ABSTRACT
        This paper seeks to provide a rationale for
evaluating Technical and Further Education (TAFE) programs by using a
management system approach that is based on corporate planning. The
first section reviews the sources of increased demands for
accountability in TAFE (societal, economic, government, and
legislative sources) and examines various management systems that
could be used to meet increased demands for accountability (program
budgeting, program evaluation, management information systems,
management procedures, and corporate planning). The first section
concludes with an examination of the Swedish model for
self-evaluation. The second part of the report describes the
following aspects of the attempt in New South Wales, Australia, to
increase accountability by using a corporate planning-based approach
in which evaluation is a major component in providing accountability
and maintaining quality of educational provision. The following
topics are covered: the diversity and scope of TAFE in New South
Wales, corporate planning as a management tool, strategic planning
(departmental, college/school, and servicing unit strategic plans),
staff participation in strategic planning, action or operational
planning, evaluation and monitoring, performance indicators and their
interpretation, evaluation procedures for program monitoring,
comprehensive audits and program evaluation activities, establishment
of a directorate of audit and review, program performance evaluation
plans, planning and evaluation support to managers, and future
directions. (MN)

TAFE

TAFE NATIONAL CENTRE FOR
RESEARCH AND DEVELOPMENT

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EDUCATIONAL ACCOUNTABILITY
AND THE NEED FOR COMPREHENSIVE
EVALUATION IN TAFE

J. L WHITE

ADELAIDE 1987

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Senior Fellowships enable senior staff from TAFE Authorities to spend 6 - 12 months at the Centre to undertake studies of national significance. The Fellowships are generously supported by all TAFE Directors.

The first Senior Fellow was Mr John White, Deputy Director General (Planning and Review) of the NSW Department of TAFE. His Fellowship was especially appropriate for three main reasons. First, it would have been impossible for the Centre to have obtained a more senior person and a more suitable person to be its first Senior Fellow.

Second, the actual idea of the Senior Fellowships arose out of early discussions with Dr Allan Pattison, the Director General of the NSW Department of TAFE, and he showed his very practical support for the idea by releasing Mr John White.

Third, the nature of the topic chosen for the research, educational accountability, is of crucial importance. Thus this paper will be eagerly read throughout all of Australia's TAFE Authorities.

William C Hall
Adelaide, June 1987

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ACKNOWLEDGEMENTS

RECOMMENDATIONS

While this project is in the format of an investigative report, the nature and extent of recent developments in NSW TAFE, particularly those experiences relating to the -

(a)   restructuring of senior management

(b)   the introduction of the corporate planning

(c)   decentralisation and regionalisation of the department administration

(d)   establishment of an Audit and Review Directorate

(e)   introduction of program evaluation

provide an appropriate basis for a number of recommendations on courses of action which may be of interest to other TAFE departments.

Based on the NSW TAFE experience it is recommended that in establishing procedures to meet accountability and planning requirements, consideration be given to:

1.   the introduction of a corporate planning management process.   This process should include the development of a corporate plan detailing corporate and strategic goals, and the development of strategic and action plans, and program evaluation;

2.   establishment of an appropriate data base using generally agreed upon performance indicators;

3.   utilisation of established assessment procedures where available to avoid unnecessary duplication of effort in the evaluation phase;

4.   establishment of a separate Audit section which draws together existing financial auditing functions and extends these to cover requirements relating to effectiveness, efficiency and appropriateness of TAFE operations;

5. use of institutional evaluation as a final stage in the evaluation procedure. Institutional evaluation should be used only where ongoing evaluation indicates the need for a more thorough review of college activities;

6. development of college profiles or areas of activities. This may be required as a forerunner to the preparation of a strategic plan or as part of the evaluation of a college. The profile should identify the aims of the institution, the nature and extent of the TAFE clientele it serves, and the range of resources available to achieve the stated goals;

7. encouragement of staff involvement in the development of profiles, strategic and action planning and program evaluation. It is important for all staff to question the effectiveness and efficiency of their operations;

8. involvement of all managerial staff in staff development activities relating to corporate planning and program evaluation;

9. inclusion of a computer systems review unit as part of a comprehensive audit section;

10. publishing of outcomes of evaluations to provide an appropriate measure of accountability. This may be through the provision of annual reports or other publications in which the selected data is analysed and future directions identified.

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SYNOPSIS

Educational accountability in TAFE is not a new issue. It
has, however, assumed greater importance in recent times.
This paper examines the reasons for this new emphasis. To
meet this challenge, TAFE in Australia needs to review its
organisational structure and management system in order to
provide the degree of flexibility and effectiveness required
by government initiatives and changing community needs.
Similar events are occurring in other Western countries and
some of these overseas developments are explored.

This paper suggests a management system approach involving
corporate planning of which evaluation is a major component
in providing accountability and maintaining quality of
educational provision.

SUMMARY

This paper seeks to provide a rationale for the extension and reinforcement of an educational management process based on corporate planning. Such a development is required in order to accommodate increasing demands for accountability, and the need to be flexible and innovative in operation in providing for government initiatives and the changing needs of society. The first part of this paper reviews the sources of these demands for increased accountability in TAFE while the second part describes one state TAFE department's response to these challenges.

To provide for these requirements, as well as to improve the level of decision-making in TAFE, a corporate planning model including internal or self-evaluation is advocated.

Present procedures for institutional evaluation are reviewed to establish their appropriateness to TAFE requirements. The models for institutional evaluation as applied to higher education in the USA and other Western countries, in which each institution is evaluated as a separate entity, are seen to be of limited value to present requirements in TAFE. Such evaluations are costly, provide information infrequently and adversely affect staff morale.

The activity-based "self-evaluation" model operating in Sweden is seen as more appropriate to TAFE needs. This model is compatible with the corporate planning process introduced in NSW TAFE in 1983.

TAFE systems in other Australian states and territories differ in some respects from the NSW system, but there are also similarities of goals, administrative procedures and educational provision. These similarities, together with commonalities in government intent, provide justification for a similar restructuring of their educational management systems. Recent experience within NSW TAFE with regard to corporate planning is used to support this contention.

This paper proposes that evaluation of TAFE's educational activities is essential both to meet the demands for increased accountability from all stakeholders in TAFE, and to provide a proper basis for planning.

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EDUCATIONAL ACCOUNTABILITY IN TAFE

Introduction

Accountability - The New Dimension in TAFE

The argument for increased accountability in education has reached new dimensions in recent times with the realities of limitations in funding and the demands of stakeholders for more effective and efficient utilisation of scarce resources. These developments have broadened the impact of accountability from simply financial accounting to justification for action taken. This need for justification holds the education authority accountable for policy and decision-making and brings into focus the question of quality of the educational provision. This in turn raises questions as to the appropriateness of the educational programs, the availability and utilisation of physical resources, the nature of the learning environment and the teaching methodology. Thus, educational accountability has the potential to provide a window through which stakeholders may view the educational process to judge its effectiveness, efficiency and the quality of its educational outcomes.

Commitment to the concept of accountability therefore presents a major challenge to educational managers.

In this context, Bartlett (1971) defines ccountability as the '... effective and efficient attainment of worthwhile educational outcomes that are reflected in student behaviour'. This emphasis on student outcomes directs the requirement for accountability on all those involved in the educational provision. Norton (1972) refers to this concept of shared responsibility of all educational staff as joint accountability. He suggests that legislation can be used to strengthen this responsibility to be accountable as can pressure from students, employers and the community in seeking to promote the moral and social obligations of the education system. To this concept must also be added a professional obligation which is influenced by the academic environment.

The means by which the window on the educational process can be opened to stakeholders is through the availability of accurate information on programs, procedures and outcomes. Terrell & Bass (1979) suggest that information communicated in this way must be presented so that it generates support for action taken. This introduces the concept of promotion of an acceptable image to generate confidence, and hence support for the educational provision.

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The provision of factual information to stakeholders for accountability purposes is reinforced by Wells (1986) who states that educational accountability is '... the responsibility or obligation of all staff of an educational department or institution for the accurate reporting of objectives, strategies, inputs, outputs and the impact of the educational provision. It involves making such reporting open to view by keeping records about decisions, activities and results and communicating these to higher authorities, to staff and clients and the community in general'.

This interpretation of accountability is applicable to TAFE particularly when the nature and extent of the educational provision, the requirements of students and the needs of industry and commerce are taken into consideration.

This demand for increased accountability should be viewed positively and should not be taken as implying any form of coercion. Terrel & Bass (1979) stress the positive aspects of accountability which, in their view, can raise the respect for, and understanding of, the educational institution. The need for accountability also provides for a more co-operative approach to education and training in that it recognises the contributions and responsibilities of all stakeholders to the total educational process.

