THE ROLE OF ACADEMICS IN THE MANAGEMENT OF TERTIARY EDUCATIONAL INSTITUTIONS IN MALAYSIA

Mohd. Afifi bin Abdul Mukti* B.Sc. M.Sc.

AKM Moazzem Hussain**
BE, ME, DrEng, CEng, FRINA, FIMarE, FIEB

Summary

The paper highlights the significant role that the academics of the tertiary educational institution in Malaysia can play in managing various aspects of their institutions more efficiently and effectively. The importance of human resource development and the role of management information system in the tertiary educational institutions are also focussed.

1. Introduction

Malaysia has undergone rapid economic and social growth since her independence in 1957 and the development of the tertiary education has been equally rapid to meet the demands of socio-economic development. In her efforts to fulfil the objectives of development, Malaysia has undergone a number of policy changes which has eventually developed into the New Economic Policy (NEP). The experience of rapid changes in the structure of the society as well as the increased demand for higher managerial capability has placed a greater stress on the system of tertiary education of this country. As a result, the Higher Education Committee on reviewing the changing needs has placed emphasis on the role of tertiary educational institutions in producing adequate manpower to meet the diversified needs of the nation

The tertiary educational institutions in Malaysia comprise six universities, one institute of technology, several polytechnics and colleges. After two decades of unimpeded growth and affluence it appears that these institutions are now facing a period of financial stringency, a situation they have never experienced before although this has not been uncommon for tertiary educational institutions in the United States, the United Kingdom and many countries in Southeast Asia since the 1960s. Although the current recession is a cyclical, not a secular phenomenon, it nevertheless could stay on for many months, if not for a few years. Even under this stringent condition the institutions have to survive and perform their rightful duties to achieve the national objectives. The limited resources of the institutions have therefore to be managed efficiently and utilized effectively. It is in this context that the academics of the tertiary institutions can play a significant role.

2. Variables in tertiary education management

History is replete with illustrations of the cycle of innovation, rationalisation, decline and subsequent renewal. Whether we look at nations, organisations, or broad social movements the pattern is frequently the same. Tertiary Educational Institutions (TEIs) are also often caught up in this cycle which may be considered to have the following two bases:—

a) Environmental Variables

*Deputy Dean II, Faculty of Mechanical Engineering, Universiti Teknologi Malaysia.

**Associate Professor, Faculty of Mechanical Engineering, Universiti Teknologi Malaysia. TEIs are not in the closed system. They are in dynamic relationship with the societies they serve, and are thus influenced by environmental variables such as:

- economic conditions
- politics
- demographic factors
- cultural and sociological trends
- · technological innovations, etc.

While it is possible for TEIs to exercise a significant influence on their environment, it is the case that the broad social, spiritual, economic, and political changes taking place around them can help determine their relative position in the cycle of innovation, rationalisation, and decline.

b) Management & Leadership Variables

Irrespective of the environmental context in which the TEI operates, a critical determinant of the position of the institution is the way in which it is managed and led. Favourable environmental conditions which in most circumstances should guarantee an innovative, vital response from a TEI do not always do so because of factors such as:

- poor leadership and little corporate vision by senior staff, both academic and administrative
- inappropriate management and organisational structures
- too little attention to human resource development within the organisation
- poorly managed financial resources
- ineffective communication with important bodies/individuals/publics outside the institution
- poor internal communication networks
- · resistance to change, etc.

The challenge for leaders in higher education, be they academic or administrative, is to ensure that as much of the life of the organisation as is possible is spent in the processes of innovation or renewal, rather than in decline.

Management variables may be considered to be more important determinants of the overall health of TEIs than environmental variables. A TEI, effectively managed, has the capacity to influence its environment and to meet the needs of its society in a way that many commercial and industrial organisation do not, simply because it is a knowledge-based industry and the need for knowledge is not subject to economic fluctuations in the same way as commercial and commodity-based industries. It can be affected greatly by these variables, but the need for tertiary level education in the arts, sciences, and for the professions is an on-going needs in all robust societies. It can be reiterated that effective management and leadership is of critical importance if the TEIs are to make a significant contribution to their societies.

