

A PROPOSED MANAGEMENT TOOL FOR INITIATING NEW PROGRAMMES IN TECHNICAL AND VOCATIONAL INSTITUTES OF OIC MEMBER COUNTRIES

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ABSTRACT

Structured internal and external examination of technical and vocational education programme is unique in the world of curriculum planning and development. Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis has been a useful tool for industries. The process of utilizing this approach requires an internal survey of strengths and weaknesses of the programme and an external survey of threats and opportunities. Educational examples using the tool are provided by the author. It is a useful way of examining current environmental conditions around programme offerings. This paper proposes the application of the SWOT tool for use as an aid for decision making as new technical and vocational education programmes are planned in the Organisation of the Islamic Conference (OIC) member countries.

INTRODUCTION

The external environment has a profound impact on educational institutes. This is also true with the technical and vocational institutes in the member countries of the Organisation of the Islamic Conference (OIC). At the beginning of the 21st century, our institutions, economy, society, political structures, and even individual life styles are poised for new changes. Recent shifts from an industrial to an information-based society and from a manufacturing to service-oriented economy have significantly impacted the demands made on technical and vocational programme offerings. Vocational programmes in comprehensive schools generally cover a broad spectrum of service areas, but they provide fewer overall programmes within each of these areas than are provided in either vocational or specialty schools [1]. Existing programmes, and those planned for the future irrespective of the type of schools should be based on a careful consideration of future trends in society.

Principals/administrators of technical and vocational institutes of OIC member countries should become initiators in shaping the future of their institutions. Strategies must be developed to ensure that institutions will be responsive to the needs of the people in this 21st century and beyond. To do so requires among other things an examination of not only the individual institute's environment but also the external environment [2]. The Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis provides a framework for principals/administrators of technical and vocational institutes of the OIC member countries to focus better on serving the needs of their communities.

Although originally intended for use in industrial and 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 enrolment 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.

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The tool is very simple and easy to understand. It can be used in formulating strategies and policies for the principal/administrator; however, it is by no means an end in itself. The purpose of this paper is to demonstrate how Strengths, Weaknesses, Opportunities, and Threats can be used by principals/administrators of technical and vocational institutes of OIC member countries to analyze and initiate new programme offerings in their institutes.

STRENGTHS, WEAKNESSES, OPPORTUNITIES, AND THREATS (SWOT) ANALYSIS

SWOT analysis can simply be understood as the examination of an institution'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 [3]. When correctly applied, it is possible for technical and vocational institutes to get an overall picture of its present situation in relation to its community, other institutions, 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 programmes or replacing redundant, irrelevant programmes with innovate and relevant ones.

The first step in a SWOT analysis is to make a worksheet by drawing a cross, creating four sectors one each for strengths, weaknesses, opportunities, and threats. An outline of a worksheet is shown in Table 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.

Table 1: A SWOT Worksheet.

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.

Strengths, Weaknesses, Opportunities, and Threats analysis can be performed by the individual principals/administrators 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 [4-5] 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. This is because they have come to understand more clearly than previously the importance of

relevance, emancipation, democracy and collaboration. Senior teachers believe that they are enabling people to create their own theory based on an investigation of their own practice. They also believe that as active learners, they can make decisions about the means and ends of their learning with confidence and humility, and have helped individuals developed confidence in their own knowledge. They don't use their position and power to control others or deny them the opportunity to be heard, as they have helped teachers give voice to their own professional concerns and have supported them in finding solutions to these dilemmas. They believe that they need to work together to bring about change for the better and to offer this opportunity to everyone concerned. The SWOT should cover all of the areas mentioned below:

Internal Environment of the Institution

- Instructors and staff
- Classrooms, laboratories, workshops and facilities (the learning environment)
- Current students
- Operating budget
- Various committees
- Research programmes

External Environment of the Institution

- Prospective employers of graduates
- Parents and families of students
- Competing institutions
- Preparatory feeder schools
- Population demographics
- Funding agencies

THE INTERNAL SURVEY OF STRENGTHS AND WEAKNESSES

Historically, principals/administrators seek to attract students to their institutes programmes by increased promotional and advertisement efforts without paying any attention 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 of new services and programmes may also emerge. Making a list of internal weaknesses could reveal areas that can be changed to improve the institute, also some things that are beyond control. Examples of inherent weaknesses are quite numerous. A few of them are as follows: low staff and faculty morale; scarce instructional resources; and even the location of institution within the community.