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Nevertheless, the need for care must be exercised in the gathering and reporting of the data to be used for accountability purposes. The view through the window can be distorted and to explain such occurrences McNelly and Cameron (1981) have introduced the concept of 'fallacious accountability'. They suggest that the distortions which lead to fallacious accountability are usually due to the adoption of incorrect or inappropriate measures of the input to and impact of the educational programs and that closer links with stake-holders to promote agreement of acceptable measures of performance are needed. Without these agreed measures, they suggest validity could be lacking and misinterpretation can result. As illustration of this possible misinterpretation, the NSW Department of TAFE offers a range of one-year fulltime pre-apprenticeship courses. Some graduates of these courses seek and obtain apprenticeships or employment in related vocational fields while others continue their studies either in TAFE or at other tertiary institutions. The department considers such post-course activities as appropriate indicators of program fulfilment. The view of some external stakeholders, however, restricts the measure of success to the obtaining of an apprenticeship, thus leading to a lack of agreement on the value of such programs to meet the needs of students.

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Other concerns relating to the provision of accountability are:

(i)   the extensive time, energy and resources which may need to be expended on establishing and maintaining an accurate data base upon which accountability is to be provided. (This raises questions about the efficiency of the accountability mechanism).

(ii)   the degree to which the stakeholders use the information provided. (This relates to the effectiveness of the process).

These concerns do not detract from the essential concept of gathering relevant information for accountability purposes. It is important, however, that the information gathered be in usable form, and that it be put to appropriate use.

The Value of a Data Base

Any data base used for accountability purposes is acquired through the evaluation of the educational input and outcomes. This evaluation process also has an administrative purpose, the importance of which is stressed by Norton (1972) who refers to evaluation as the '... process of collecting and providing useful information for the purpose of making sound decisions'. Smith (1985) also

refers to the planning implications of the evaluation process by emphasising the need to measure inputs and outcomes which will:

(i)   assist in planning, policy development, implementation and monitoring of programs in operation at all levels of management;

(ii) provide a measure of appropriateness of organisational goals and objectives and the need for improvements in performance;

(iii) satisfy accountability requirements to stakeholders including students, the community, the educational authority and government.

The evaluation process is considered to be comprehensive in scope because of the broad range of uses for which the data base is intended.

Thus, comprehensive evaluation provides an information data base for future decision-making with regard to the education provision, and for accountability purposes where accuracy of reporting and documentation of the information are crucial elements and emphasis is placed upon the justification of decisions made and actions taken.   (Figure 1).