3. Management & Leadership: Requirements for Institutional Effectiveness

3.1 Management

e

It is possible to identify the essential elements of institutional effectiveness within the framework of the definition of management given by Kast and Rosenweig: "Management involves the coordination of human and material resources towards objective accomplishment.....four basic elements of management can be identified:

- towards objectives
- · through people
- · via techniques
- in an organisation.....

Management is the primary force within organisations that coordinates the activities of the subsystem and relates them to the environment." (1) Let us look at each of the elements identified in turn:

JURNAL TEKNOLOGI Bil. 6

AS 2

i) Toward Objectives

TEIs have a long tradition of scholarship; research; education for the professions, the sciences and the arts. We have also more recently added the dimension of community service to the broad range of objectives covered by TEIs. The implications of these objectives should be reflected in the next level of planning in the TEIs: goal setting. The challenge for the managers of TEIs is therefore to keep institutional objectives constantly before them as a framework for decision-making.

ii) Through People

Tertiary education is people oriented. Its basic inputs are people; its transformation processes are achieved by means of people, and its outputs are people. People are its basic resource.

In manufacturing, primary industries, or service industries such as banking, the basic task of the manager is to maximise output and to introduce cost-effective solutions to production or service functions. Yet in tertiary education we often take for granted that our staff resources are functioning efficiently and effectively, and that the organisation is effectively contributing to their development. We will only have effective institutions if we value and utilise our human resources to best effect.

iii) The Use of Techniques

Even though our basic focus is on people, it would be wrong to ignore management concepts and techniques available to us which are industry-specific and can be shared on a collegial basis, or which might be drawn from other public sector organisations or business/industrial organisations. The Systems Approach to management and new technology has provided a whole range of techniques for the management and administrative tasks of institutions, but there is also now a whole range of conceptually based management techniques in areas like human resource development, financial management, public relations and other areas available for adaptation in the effective management of TEIs.

iv) Organisational Orientation

Management is a corporate activity in which we seek to weld together organisational and human and other resources through a range of techniques. It is directed toward giving impetus to the organisation as a whole, as well as to its constituent parts. But if we look at the TEIs we feel that there is a lack of focus on their corporate activity and they have gained maximum freedom for the participating professional, at the cost of financial inefficiency and the inability for entrepreneurial response to social needs.

TEIs have now become such important parts of the social fabric that their corporate achievements will be under scrutiny by the community and politicians to justify the expenditure of public resources. A more corporately oriented response is now required if our TEIs are to remain productive social organisms.

3.2 Leadership

The leaders in a TEI are all senior staff of the status of Head of Department/Faculty/Division and above. They are basically the academics and their task as leaders is to provide an effective link between the institution and its surrounding environment and to work with other staff members to achieve corporate objectives of the institution.

To make the institution effective it is essential that the leaders will:

- think and act corporately
- · be goal oriented

- learn essential management and leadership skills
- be entrepreneurial
- be good communicators

The antithesis of all of this could be illustrated by the sea-anemome, fixed on its rock, reacting to each incoming wave. How illustrative this is of many leaders, reacting to rather than influencing their organisation or environment. TEIs need more than sea-anenomes for the tasks of leadership and management.

4. Financial Management in the TEI

It goes without saying that the present day limited financial resources of the TEIs in Malaysia has to be managed effectively for their survival. Corporate planning is an essential element of financial management and it is the responsibility of the Vice-Chancellor/Principal and his Deputies and other senior managers—both academic and administrative. The planning will not occur by accident—it must be a concious and regular process, with all participants fully aware of what is being attempted. From a financial stand point the objective of planning is to marry the academic goals and aspirations with the budget.

Since planning is concerned with the future consequences of today's decisions it is imperative that the consequences can be measured against some yardsticks, such as clear objectives, anticipated opportunities, strategies for change, etc. Ackoff says: "Wisdom is the ability to see the long run consequences of current actions, the willingness to sacrifice short-run gains for larger long-run benefits, and the ability to control what is controllable and not to fret what is not." "Planning is an instrument that is used by the wise, but not by the wise alone. When conducted by lesser men it often becomes an irrelevant ritual that produces short-run peace of mind, but not the future that is longed for." (2)

Planning is therefore a concept based on the belief that action or decisions taken now can improve the future. It is a continuous process, so that no plan is the final blueprint but must be revised in the light of changing circumstances. The planning process establishes the organisation's present position, determine strategies which set future objectives and formulates policies and plans to achieve those objectives. A general planning model is presented in Table 1.