Rarely 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 technical and vocational institutes 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 enrolment and retention is an important emerging issue because technical and vocational schools have a mission to education of people from all sectors of society.

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. Table 2 depicts an example using a SWOT analysis.

BACKGROUND INFORMATION

Consider a private technical college or polytechnic institute that is planning to add some new programmes. Assume that, during previous brainstorming sessions, several ideas emerged and a programme in medical technology is being strongly contemplated by the head of department and other instructors. The head of department and some selected group of instructors could meet and conduct SWOT analysis to help develop a strategy. Points mentioned in Table 2 may appear on the worksheet.

Table 2: Sample SWOT analysis used for initiating a medical technology programme.

Potential Internal Strengths	Potential Internal Weaknesses
1) Existing electrical and electronics programmes could provide some basics required for a medical technology programme.	1) Current instructors are not well versed in medical technology.
2) Instructors who are enthusiastic and willing to go the extra mile to acquire knowledge and training in medical technology.	2) Lack of sufficient space for the required extra equipment.
3) Sufficient funds to invest in high technology programmes.	3) Current safety features are not adequate for handling potential hazards such as lasers
4) Successful experiences in the past with new, dynamic programmes, thus, expertise in dealing with change.	4) A fraction in the instructors want a programme in microprocessor technology rather than in medical technology.
S	W
O	T
Potential External Opportunities	Potential External Threats
1) Local area hospitals, and other allied industries/companies suffer from a critical shortage of medical technologists.	1) The polytechnic institute in a nearby district has already taken a lead and possesses the infrastructure to start a medical technology programme.
2) Nation-wide demand for medical technologists is projected to increase for the next 10 years.	2) Programming may not get approval from the academic and governing board because of previous history of accidents of the institute.
3) Local secondary school teachers' and students' enthusiasm for the proposed programme could result in recruiting the best students.	3) Some efficient and cheaper alternatives to medical technology devices are appearing in recent literature which, if true, will not hold a bright future for prospective medical technologists.
4) Expert medical technologists in area hospitals and allied industries have offered to give their expertise on a part time basis.	4) Secondary school students in the area indicate a preference for business programmes rather than technical ones.

EXTERNAL SURVEY OF THREATS AND OPPORTUNITIES

The external look is complementary to the internal self study in a SWOT analysis. National and provincial influences as well as divisional and local concerns are of paramount importance when deciding what new programmes need to be added or which existing ones need to be modified or removed. Gilly 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 principals/administrators must keep an eye on the community, but they also must 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 study. A multitude of sources include but are not limited to parents and community leaders, local newspapers, national news magazines, education journals, conferences, the local industry 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 technical and vocational education are a rule rather than an exception. A decrease in subventions or anticipated cut in state funding can have significant impact on implementing a high-budget programme. Nearby institutions may be planning some new changes to attract more students to their programmes. In addition, a decreasing number of secondary school graduates in the region and surrounding areas may pose a considerable threat by way of reduced student demand for some planned programmes.

An awareness of demographic changes in the local population can reveal potential opportunities to address new issues and pave the way for 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 business 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 the 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 THE TOOL

Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis 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 which goes thus, "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 Table 2, the opportunity provided by experts in area hospitals and allied industries to train students may be viewed by faculty members as a threat to their own position and job.

SWOT can allow technical and vocational institutions to take lazy course and look for 'fit' rather than to 'stretch' as 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 institution 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 [4].

CONCLUSION

Strengths, Weaknesses, Opportunities, and Threats analysis can be an excellent and effective tool for exploring the possibilities for initiating new programmes in technical and vocational institutes. 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 principals/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. Situation changes 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.

REFERENCES

- [1] Weber, J.M. (1989). Variations in selected characteristics across three types of high schools that offer vocational programmes. *Journal of Industrial Teacher Education*, 26(4), 5-37.
- [2] Broadhead, C.W. (1991) Image 2000: A vision for vocational education. *Vocational Education Journal*, 66(1), 22-25.
- [3] Bartol, K.M. & Martin, D.C. (1991) *Management*. New York: McGraw Hill, Inc.
- [4] Glass, N.M. (1991). *Pro-active management: How to improve your management performance*. East Brunswick, NJ: Nicholas Publishing.
- [5] Sabie, A. (1991). The industrial arts/technology education: A supervisor's perspective. *The Technology Teacher*, 51(2), 13-14.