THE AUDITING/   THE MANAGEMENT
REVIEW PROCESS   PROCESS

```
                    ┌─────────────────────┐
         ┌─────────►│   ORGANISATIONAL    │◄─────────┐
         │          │  GOALS & OBJECTIVES │          │
         │          └─────────────────────┘          │
         │                     │                      │
         │              ┌────────────┐                │
    ◄────┼────►         │  Planning  │◄───────────────┤
         │              └────────────┘                │
         │                     │                      │
         │          ┌──────────────────────┐          │
    ◄────┼────►     │ Operations (Programs) │          │
         │          └──────────────────────┘          │
         │                     │                      │
         │              ┌──────────────┐              │
    ◄────┼────►         │  Evaluation  │              │
         │              └──────────────┘              │
         │                     │                      │
         │              ┌─────────────┐               │
    ◄────┼────►         │  Data Base  │               │
         │              └─────────────┘               │
         │                 ╱        ╲                 │
         ▼                ╱          ╲                │
┌──────────────────┐    ▼            ▼    ┌──────────────────┐
│  Accountability  │                      │  Decision Making │
└──────────────────┘                      └──────────────────┘
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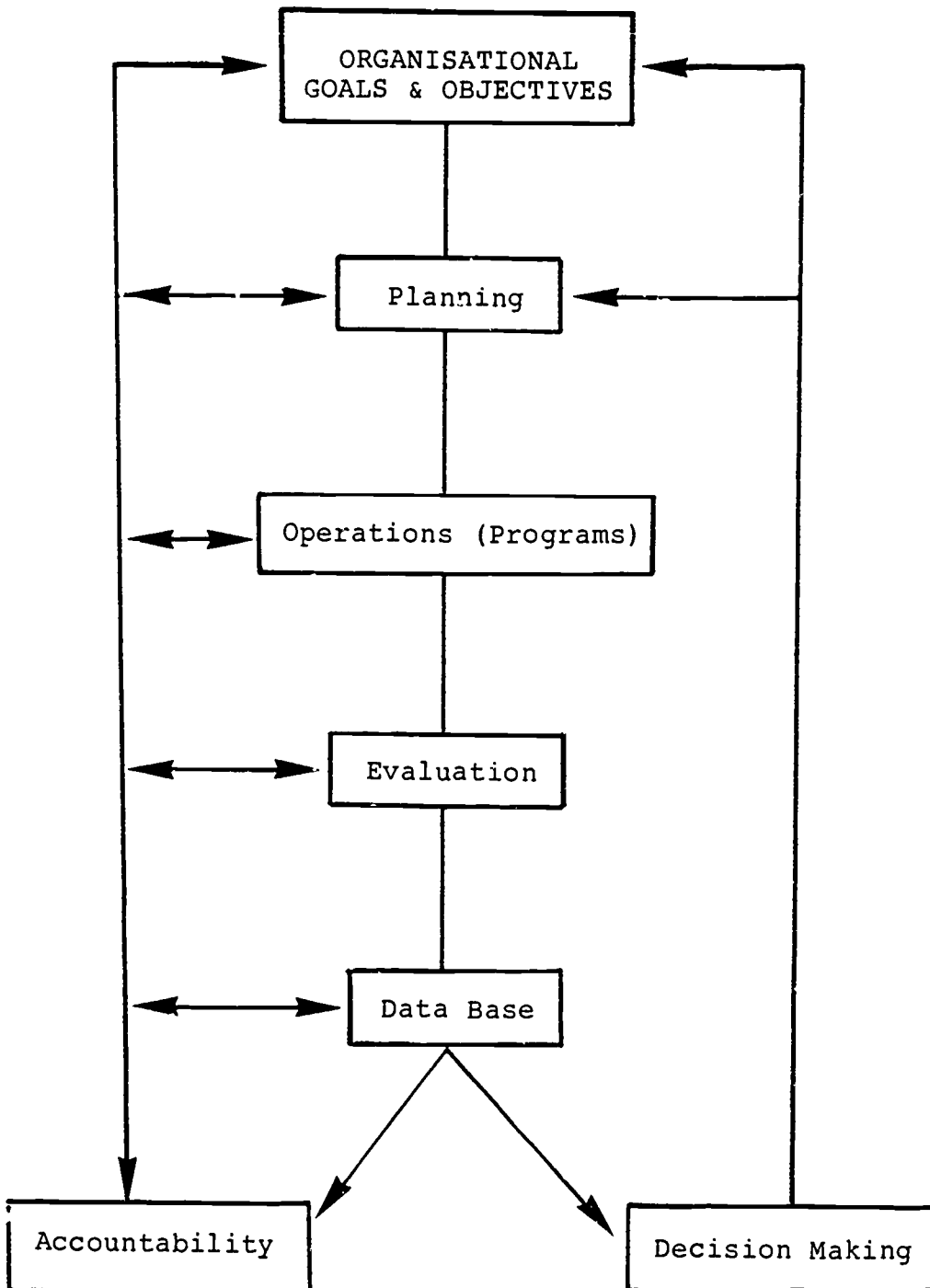
<u>Figure 1</u>

The Role of Comprehensive Auditing

Evaluation has been defined as an integral part of the total management process and completes the planning operations cycle. The role of auditing as an official examination or review is separate from the management process. Previously auditing was mainly concerned with the verification of financial accounts and records but consistent with this move towards increased accountability there has been a broadening of the scope of auditing from purely financial considerations to a more comprehensive approach. This expansion in role places greater emphasis upon the efficiency and effectiveness of the use of resources in achieving educational goals. Comprehensive auditing reviews the criteria and standards upon which performance is based and examines the relationship between program outcomes and resource inputs to determine the level to which the organisation is managing its resources and the degree to which its performance is maximised.

Chelmsey (1985) believes that the auditing function needs to be external to the organisation, but this is not always essential or in some instances even desirable, unless there is a real need to compare one organisation with another. In all cases, however, auditing differs from comprehensive evaluation in that it is an independent procedure and should

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be conducted by a body separate from the field of operations.

The report of the NSW Public Accounts Committee (1985) states that objective setting and performance review are functions of the organisation and accordingly recommends that each department/authority be required to continually review the performance of its organisational units and programs. The committee suggests that such audit reviews can give support to management in that they provide educational staff with '... encouragement, support and constructive suggestions for improving the effectiveness of programs'.

Figure 1 diagrammatically relates the auditing or review process to the management process.

Sources of Demand for Accountability

Demand for increased educational accountability has come from various quarters including societal, the economy and legislation.

(a) Societal Influences:

Two major social factors influencing the trend to greater educational accountability are firstly,

increasing public awareness of, and commitment to, a range of human rights issues and, secondly, the expanding role of government in provision of community support services.

These influences are apparent in the expectation by both the government and the public that TAFE should provide a broad range of educational packages to meet the emerging needs of disadvantaged groups in the community (including unemployed youth, Aborigines and the disabled).

At the same time, TAFE is expected to continue to provide industry and commerce with an adequately trained workforce, and also to provide a range of personal enrichment programs for those seeking improvements in the quality of their lifestyles.

TAFE has responded to these expectations with flexibility and innovativeness. This responsiveness, and the recent prominence given to TAFE by government and media, have resulted in greater public awareness of TAFE's goals and objectives; increased public acceptance of TAFE as a major provider of tertiary education; wider interest in the role and function of TAFE in the community; and a concomitant demand for

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accountability in relation to the provision of educational facilities and availability of programs.

In the current atmosphere of fiscal restraint there is recognition of the limitations to government spending and a concern for the effectiveness of government initiatives: equity of access to these finite resources is increasingly seen as a significant element in the measurement of effectiveness.

The increased participation of stakeholders in the decision-making process of TAFE, the commitment on a national scale to common core curricula, course registration and standard nomenclature are further developments which enhance this accountability process.

(b)   Economic Influence

The current economic climate with its unacceptable levels of youth unemployment, its need for industry re-structuring and its preparation for the introduction of new technology has led also to increased demands upon TAFE to provide a range of educational programs for the training and re-training of the workforce, increasing the competitiveness of

the unemployed for employment opportunities and imparting skills necessary for the full utilisation of new technology. These increased demands brought about by the state of the economy and the restructuring of industry are in conflict with the need for financial constraint applied to public monies. This has resulted in moves at both commonwealth and state levels to improve government administration generally and to generate an information flow upon which the allocation of future resources can be provided with increased precision. This has led to a commitment by governments to a system of accounting which classifies costs according to outputs instead of inputs. This concept is known as program budgeting and is affecting all government departments and statutory authorities. It is designed to provide betteriinsight into public spending and to encourage expenditure by objectives.

(c)   Government Initiatives and Legislation in the
      Public Sector

If government initiatives and legislation relating to the public sector are examined, the trend towards increased accountability is evident.

At the state level, and again using NSW as an example, government initiatives directed to all departments,

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including TAFE, reveal a pronounced trend towards the provision of information for accountability purposes. This accountability is required not only in the financial sense but administratively as well, as it is designed to ensure that government departments and statutory authorities are providing the services for which they were established.

The beginning of this trend for increased accountability can be traced back to the commission established in 1976 to report on government administration in NSW which was headed by Professor Peter Wilenski (1977). As a result of the recommendations of this report, there have been a succession of statutory and other initiatives designed to make governments, statutory authorities and agencies more accountable for their operations.

These initiatives include:

(i)   The Public Service Act (1979), which specifically makes the ministers and departmental heads responsible for the effectiveness and efficiency of their department's activities. The Act also provides the statutory basis for external efficiency

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audits to be undertaken at the request of the Premier in government departments and agencies;

(ii)   The Public Finance and Audit Act (1983), which requires departmental heads to ensure that there is an effective system of control and an internal audit procedure in their departments which reviews programs to establish consistency of stated goals with operations;

(iii) Management strategy reviews of selected departments and agencies which are required to be undertaken by the Premier's Department. These reviews provide an external investigation of key questions concerning the trends and purposes of the organisation. The reviews include an assessment of the degree of congruence between government policies and initiatives and organisational aims and objectives;

(iv)   The introduction of Program Budgeting by the NSW State Treasury which is designed to forge a more direct link between a department's budgetary allocation and its programs of expenditure. Program budgeting allows for the costs of

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programs (sets of activities) to be known and requires that program effectiveness be assessed and taken into account in future resource allocations;

(v) Moves towards a closer scrutiny of departments by the NSW Public Accounts Committee (PAC). All government departments are required to complete a detailed questionnaire on their operations and the management procedures used to evaluate the efficiency and effectiveness of those operations;

(vi) A growing accountability to the community through the Ombudsman's Office which investigates complaints received from members of the community relating to services provided by government departments and agencies;

(vii) The annual reporting of departmental performance as required by the Annual Reports (Departments) Act of 1985. These reports must include qualitative and quantitative measures of performance to show the level of efficiency and effectiveness, details of consumer or client reaction to the services provided and an account

of the major issues and problems encountered during the year of reporting;

(viii) The requirement that departments conduct self-examination of their programs (known as internal prcgram performance reviews) using established program evaluation methodology. The rolling 5-year plan for future evaluations is to be submitted annually to the Management Performance Committee, and the annual report must include a description of the nature and extent of the reviews undertaken, and the improvements to performance which have resulted from these reviews.

A diagram of these measures of accountability as implemented in NSW is shown in Figure 2.

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PREMIERS
DEPARTMENT

TREASURY

MANAGEMENT
STRATEGY
REVIEWS

PUBLIC
ACCOUNTS
COMMITTEE

BUDGET
(PROGRAM
BUDGETING)

REVIEWS
OF
PUBLIC
ACCOUNTS

PUBLIC
SERVICE ◄── EXTERNAL ──► DEPARTMENT ◄── GRIEVANCE ──► OMBUDSMAN
BOARD   EFFICIENCY   INVESTIGATIONS
             AUDITS

INTERNAL
PROGRESSIVE
PERFORMANCE
REVIEWS

AUDITS
OF
• FINANCE
• SYSTEMS
• FUNCTIONS

ANNUAL
