually reflect a person's existing position and viewpoint, which can be misused to justify a previously decided course of action rather than used as a means to open up new possibilities. It is important to note that sometimes threats can also be viewed as opportunities, depending on the people or groups involved. There is a saying, "A pessimist is a person who sees a calamity in an opportunity, and an optimist is one who sees an opportunity in a calamity." In the example provided in Figure 2, the opportunity provided by experts in industry to train students may be viewed by faculty members as a threat to their own position and job.

SWOTs can allow institutions to take a lazy course and look for 'fit' rather than to 'stretch'<sup>3/4</sup>they look for strengths that match opportunities yet ignore the opportunities they do not feel they can use to their advantage. A more active approach would be to involve identifying the most attractive opportunities and then plan to stretch the college to meet these opportunities. This would make strategy a challenge to the institution rather than a fit between its existing strengths and the opportunities it chooses to develop ([Glass, 1991](#)).

### **SUMMARY**

A SWOT analysis can be an excellent, fast tool for exploring the possibilities for initiating new programs in the vocational school. It can also be used for decision making within departments and committees or even by individuals. A SWOT analysis looks at future possibilities for the institution through a systematic approach of introspection into both positive and negative concerns. It is a relatively simple way of communicating ideas, policies, and concerns to others. It can help administrators to quickly expand their vision. Probably the strongest message from a SWOT analysis is that, whatever course of action is decided, decision making should contain each of the following elements: building on Strengths, minimizing Weaknesses, seizing Opportunities, and counteracting Threats.

In order to be most effectively used, a SWOT analysis needs to be flexible. Situations change with the passage of time and an updated analysis should be made frequently. SWOT is neither cumbersome nor time-consuming and is effective because of its simplicity. Used creatively, SWOT can form a foundation upon which to construct numerous strategic plans for the vocational school.

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