It is also important to appreciate the variety of financial planning approaches which will best suit the achievement of the objectives in a given institution, depending on structure, politics, sophistication of systems, scarceness of resources, degree of maturity, etc. The major responsibilities for senior management, with respect to budgetary processes, is to understand its impact on the educational programme of the institution. A close cooperation between the academic and the administrative managers is essential to devise systems of resources allocation and financial strategies which protect the institution's long term viability and which are not an impediment to academic integrity as to course content, teaching methods and standards.

There are five traditional models of budgeting as follows:

- Incremental or historic approach
- Planning, Programming and Budgeting System (PPBS)
- Formula Budgeting
- Performance Budgeting
- Zero-Base Budgeting (ZBB)

Each of the above models has its own characteristics, merits and demerits. ZBB model has, however, received wide publicity during the recent years. It may be considered as a microeconomic approach as it is concerned with immediate objectives and their efficient realisation. As its name implies, ZBB requires that every activity must be substantiated each year with no assumption that there was any justification in last year's budget for the same activity. The past is virtually ignored, and each year the new budget starts at zero in direct contrast to the incremental approach.

TEIs are notorious for their inability to spell out measurable objectives — which are a pre-requisite for ZBB to work. ZBB principles can therefore be applied to selected areas at the marginal level and in conjunction with other techniques, such as PPBS, if ZBB is to be a practical and effective method in

tertiary education budgeting.

5. Management of the Curricula

The curriculum is a dynamic process and it is always affected by the changes in our socio-economic infrastructure. It has to be relevant to the needs of our society.

The management of curricula involves their design, development, effective implementation, evaluation and feedback. It is one of the principal duties of the academics to manage the curricula of their institutions efficiently.

Performance of the needs assessment is an essential criterion before a curriculum is designed. The needs assessment can be carried out through organising seminars, distributing questionnaires among the public, personal visits, etc. All essential elements of a curriculum such as content, level, duration, etc. are determined on the basis of needs assessment data. The curriculum content at the tertiary level is limited to mostly the statement of topics which give unlimited freedom to the academics in its development and implementation, and quite often it becomes very difficult to measure its effectiveness. The objective-type curriculum, on the other hand, where the learning elements are composed of expressions such as "at the end of the lesson the students will be able to

- · identify different kinds of metals
- compare mechanical properties of mild steel and high strength steels
- state safety precautions needed for gas cutting, etc."

seems to be more effective in the teaching-learning process even at the tertiary level.

Preparation of learning units and lesson plans are very important at the development and the implementation stages of a curriculum. Distribution of handouts and use of models and visual aids make the implementation far more effective. The evaluation of a curriculum is a difficult and time-consuming process. The acceptability of the graduates of an institution by the employers is, however, an important indicator for its curriculum evaluation. The constant feedback from the employers is essential to modify or redesign the curricula of an institution.

6. Effectiveness through Human Resource Development

The senior academic and administrative managers of TEIs may consider human resource development as a means of satisfying both the needs of individuals, and of channelling the energies of staff toward the fulfilment of institutional goals and objectives. Human resource development (HRD) is essentially the process of management as it relates to staff. To quote Flippo:

"no organisation has the choice of whether to develop employees or not, the only choice is that of method. Planned development programme will return values to the organisation in terms of increased productivity, heightened morale, reduced costs and greater organisational stability and flexibility to adapt to changed external requirements." (3)

It is important that we consider human resource development as an imperative, and not an optional extra. HRD must therefore begin from the basis premise that we must maximise the effective use of public resources. The HRD methodologies can be divided into the following four categories:

- · executive and senior academic staff
- professional or academic staff
- middle level managers (administrative)
- line staff (service staff)

The category-wise broad development needs, areas and methods of development are presented in Table 2. The analysis shown in the table could be expanded to include a whole range of activities: the table is meant to be indicative, not definitive.

While the Personnel Division always plays a crucial facilitative role, the task of HRD is a management responsibility. Deans, Heads of Department and other senior academics must give leadership in this function.