REPORTS ACT

MANAGEMENT
PERFORMANCE
COMMITTEE

MINISTER

AUDITOR
GENERAL'S
DEPARTMENT

Figure 2

SOME OF THE GROWING NUMBER OF
MECHANISMS FOR THE ACCOUNTABILITY
OF DEPARTMENTS

(d)   Government Influences Relating to TAFE

If the situation with regard to government influences relating to TAFE is examined at the state and national level this general trend of accountability is very evident.

The Kangan Report (1974) described TAFE's existing role and function and projected TAFE's capacity to improve access to tertiary education of disadvantaged groups in society. The report provided a new standard for TAFE's involvement against which its activities could be evaluated. The report prompted the introduction of a new TAFE Act which gave rise to a more descriptive title for this field of tertiary education and established legislative requirements for the future. The Williams Committee Report (1979) also emphasised the need to evaluate the post-secondary educational process.

Each state has also undertaken at least one comprehensive review of its TAFE activities during this period, with similar intent and uniformity in the conclusions reached.

Although the Act setting up the Tertiary Education Commission (TEC) and its councils makes no direct

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reference to accountability issues, the need for consultationw with the states was included. The States Grant (Tertiary Education Assistance) Act, however, does provide for the states to supply such information as the TEAC may require.

Requirements with regard to Special Purpose Grants and funding provided for Pre-Apprenticeship Programs, Labour Adjustment Training Arrangement (LATA) and Priority 1 Traineeships have more specific accountability requirements as a condition of funding.

Clearly then, the concept of accountability is extending far beyond mere financial transactions and procedures and is moving towards increasing the evaluation and review of the efficiency, effectiveness and even appropriateness of a department's functions and operations. With this growth in awareness of accountability to stakeholders in TAFE, it falls within the bounds of possibility that instances of legal recourse, similar to those occurring in the USA relating to professional negligence, may occur.

In fact, the forces tending towards greater educational accountability in Australia have marked parallels in other western countries.

Educational Accountability in other Countries - Are we
Treading the same path?

An examination of trends in educational accountability in
other western countries reveals marked similarities with
recent developments in Australia.

In comprehensive surveys of trends in higher education
management in five European countries (Lockwood & Prosser,
1980; Broadfoot, 1982) a number of key areas for comparison
were identified by the researchers. These include:

(i)   changes in educational needs and clientele;

(ii)   new legal requirements and restrictions;

(ii.)   the effects of economic uncertainty;

(iv)   organisational complexity due to increased demand and
        rapid growth;

(v)   industrial relations;

(vi)   demands for increased productivity and public
        accountability.

Responses to these key issues from each of the countries
surveyed - Ireland, UK, France, Sweden and Denmark - were
similar, although to varying degrees. Changes in needs and

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student profiles were apparent, but in contrast with USA and Australia, there was less response to claims by minority groups. In fact, disadvantaged groups were not even identified as a significant feature of the surveys.

In all countries, with the exception of Ireland, national legislation was seen as an increasingly pervasive influence on the demand for greater educational accountability. Legislation relating to issues such as occupational health and safety, sexual equality, privacy and confidentiality were taken as indicators of the impact of recent government initiatives which now affect all sectors of society in these countries. Increases in the use of litigation to resolve issues were also in evidence.

The survey identified the growth of tertiary education and the state of national economies as important influences on the demand for increased public accountability. Increased demands for information and tighter controls on the transfer of funds between budget items were other indicators of this increased level of accountability.

The institutions surveyed did express their concern about increases in the level of government control and the diverting of funds to provide for the machinery of accountability. In the UK in particular, accountability

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through the increased provision of information to the public usually through the publication of annual reports and other documents, was seen as a costly, though necessary, measure of accountability.

In those European countries surveyed, economic uncertainty is related to the state of national economies, inflation rates, political aspirations and the changing status of higher education. This has resulted in institutions broadening their educational provision to meet government initiatives and reviewing programs to achieve economies of scale because of increasing financial restraint.

Certainly greater effort has gone into effecting economies of scale in the educational provision. However, in the UK, the move to create polytechnics is seen as a means of increasing educational productivity at a unit cost substantially lower than that of universities. It is interesting to compare this development with the introduction of Colleges of Advanced Education in Australia in the 1960s, and the recognition and acceptance of TAFE in the 1970s and 1980s.

All countries surveyed acknowledge increases in the administrative complexity of tertiary institutions. Sweden in particular has encountered difficulties associated with

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the organisational reforms of higher education in 1977. These reforms introduced a form of goal-oriented program budgeting and as a result higher education institutions have increased the complexity of their organisational and management structures. These problems of complexity are exacerbated when confronted with increasing financial constraints and, together with the move towards participatory management, have led to a re-allocation of human and financial resources.

Many of the developments cited in the survey are similar to those taking place in Australia. However, the researchers claim that the resultant increases in educational and administrative complexities of tertiary institutions should not be taken as an excuse to defer organisational change. In fact, these developments should stimulate action to provide increased flexibility in educational management. To achieve this flexibility the authors of the survey suggest:

(i)   creating interdisciplinary academic units;

(ii)   improving the quality and quantity of staff development;

(iii)   increasing the level of co-operation with external stakeholders;

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(iv) reducing the complexity of the decision making process;

(v)   increasing flexibility in control over budgets.

In predicting trends and the effect they will have on tertiary education in these European countries, Lockwood and Prosser predict that there will be:

(i)   an increasing scarcity of funds for education;

(ii) tighter government controls;

(iii) more demands for broader public accountability;

(iv) the development of technology to liberate human resources;

(v)   changes in educational needs due to increases in leisure.

The similarities between developments in these five European countries and Australia are real and predictable, as the educational systems in this country have been modelled on those in the UK. As with tertiary education in the European countries surveyed, it is equally necessary for tertiary education in Australia and particularly TAFE to prepare to meet the challenge of changing public and government expectations of TAFE and demands for increased public accountability of its educational provision.

The Need for Systematic Planning and Evaluation

From this review of trends in educational accountability in other countries, it will be seen that the current trends towards increased accountability in this country may require significant changes to our present organisational structures and the introduction of more appropriate management systems.

The literature on educational accountability consistently refers to the unstructured nature of planning and evaluation in education. For example, Galloway and Knell (1974) argue that greater accountability is achievable through syst .tic and more formalised planning. Bacon (1978) believes that the unsatisfactory nature of present planning systems is due t> the inadequacy of available information upon which decision making is based. This view is supported by Turner (1980) who attributes the recent accelerated development of more systematic administrative procedures used by colleges to the use of management information systems and variations of management by objectives. Schure (1971) is of the opinion that the introduction of sophisticated forms of information processing should result in more efficient decision making and more effective workforce planning procedures.

Closer to home, the call for more effective planning in TAFE

has come from TAFE educational administrators. The NSW
Report of the Joint Workshop of Regional Directors,
Metropolitan Principals and Heads of Schools in 1981
recommended that '... much more effective planning needs to
be undertaken to ensure a more adequate response is made to
the overall needs of and demands made upon TAFE'.

In considering the formal structure of education Bidwell
(1985) refers in his article to the lack of systematic
planning and evaluation as 'structural looseness' which he
sees as a product of the educational process and teacher
professionalism. Moves to change organisational structure
by decentralising the administrative process, as in NSW
TAFE, or by imposing a greater degree of centralisation on a
highly autonomous system, as in Victoria, are viewed as
attempts to provide organisational structures with optimum
flexibility in the educational provision. These
organisational changes can establish also the basis for an
improved system of information management within the
organisation.

Management Systems to Meet the New Challenges

To meet the requirements of government and stakeholders for
increased accountability and to ensure more effective and
efficient educational management, organisational

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restructuring and new management systems are being
introduced into TAFE departments. Some of these changes
result from government initiatives such as program budgeting
while others such as corporate planning aim to provide
improved decision-making.

(a)   Program Budgeting

The need for more systematic planning in education
coupled with improved systems for the collection and
dissemination of information is reflected in the
commitment by state governments in Australia to
program budgeting and program evaluation. It is
generally agreed that traditional budgeting processes
provide control of expenditure of public monies but
make limited provision for planning and decision
making. Program budgeting provides a more appropriate
information base upon which decision making at both
government and organisational levels can be based.

In NSW, the Review of NSW Government Administration
(1977) recommended the adoption of program budgeting
'... in order to facilitate budgetary choice by
Ministers among departmental activities to permit the
allocation of resources by departmental managers to
achieve the best results and to increase public and

4U

parliamentary understanding of government programs'.
The references to facilitating '... public and
parliamentary understanding' and the allocation of
resources to achieve the best results are very clear
refere..ces to the need for increased accountability of
government departments and agencies. By 1987, all
governmenт departments in NSW will be required to make
forward estimates on a program basis.

Other Australian states have given consideration to
program budgeting, with South Australia and Victori,
well advanced in its implementation.

(b)   Program Evaluation

The attention given to program budgeting as a means of
improved decision making has led to an increased
emphasis on program evaluation as a form of
comprehensive audit. The NSW Public Service Board's
Program Evalu.tion Unit (PEU) provides assistance to
government departments and authorities to establish
procedures and guidelines for the review of program
efficiency and effectiveness, and the inclusion of
program evaluation in the planning and budgeting
cycle. This unit is responsible to a committee of
senior officers from the Premier's Departmen,, Public
Service Board and Treasury.

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(c)   Management Information Systems

These developments, together with the minimum standards for annual reporting now established by legislation, require departments including NSW TAFE to proviue set information for accountability purposes. In order to achieve this, an appropriate management information system (MIS) is required in TAFE. Such a system will not only provide for accountability requirements of the public and government, but is essential also for internal decision making to achieve the maximum and most effective use of resources.

(d)   Management Procedures

Linked with the need to review the structure of the educational c janisation and the introduction of an appropriate management information system, is the need to introduce management procedures which will accommodate the planning for and evaluation of the educational outcome.   In seeking the appropriate management procedures, educational administrators have adopted industrial management techniques with varying degrees of success.   Polczynski and Thompson (1980) state that while a high level of success is reported for Management by Objective (MBO) in industry, its

application to higher education has proved less successful. A high level of participatory management and personal commitment to the process is required for its successful operation. This view is supported by Furamak (1981) and by Taylor (1975) who, after attempting to introduce MBO into schools in the UK, reported it as a 'valueless exercise'. Williams (1982) claims that a re-thinking of the value of MBO to educational institutions has occurred recently and he reports success in the introduction of MBO to a large college of further education in the UK. Here the success is based upon the involvement and commitment of all staff and the appropriate modification of management style and organisational structure.

(e)   Corporate Planning

Some of the more successful features of MBO - goal setting, appraisal and analysis of results, and improvements in communication - are incorporated in the concept of corporate or strategic planning. Corporate planning is a management process based upon the clear identification of goals and objectives. This is achieved by taking into account the perceived

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roles and functions of the organisation, the operating environment and climate, and the needs of stakeholders. The goals so identified provide direction for the development of action plans which translate the goals into operational programs which require evaluation on an on-going basis.

Analysis of the comparison of operational outcomes with goals provides the essential feedback upon which future decision making is based. Any mismatch which is identified signals the need to review goals and/or action plans or may identify changes to the environment within which the organisation functions, and thus, may require modifications to the statement of organisational goals and objectives.

The total corporate planning process provides the potential for improved communication, participatory management and awareness of and commitment to the quality of product or service.

Evaluation - the Forgotten Factor?

The emphasis on corporate goals and objectives, the need to develop profiles and appropriate action plans and the importance of evaluating outcomes and impacts of the

educational provision have focused attention somewhat belatedly on the evaluation process itself.

In most instances where evaluation has gained attention it has been directed at the educational institution instead of the educational process. It is most often used to provide a measure of comparison of educational institutions.

The introduction of management techniques such as corporate planning establishes evaluation as an internal ongoing management process. Evaluation is essential to the decision making process as well as providing a firm basis for accountability. Before discussing the evaluation process further we will consider briefly the advantages and disadvantages of institutional evaluation.

Institutional Evaluation

With institutional evaluations the evaluation process involves using a team of evaluators. The team may consist of persons from within the institution, in which case it is a self-evaluation process. Alternately, it may consist either wholly or in part of evaluators from outside of the institution (external evaluation). External evaluators are seen to lend a measure of credibility to the evaluation process, particularly for institutional comparisons.

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In reviewing the evaluation of Australian universities, Clarke and Birt (1982) regard institutional evaluation as a change agent which assists universities to adapt to changing environments. Lindsay (1981) argues for evaluation to provide information which is relevant to management needs. In supporting an institutional approach to evaluation which will avoid fragmentation of information obtained, he stresses the need for the relevance of analysis to the decision making process. In doing so, he provides support for the concept of program evaluation.

Dressel (1976) defines institutional self-evaluation as '... a planned and organised enquiry by the staff of the institution into the total effectiveness of institutional operations'. Such a definition implies a regularly spaced evaluation whereas for on-going management purposes, a continuing monitoring procedure has greater value for future decision making.

Because of difficulties in developing appropriate measures in the form of performance indicators, reliance has been placed upon the professional judgement of evaluators to measure effectiveness (Lindsay, 1981). Evaluation of higher educational institutions using professional judgement only and involving staff from other institutions is not viewed as a useful substitute for valid evaluation criteria or

performance indicators. In addition to this limitation, Lindsay argues that the major disadvantages of this approach to evaluation are that it is time consuming, administratively disruptive, costly to undertake and provides information for decisional purposes at infrequent intervals.

Where institutions are homogeneous with respect to goals and educational provision, institutional comparisons can provide data on their relative effectiveness and efficiency. It could in fact be argued that such similarities of purpose and process occur in TAFE colleges, but such an assumption does not take into account the diversity of educational output and the variations in the needs of the communities served by TAFE.

Institutional Evaluation Models for TAFE

Institutional evaluation has been studied in the TAFE context by Byrne and others (Byrne, Thomson, 1985; Thomson, Byrne, Houston, 1984). These studies sought to develop 'system-wide' evaluation models suited to the bureaucratic structure of TAFE in Australia which are designed to promote a means of improving performance. The models proposed promote a global approach to evaluation which is similar to models adopted in the US and other western countries for

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individual institutional evaluation. In so doing, the authors have adopted the view of educational auditing as '... the methodical and systematic review of the whole situation associated with an institution'.

In comparison with several models of evaluation of American colleges, in particular that in Portland, Oregon, Burne and his fellow researchers identify several features which are claimed to have direct relevance to TAFE. Among these features are the need to use a '... well qualified and experienced external consultant, recognition of the need for a flexible approach in recording the reality of a particular school ... the full and careful description of a school as a starting point for evaluation, recognition of the primacy of the Principal in the life of a school ...' and the use of a case study approach to evaluation.

in developing models for TAFE, the authors refer to the need for a two stage evaluation - a profile phase and an inquiry phase. The need for an accurate college description is seen as an essential precursor to the evaluation.

While the model is a valuable contribution to the study of evaluation in TAFE institutions and provides comprehensive data on evaluation instruments and methodology, the project does not give sufficient emphasis to evaluation as a

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component of the on-going management structure. To do so would overcome many of the difficulties encountered, particularly those relating to time, cost and implementation.

The development of College profiles however is seen as an important component in corporate planning but should be undertaken by the staff of the College or institution. Institutional evaluation may be required as part of the educational auditing process but it should not be seen as a substitute for ongoing (self) evaluation.

Swedish Model for Self-Evaluation

This concept of evaluation has been incorporated as part of the on-going management structure in a recent project in Sweden (described by Furamak, 1981). This project was designed to foster institutional self-study and self-evaluation and resulted from the decentralisation of the Swedish Higher Education system in 1977. This move closely parallels in time and action, the move to decentralise administration throughout TAFE in NSW. In Sweden, as in NSW, this led to structural changes in the organisation, increased public involvement in the decision making process, and the delegation of authority and responsibility to colleges. In describing these changes in