Personnel management and HRD is one of the most crucial determinants of the success of an organisation. The failure of an organisation is the result of negligence to establish a combination of the following functions:

- Corporate and strategic planning processes
- Proper financial management structures
- · Personnel management and human resource development processes.

The question is therefore not whether or not to establish proper human resource development policies, but whether or not we want to have successful organisations.

7. Role of Management Information System

A management information system (MIS) as defined by Hannah et al is "a formal, integrated system which provides the necessary report to aid management in the decision-making process." (4). Information inputs from the institutional environment (internal and external) are as critical to ongoing performance of the organisation as its internal information sources and processes and an institution may have a credible MIS even without the aid of computer technology. The critical factor in MIS is whether management has an appreciation of information as resources and whether the information is available at the right time in a structured format to assist in the management process.

Interest in management information and systems for handling management information has grown in recent years because of the increased complexity of the management task and because of the availability of advanced technology for data manipulation and structuring. Too few administrators, however, handle management information as though it were a resource and hence it is often one of the least understood and least coordinated areas of the institution.

All levels in the institutional structure require data and information, but the needs vary with the tasks. If the institution is viewed in a systems framework it can be shown that the institution interacts with its environment and relates to its public. There is thus a constant flow of data and information to and from these external sources of influence.

When a system is integrated horizontally, vertically and longitudinally, it becomes a total system. The integration characteristic of MIS is therefore that which inter-relates all the sub-systems so that information to management is not uncoordinated or incomplete. The successful implementation of a comprehensive MIS involves commitment from top management to the development of the system, resolve to intput data and information from the institutional environment and a firm appreciation on the part of all levels of management of the importance of structured information in the decision-making and planning processes. The academics of a TEI can play a vital role in designing an appropriate MIS for it, which will contribute to increased efficiency of the institution.

8. Conclusion

The academics constitute the life-line of the tertiary educational institutions. Teaching and research are of course their primary functions. They have also a vital role to play in the management of their institutions. Their leadership and active participation in management will enhance the efficiency and the effectiveness of the tertiary educational institutions in this country.

References

- KAST and ROSENWEIG., "Organisation & Management A systems and Contingency Approach," McGraw-Hill, 1979, P. 7.
- 2. ACKOFF and RUSSEL., "A Concept of Corporate Planning," John Wiley and Sons, 1970.
- 3. FLIPPO, E.B., "Personnel Management," McGraw-Hill, 1980, P. 181.
- 4. HANNAH, STACE and YACOPETTI., "Management Information Systems in Higher Education," The Institute of Higher Education, Australia, 1982.

FUTURES RESEARCH

Broad societal perspectives; long time horizons Monitoring and interpreting trends Design and evaluation of alternative futures

NORMATIVE PLANNING - What should we do and why?

Values, Missions, Objectives

Evaluation of external threats and opportunities

Evaluation of internal strengths and weaknesses

STRATEGIC PLANNING — What can we do and how?

Organisation design and manpower planning

Contingency plans

Diversification plans; line of business plans

Financial strategies

OPERATIONAL PLANNING - What will we do and when Annual goal setting; management by objectives

Budget and schedules

Project Planning

IMPLEMENTATION

Review and evaluation

Table 2: Methodologies in Human Resource Development

	Category	Broad Development Needs	Areas	Methods
1.	Executive & Senior Academic Staff	Conceptual skills Management skills	Systems Thinking Corporate Planning Public Relations Management • Finance • Human Resources • MIS Change Management Performance Measurement	 Seminars Conferences Short Courses in Management Secondment to Private Enterprise MBA/PhD course in Management
2.	Professional or Academic Staff	Disciplinary research Industry exposure Course Development Course Management Teaching Skills	(As for needs)	 Study tours Seminars Conferences Secondment to Industry Higher degree Studies Short courses in Course Development & Management Teaching methods course
3.	Middle Level Managers	Performance Skills Management & Supervisory Skills Technological awareness	Financial Management Personnel Management Estate Management Marketing Residential & Hotel Management Report Writing MIS Coping with Change Staff Appraisal Techniques	Formal courses Formal management Formal higher education Formal professional in-house seminars & workshops Conferences Practitioner Study tours
4.	Service Staff	Technical Skill	(As for needs)	Inhouse seminars & workshops Industry workshop On the-job training.