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Sweden, Furamak refers to the move towards '... a more dynamic process-oriented perspective where self-evaluation and the capacity for self-renewal are key concepts'. The Swedish concept of self-evaluation is directly related to 'activity evaluation' and is seen as a 'continuous systematic activity' to be undertaken by each institution. The information resulting from self-evaluation is primarily intended for decision making purposes. It is therefore a 'grass roots' approach to evaluation which ultimately involves all staff.

Furamak states succinctly that the purpose of the project '... is to stimulate and foster critical self-study at all levels of the higher education system with the ultimate aim to improve effectiveness and efficiency'.

The support of all staff for the concept of self-evaluation was regarded as central to the success of the project. Conferences, workshops and personal contacts were used to encourage and gain support for the management concept.

The main features of the project design were:

(i)   establishing staff support for the purpose of self-evaluation;

(ii) securing staff concensus on project design;

(iii) identifying strengths and weaknesses of present
      activities and performance;

(iv) the formulation of goals for change;

(v) the adoption of an action plan for self-evaluation.

The Swedish project stressed the importance of selecting the right issues for improvement, issues which '... will contribute to innovation and growth within the institution'. To identify these issues, the process of 'problem scanning' is seen as the initial step to self-evaluation. This is best achieved by comparing program impact with educational or institutional (corporate) goals.

Self-evaluation as typified by the Swedish project recognises the need for on-going feedback in the educational management process.

It encourages staff participation in decision making, the setting of goals, the use of profiles and action plans and the identification of areas or issues for improvement which enable the institution to meet the changing needs of society. Such a management process is dynamic in operation and provides for a more effective and efficient performance.

While the main aim of self-evaluation in the Swedish context is to provide a better basis for future decision making,

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concern was expressed over the possible misuse of information due to apathy or more deliberate intentions. Romney (1979) refers to problems of morale relating to institutional evaluation and to the expose of 'cherished activities and practices'. The need for good communication and appropriate staff development is strongly advocated to overcome such problems of staff morale.

The Swedish project is significant in that it advocates for educational institutions a process of self-evaluation which forms an integral part of the management process. It indicates also the need to identify specific issues which require more detailed evaluation and from which changes to existing goals and operations may result.

Thus it will be seen that institutional evaluation may have limited appeal compared with the ongoing self evaluation typified by the Swedish project.

This model of evaluation is particularly relevant to developments in NSW TAFE and these aspects will be examined in some detail in Part II of this paper.

COMPREHENSIVE EVALUATION IN TAFE IN NSW

Introduction

The first part of this paper traced the developments leading to increased demand for accountability in education. It established the need for more evaluation of educational activities and outcomes to improve the decision making process and provide for increased demands for accountability. Superimposed upon this management process is the movement towards comprehensive auditing or review of the organisation's operations.

In the second part of this paper the impact of these forces for change on TAFE in NSW is examined and the organisational re-structuring and the management systems introduced to accommodate these developments are described and discussed.

TAFE in NSW - Its Diversity and Scope

The NSW Department of TAFE is a major provider of tertiary education to communities statewide. It achieves this through the work of over 100 colleges and 200 centres

throughout NSW. It provides over 1200 established cours s of study which have statewide accreditation, and a wide range of programs to meet the needs of disadvantaged groups in the community including those in rural areas. The diversity of NSW TAFE and the present demands upon its resources have meant rapid change in program content and educational direction. Many of these changes have been government initiatives to counter current economic difficulties; to respond to changes in demography and social values; to encourage technological development in industry and commerce; and to meet the needs of disadvantaged community groups.

With the introduction of the TAFE Act in 1974, enrolments in NSW TAFE have more than dcubled to over 400,000 with staff levels in excess of 10,000. Government initiatives and changing community needs have required TAFE to develop a management structure which is flexible and responsive to the changing face of tertiary education. The move to review the management structure of the department was influenced by government action which led to the preparation of several 'statements of purpose'.

In 1974, the then NSW Department of Technical Education published a document entitled 'Technical Education - Preparing for Tomorrow'. This document was the department's

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submission to the Australian Committee on Technical and Further Education which, in 1974, also released its report entitled 'TAFE in Australia - Report on Needs in Technical and Further Education'. It was the publication of this latter document which increased public and government awareness of the potential of TAFE and led to a fundamental shift in direction in its educational provision.

In 1977, the department decentralised its administration by moving rapidly from a highly-centralised administrative structure to one based on regions. While certain administrative functions are still performed centrally, for example, the payment of staff salaries, there has been a significant shift towards the college as the operational unit of the department's activities. Since 1977, further administrative delegations to regions and colleges have occurred in an attempt to provide an appropriate balance of responsibilities best suited to ensure the most effective and efficient use of resources and an appropriate degree of flexibility to meet community needs.

Corporate Planning as a Management Tool

Government initiatives to provide greater measures of accountability and more effective and efficient operation of government departments and agencies have been described

earlier in this paper. In response to these government
initiatives and increasing public awareness and to provide
direction to its educational administrators, NSW TAFE
introduced the concept of corporate planning. The intention
was to set '... the bench-marks for the annual cycles of
planning and operation against which achievements with
respect to both short-term and long-term goals and
priorities can be measured'. (The Corporate Plan for TAFE
in NSW, 1983).

The issuing of a corporate plan in 1983 was seen as the
first stage of an improved corporate management process.
The plan provided a broad statement of purpose and included
a broad corporate goal together with several more specific
strategic goals.

Implementation of corporate planning was to be achieved by
the preparation of strategic programs at all levels of
educational management in the department. These programs
incorporate action plans designed to achieve the
department's goals and objectives.

To monitor the degree of success in the matching of
operations to goals, a third phase of corporate planning is
required. This is the evaluation phase. The evaluation is
compared to the organisation goals and any disparity signals

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the need to review either the goals, the strategies for their implementation or the programs being offered.

This three-phase corporate planning model is consistent with many of the organisational and administrative advantages of management by objectives discussed earlier. This planning cycle is represented diagrammatically in Figure 3.

The introduction of the three-phase model for corporate planning has provided NSW TAFE with:

(i)   a better-structured basis for organisational decision making;

(ii)   increased participation by staff and other stakeholders in educational decision making, particularly in the strategic programming and self-evaluation phases;

(iii) improved communication within the department with a more reliable data base for future decision making and for accountability requirements;

(iv)   the establishment of priorities and the development of clear guidelines for program development and implementation;

(v)   the means to identify issues for improvement which

will contribute to innovation and change and more
efficient and effective operation;

(vi) the identification of realistic program goals and the
monitoring of the impact of such programs;

(vii) improved flexibility of operation and more effective
and efficient use of educational resources.

Strategic Planning

Implementation of the corporate plan was followed by the
development of strategic plans at all levels of management
within the Department. Here the term 'strategic planning'
refers to the means by which the goals and objectives which
relate to an organisation's field of endeavour are converted
to actions in the form of programs. This form of planning
develops the strategies whereby these goals and objectives
may be achieved. These strategic plans are usually prepared
covering a three year period which is consistent with the
department's triennial planning submissions to the
Commonwealth Tertiary Education Commission.

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CORPORATE PLANNING

GOVERNMENT
INITIATIVES
&/OR URGENCIES

PRIORITIES AS
DETERMINED BY GOVERNMENT
IN RESPONSE TO COMMUNITY
NEEDS

NSW STATE
OBJECTIVES
(TAFE ACT)

BROAD OBJECTIVES
OF TAFE

SET/REVISE
SPECIFIC
EDUCATIONAL
GOALS AND
OBJECTIVES

CORPORATE PLAN

REVIEW
SITUATION

PHASE I

DETERMINE/MODIFY
STRATEGIES & TACTICS

STRATEGIC
ACTION
PLANNING

PHASE II

PHASE III

IMPLEMENT/ADJUST
OPERATIONS

MONITOR (EVALUATION)
PERFORMANCE

COMPREHENSIVE EVALUATION
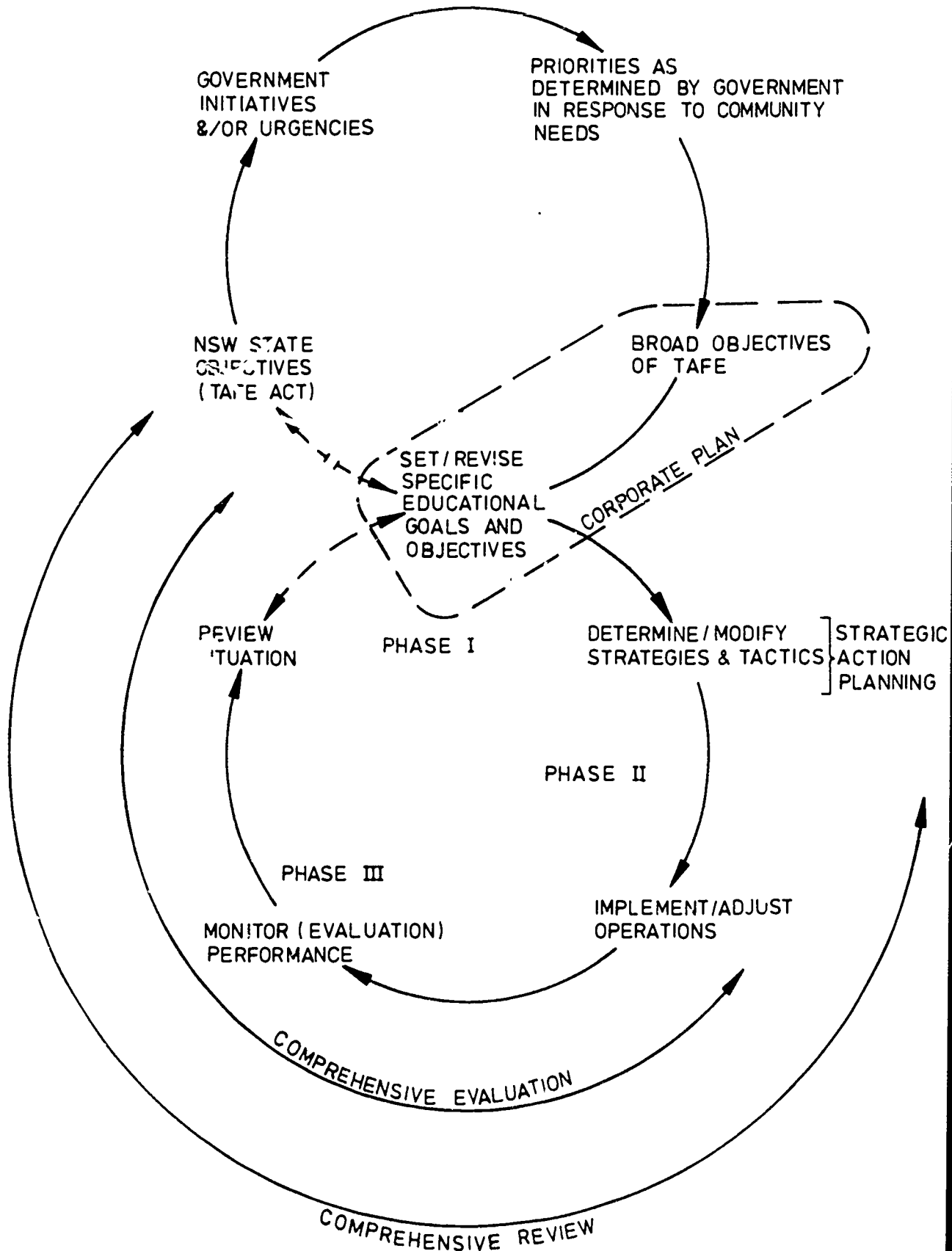
COMPREHENSIVE REVIEW

Figure 3

Strategic planning for this purpose should be broad enough to provide an appropriate basis for action or operational planning. Thus, in NSW TAFE, the development of strategic plans were undertaken at three major levels of activity: departmental, by Colleges and Schools and by the servicing units.

(a) Departmental Strategic Plans

In NSW TAFE, departmental strategic plans are initiated at senior management level and establish strategies for planning throughout the department. To date strategic planning has included major areas of activities such as:

... regionalisation;

... student examination and assessment procedures;

... library services;

... development of educational computing activities.

These plans have been developed to be achievable within set time limits. This, however, is dependent upon budget constraints and for this reason strategic programs need to be reviewed annually.

(b) College/School Strategic Plans

In NSW, colleges have the role of being the operational units of the department. In order to

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clearly identify this role College profiles are
developed as a basis for strategic planning. NSW TAFE
has traditionally based its educational quality
assurance upon a system of teaching schools each with
responsibilities in specific disciplines. The schools
have state-wide responsibility for maintaining
uniformity of an acceptable educational standard and
provide a high level of educational consultancy to the
colleges.

The underlying factors for establishing strategic
planning at the school and college levels are:

(i)   the stating of goals and objectives relevant to
       the particular activities of each college or
       school;

(ii)   the identification of major stakeholders and the
       establishing   of   appropriate   lines   of
       communication. This may be achieved by external
       representation on college or school committees
       or by direct personal contact with individuals
       or groups, or by structured surveys;

(iii) the   consideration   of   positive   and   negative
       educational growth factors. For this purpose
       the   acquisition   of   data   from   within   the

organisation and from external sources is
required;

(iv)   the determination of the education resource
potential within a college or school. The range
and scope of the educational provision and the
extent to which the college or school can meet
the future needs of stakeholders will depend
upon the total resources available and the level
of efficiency and effectiveness in the use of
these resources. To achieve these objectives,
the degree of flexibility in the utilisation of
these resources is important in considering
strategies for program implementation;

(v)   the development of future educational policy.
Future policy at the school/college level is
dependent upon overall departmental policy and
should be based upon past performance and
present needs. For this reason, the evaluation
phase of corporate planning is a vital link in
the total management system. From such
evaluations of past performance, the strengths
and weaknesses of an organisation can be
identified and appropriate action taken;

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(vi) the specification of strategies for goal achievement. The strategic plan should clearly state the strategies by which the educational goals can be achieved. It is these strategies which also provide the basis for future monitoring and evaluation.

In addition to the factors listed above, the teaching schools, because of their statewide responsibilities, give prime consideration to the maintenance of educational quality. In this regard, strategies are being developed to improve the efficiency, effectiveness and appropriateness of all educational programs. Such strategies include the need to develop more flexible use of resources and the introduction of a variety of teaching methodologies to achieve educational objectives.

(c)   Servicing Units Strategic Plans

The NSW TAFE servicing units and divisions are predominantly centrally located and provided a full range of educational and administrative support to colleges and schools.

In developing strategic plans for these units of TAFE, government initiatives and the provision of special funding are important considerations.

Staff participation in Strategic Planning

In the development of strategic plans at all levels of the organisation it is essential that staff be given the opportunity to participate. The working parties established for this purpose have been of a size consistent with the extent of the area of influence on departmental operations. An oversized committee, however while providing broader representation, can extend the period of planning to unacceptable limits. Where appropriate, external stakeholders are represented on the working parties.

Action or Operational Planning

Strategic programs also provide the basis for operational or action planning. Action planning is the means by which the strategic plans are implemented. Action plans are usually developed for a shorter duration than strategic programs and are consistent with an operational cycle such as the academic year or semester. In some circumstances a shorter period may be appropriate.

In developing action plans, managers in NSW TAFE have:

(i)   established goals and objectives appropriate to their field of operation. These shorter term goals are consistent with the department's corporate and strategic goals;

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(ii) identified the range of clients for the educational programs to be provided;

(iii) established the extent and nature of the educational resources available;

(iv) determined priorities where resources may not suffice to meet the indicated needs of potential clients. In this regard, priority guidelines which have been incorporated into strategic plans are taken into consideration;

(v)   allocated resources;

(vi) planned operational activities including student enrolment, examination and assessment requirements and staff development.

It should be emphasised that such action plans are:

(i)   based upon department/college/school strategic plans;

(ii) developed with staff input and where possible student participation;

(iii) documented to ensure full understanding by all staff of the educational directions for the coming period and to provide a basis for monitoring and self-evaluation.

The development of such plans at all levels of management within the department provides also the basis for operations evaluation.

Evaluation in NSW TAFE

Managerial effort in NSW TAFE is directed towards the provision of courses in Colleges to meet the needs of those in the community. Monitoring of the outcomes of the educational provisions occurs with employers and other stakeholders through the functioning of Regional Councils and College and School Committees. However, the present financial climate and requirements for increased accountability indicate a need for a more structured approach to evaluation.

This evaluation process is an important component of educational management at all levels of TAFE in providing for these requirements.

Monitoring

Having implemented a range of programs as the result of strategic and operational planning, the process of monitoring ensures that the programs are evaluated to establish their effectiveness, efficiency and appropriate-

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ness. Monitoring is the critical observation of program operation on an ongoing basis. This usually refers to the day-to-day activities of managers but can be expanded to incorporate activities related to ongoing program review by bodies external to local management. It provides the necessary feedback in determining the strengths and weaknesses of the programs provided.

In NSW TAFE educational monitoring is based upon criteria used in planning and requires the use of indicators which give some tangible measure of performance. The use of indicators rather than comprehensive descriptions of performance reduces the time and effort involved in evaluation thus reducing the overall cost. The continued use of established validated indicators provides reliable information relating to trends.

Such an evaluation process enables a manager to obtain data relating to:

(i) program performance with regard to the inputs and outcomes;

(ii) the changing need for such programs;

(iii) the level of appropriateness and effectiveness of the different strategies employed by the program;

(iv) the extent to which the program is meeting the corporate goals and strategies.

Performance Indicators

(a) Within NSW Government Departments:

The development of performance indicators for program evaluation by NSW government departments has been undertaken by Lenne & Wells (1986). Wells defines an indicator as '... a variable (or composite of variables) which is used to represent a more complex concept. 'Performance' is a complex concept, and in the NSW public sector it is broken down into three components: appropriateness, effectiveness and efficiency'. These indicators are '... substitutes for things which cannot be measured directly' but which can, with careful interpretation, lead to judgements about the program.

(b) Within NSW TAFE:

In TAFE educational outcomes are often qualitative and measures of program impact are difficult to quantify directly. Therefore the concept of using performance indicators for evaluation purposes is considered appropriate.

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In evaluating the offerings of a college or regional
TAFE program in NSW, Wells claims that appropriateness
is indicated by the degree to which the educational
provision is matched with client needs. Program
effectiveness then is indicated by the degree to which
stated aims and objectives are achieved, while program
efficiency is indicated by the extent of resource
utilisation.

The development of appropriate performance indicators
is the basis for evaluation. The indicators selected
are validated by relating them to the strategic
planning goals developed during the second phase of
corporate planning.

The level of success of a performance indicator is
dependent upon:

(i)   the degree of precision with which it can be
       measured;

(ii)   the degree of representation of the particular
       aspect of performance being measured;

(iii) the level of acceptability by stakeholders of
       the indicator as a measure of program
       effectiveness and efficiency.

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As no single indicator can be expected to meet all such tests of validity, more than one indicator of performance is usually required. Since each indicator may measure a different aspect of performance, the use of a number of indicators enables a more complet. picture to be developed. The number of indicators selected depends upon the level of comprehensiveness required of the evaluation.

Lenne & Wells identify three basic principles concerning the development and use of performance indicators. These are:

(i) indicators are deve.:ped by asking questions about certain elements of a program. These elements relate to needs, objectives, inputs, activities, outputs and impacts;

(ii) indicators which are developed and implemented need to be reviewed and refined to ensure high levels of validity and reliability;

(iii) indicators which are selected for use should be developed with the user in mind. In NSW TAFE these relate to managers and those stakeholders to whom the individual manager is accountable.

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(c) <u>Indicator Interpretation:</u>

The interpretation of information obtained by the application of indicators is particularly important and it is essential that agreement is reached among stakeholders on indicator interpretation as varying interpretations can lead to misunderstandings, confrontation and conflict.

The question of possible misuse of performance indicators is raised by Roe & Moses in their report on departmental reviews of higher education institutions. They note that '... apart from the risk of failing to catch the essence of a department's performance there is the likelihood that their active presence would more and more determine that performance'. They agree, however, that performance indicators need not necessarily be misused and that they can provide a means of regular self-evaluation and 'systematic and coherent information for departmental reviews'.

In NSW TAFE the development and use of performance indicators is proceeding with due care to ensure their validity and reliability. Testing of many indicators is required to establish their value to the total evaluation process.

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Evaluation Procedure for Program Monitoring

The procedure for ongoing internal evaluation by managers in NSW TAFE, includes the following:

(i)   the determination of appropriate indicators of performance to ensure a degree of comprehensiveness of information required for planning and accountability;

(ii)   the seeking of agreement with stakeholders of appropriateness of indicators and consensus on interpretation;

(iii)   the identification of indicators which will be used for accountability purposes. These may be required to provide data to higher management levels and to meet government requirements such as those required in the NSW Annual Reports Act (1985);

(iv)   the application of indicators to performance and the establishment of an information data base;

(v)   the interpretation of data to identify program strengths and weaknesses. Areas of weakness so identified may require further evaluation.

Such a process of self-evaluation through monitoring is essential to the successful operation of the total

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management process. Its success is dependent upon the agreed development of appropriate and valid performance indicators. It is not however, intended that the monitoring process will entail a substantial administrative increase in the management process as many of these activities in checking performance and assessing output are already in existence.

Comprehensive Audit and Program Evaluation

In 1984, Cooper and Craig developed a profile of internal audit in Australia. They recorded strong support from management for internal auditing and noted that the process presently covered a wide range of activities within organisations. It was predicted that in the future, the role of in ernal auditing would expand to include '... the review of efficient operation and review of the effectiveness of management'. To accommodate this expansion, existing internal audit units will be strengthened to provide for program performance evaluation.

Program Evaluation Activities in NSW TAFE

In May 1986, a NSW government requirement was issued to all ministers for the submission of Five Year Plans for Program Performance Review. These plans are to be submitted to the

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Management Performance Committee in December of each year for approval.

For the purposes of performance evaluation, programs are defined as '... any set of procedures, activities, resources and/or management strategies designed to achieve some common goal(s) or objective(s)'. The aims of the evaluation cycle are to:

(i)   assist managers to improve their operations;

(ii) satisfy the accountability expectations of government, the community and clients;

(iii) provide information for senior management concerning the appropriateness, effectiveness and efficiency of TAFE provision.

It is expected that over a five year cycle, NSW TAFE's major objectives and activities will be reviewed. This comprehensive auditing process is to be a normal part of the department's review procedures. It is intended that these reviews will focus attention upon areas which have been identified by the monitoring process as those requiring more rigorous assessment.

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Establishment of Directorate of Audit and Review

Such a requirement will lead to the development of universal
indicators of performance for use throughout the department
and establish a structure for performance review. This is
consistent with the aims of the monitoring process
established as part of corporate planning. In fact, the
program evaluation plan is designed to review in greater
depth those aspects of performance which have been
identified as requiring closer and more thorough attention.
In so doing, use will be made of existing evaluation
mechanisms within the department such as those currently
established to review curricula and teacher assessment.
Where such review processes are not in existence, program
evaluation will be conducted on a project basis, by the
creation of a task force appointed for the purpose. NSW
TAFE is in the process of establishing a directorate of
Audit and Review which will incorporate the existing
Internal Audit Unit. (Figure 4). These project taskforces
will comprise officers from the divisions within the
directorate.

DIRECTORATE OF AUDIT AND REVIEW

Deputy Director General (Planning and Review)

Comprehensive Audit Committee

Director

Audit and Review

MANAGEMENT REVIEW DIVISION

INTERNAL AUDIT DIVISION

Assistant Director
Management Review

Assistant Director
Internal Audit

Efficiency
Review Unit

Effectiveness
Review Unit

Computer
Systems

Northern
Regions

Southern
Regions

Metropolitan
Region

Head Office
S.T.C.

Figure 4

The Audit and Review Directorate of the Department of TAFE will embrace four major activities:

(i)   Internal audit which is the independent appraisal activity within the department providing a service to senior executives by assessing financial compliance systems and controls and alerting the department to weaknesses or undesirable departures from internal control procedures.

(ii)   Economy and efficiency reviews which are those activities within the department which determine whether resources are being managed in an economical and efficient manner. These reviews aim to reveal the causes of inefficiency or uneconomical practices, including inadequacies in management information systems or administrative procedures.

(iii)   Effectiveness reviews which are used to determine whether the objectives established by government and TAFE are being met and which examine alternatives which might yield the desired results more economically or effectively.

(iv)   Computer systems audits which are the independent appraisals of the operations of the department's complex computer systems. Positive audit feedback

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provides reliance on information generated by these
computer-based information systems.

In addition to the above functions, the Management Review
Division of the Directorate of Audit and Review will be
responsible for the development and implementation of the
Five Year Program Evaluation Plan and for reviewing the
reliability and validity of the performance indicators
published by the Department.

Program Performance Evaluation Plan

On receiving notice from government of the requirements of
the initial Five Year Program Evaluation Plan, the
department sought advice from TAFE managers at Head of
Division level and above of their intentions with regard to
evaluating and reviewing their operations. These plans were
received by the Comprehensive Audit Committee and seven
major departmental activities were identified for review
during the first year of the plan. The other review
proposals were noted by the Committee and progress will be
monitored by the Audit and Review Directorate. Many of
these review proposals will use the department's existing
mechanisms for evaluation and review.

Figure 5 illustrates the range and extent of these review

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projects over the departments organisational structure. Level 1 projects involve all levels of management and are broader in concept than projects undertaken at lower management levels. These level 1 projects will be undertaken by the Management Review Division and fulfils the first year of the requirements of the departments rolling Five Year Program Evaluation Plan.

Review projects identified at lower management levels are more specific in scope. The projects will be co-ordinated by the Management Review Division but will be undertaken by the management units concerned. The projects identify those aspects of program performance requiring a more detailed evaluation than would be possible during the normal monitoring process.

Planning and Evaluation Support to Managers

In order to assist NSW TAFE managers in the move towards the departments initiatives in corporate planning and program evaluation, a system of management support has been introduced to aid in developing their strategic and operational plans and in developing appropriate performance indicators and procedures for monitoring and evaluating their programs.

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PROGRAM PERFORMANCE EVALUATION
DISTRIBUTION OF FIVE YEAR PLAN

TAFE   ORGANISATION

LEVEL 1

LEVEL 2

LEVEL 3

LEVEL 4

| HEAD OFFICE |
| REGIONAL DIRECTORS |
| HEADS OF SCHOOLS |

| REGIONAL COLLEGES | REGIONAL COLLEGES | METRO-POLITAN COLLEGES | METRO-POLITAN COLLEGES | DIVISION | DIVISION |

REGIONS   METROPOLITAN COLLEGES   SCHOOLS
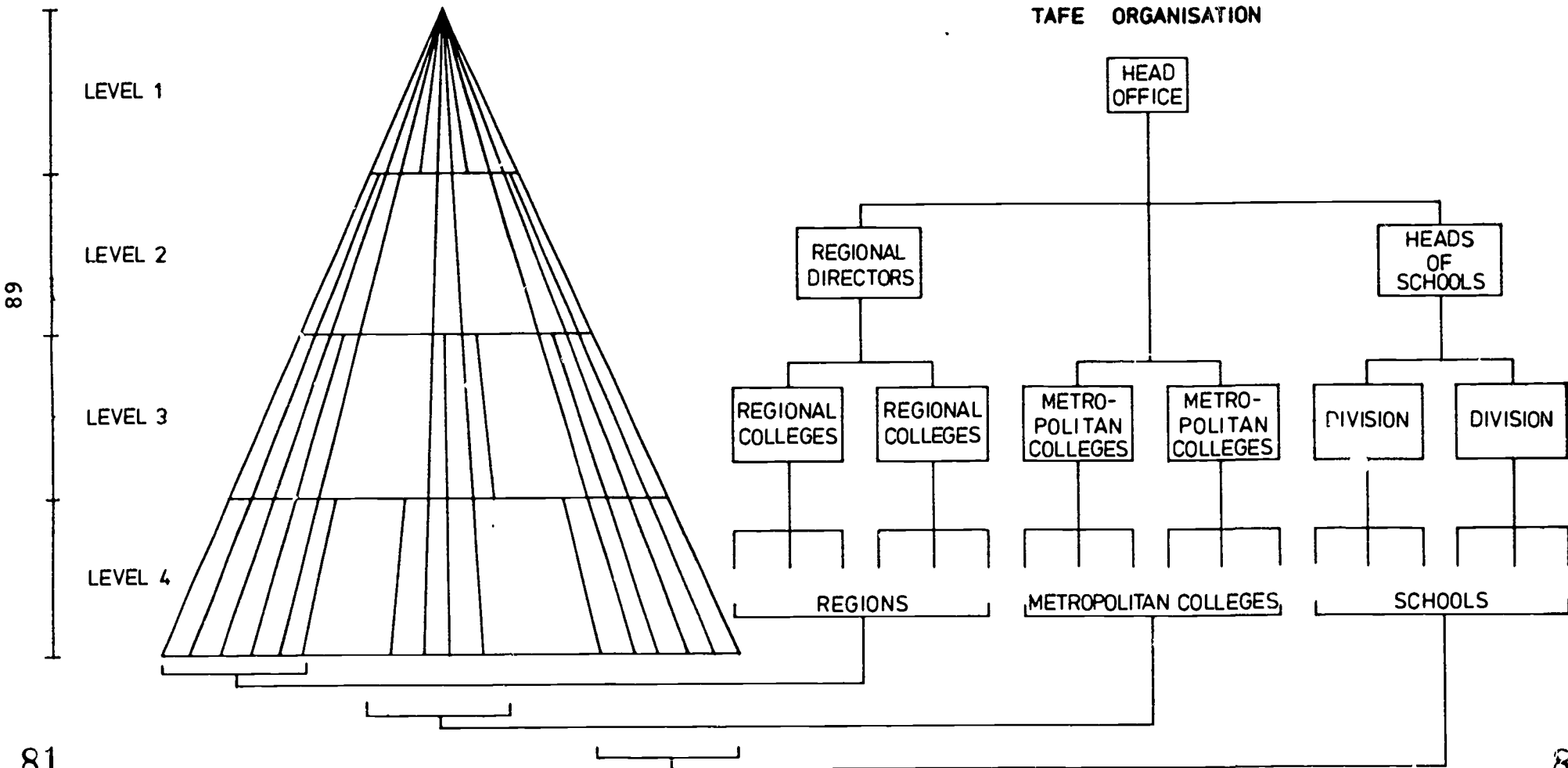
89

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Figure 5

A Planning and Evaluation Support Unit (PESU) has been established in NSW TAFE for this purpose. PESU will be responsible for establishing guidelines for each management level on:

(i)   the contents of, and methods for, developing objectives and strategic and operational plans;

(ii) review of such plans;

(iii) the methods of monitoring operation and the evaluation of selected programs.

In addition, PESU have developed in co-operation with the Staff Development Division training packages to prepare managers for the requirements of corporate planning, program evaluation and the development of performance indicators, and the revision at appropriate intervals of the department's corporate plan.

Future Directions

The model adopted by NSW TAFE for the planning, implementation and evaluation of its educational provision is designed to meet changes in community needs for TAFE and the increasing demand for accountability. The successful operation of this management process must be the

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responsibility of all managers in TAFE. The challenge of the future will be to provide educational programs of high quality wi^hin a climate of financial constraints. To meet this challenge close monitoring of the efficiency, effectiveness and appropriateness of these programs will be a requirement of all managers. It will be their responsibility also to ensure that teaching methodology is not only of a high standard but that all available technology is used in appropriate circums ances. This will require much co-ordinated experimentation.

In addition future decision making must be based on the best available data and for this purpose efficient and effective management information systems are essential. The data upon which future decisions are based must be accurate and pertinent to the decision making process. For accountability purposes the data must be valid and based on performance indicators which have proven reliability and general acceptance by stakeholders. All published data must be analysed and reported in a format which provides the rationale for decisions taken. Where problem areas are identified the management system must be able to react to take appropriate action. Once in place the process described in this paper will enable NSW TAFE to achieve its corporate and strategic goals and to meet the challenges of the future with confidence.

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