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ABSTRACT

A study to examine quality and standards in distance education identified the elements of quality, indicators that would signify their achievement, and processes that foster the achievement of quality. It focused on perceptions of quality of particular stakeholders. Documentation provided by institutions showed that they define and determine what they mean by quality of distance education against a range of objectives. Recommendations addressed issues of access and equity at national and institutional level as factors in the quality of distance education. Concerns with appropriate policy, organization, and resource distribution led to recommendations on the following matters: resources for academic staff development; development and use of appropriate technologies; encouragement of excellence in distance teaching; and establishment of guidelines for disbursement of funds. Recommendations designed to foster the quality of processes used in distance education involved consideration of course materials and their teaching and learning arrangements and of interactions among institutions, lecturers, and students. Indicators for monitoring and evaluating the quality of distance education were identified and organized under policy development, organization and resource management, and processes of distance education. (Appendixes include indicators of quality, views of teachers and institutional clients of distance education centers regarding quality and annotations of 57 selected works.) Contains 99 references. (YLB)

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**Report of the Project to Investigate
Quality and Standards in Distance Education**

1992

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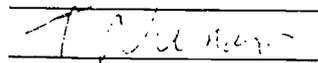
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Quality and Standards in Distance Education

**Report to the
National Distance Education Conference**

The members of the Project Reference Group

The Project to Investigate Quality and Standards in Distance Education was funded through the National Priority Reserve Fund and carried out with the support of the National Distance Education Conference Working Party on Quality and Standards in Distance Education. The Project was a joint exercise conducted by the University of South Australia and Deakin University with Associate Professor Ted Nunan and Professor Jocelyn Calvert as joint Project directors. The members of the Reference Group for the Project were:

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EXECUTIVE SUMMARY AND RECOMMENDATIONS

The focus on quality as a central theme in education in the 1990s is an outcome of the recent redirection and restructuring of higher education and is paralleled by developments in other countries. During this period, in which enrolment has increased and expanded to include a wider clientele, distance education and open learning have emerged as major vehicles for teaching and learning.

The Project to Investigate Quality and Standards in Distance Education was developed under the auspices of the National Distance Education Conference through its Working Party on Quality and Standards. It was commissioned by the Commonwealth Government in 1991 and carried out under the guidance of a reference group. Its conception predated the release of significant and relevant Commonwealth publications, notably *Performance indicators in higher education* (Linke, 1991) and *Higher education: quality and diversity in the 1990's* (Baldwin, 1991). Its completion comes at a time when the Higher Education Council is investigating the broader issue of quality in higher education.

The Project reviewed an extensive literature on quality, particularly in higher education, which deals with factors affecting quality, quality measurement and assurance, judging and evaluating quality, as well as the political and ideological issues surrounding its adoption as a focus of national and international attention.

Quality of education is a construct which draws boundaries between what is in and what is out; what is acceptable and what is not; what is valued more and what is valued less. Meanings attached to this construct are embedded in the language of educational discourse, have a history, and are constantly being reshaped and reformulated. Investigating the quality of distance education is, therefore, a complex undertaking which is located in an inherited context of time, place and power. Further, the act of investigation itself reshapes parts of the construct. Also, any investigation, in its methodology and its choices of what to investigate, cannot be divorced from the circumstances that prompted the investigation or from possible policy initiatives that may arise from it.

Given this situation, the term quality defies any definition which will be universally accepted. When it is linked to performance, quality implies evaluation for comparative purposes; 'measures' of quality invoke norms and standards and judgements of quality are assisted through use of norm or criterion referenced indicators. Where measurement focuses on the student as a product of education, quality is seen as 'value added' by the process of education. When the emphasis is management of quality, attention focuses on strategies for achieving or improving quality.

Quality also implies a combined judgement of 'how well' and 'how worthwhile'. In this context it must be asked who makes the judgements, on what basis, for whom and in whose interests. Judgements about quality are closely tied to the aims and interests of particular constituencies; they are owned by stakeholders.

In addressing its terms of reference, the Project sought to identify three things: the elements of quality (*what is valued* in distance education); *indicators* that would signify that these aspects of quality have been achieved; and the *processes* that foster the achievement of quality or its improvement. Recognising different perspectives and levels of analysis arising from different constituencies, the investigation encompassed government policy statements; institutional mission statements, policies and services; the views of academic staff and those providing distance education services in institutions; and the expectations of institutional clients of Distance Education Centres, both within and outside the higher education system. Students and employers as stakeholders were outside the terms of reference and ascertaining their views must be the focus of other research.

The Project has generated recommendations for fostering and improving the quality of distance education in a number of areas:

Access and equity

Worthwhile achievements may be outcomes that lie outside educational processes. Education at a distance, because it is closely linked to government goals for mass education and, in fact, is an instrument for achieving these goals, can be seen to serve the interests of the nation and the economy. While any national goals for higher education may apply to distance education, there are particular goals that are especially relevant to this mode. For example, one commonly acknowledged function of distance education is to widen access to higher education, thus contributing to the achievement of goals for social equity, lifelong learning, workplace education and links with industry. Thus, one set of recommendations addresses issues of access and equity at national and institutional levels as factors in the quality of distance education.

Policy development, organisation and resource management

Where value or worth lies within educational processes, distance education and face-to-face education (and variants of the two) may be directed towards, and achieve, identical educational outcomes. While educational achievements are fully valued, regardless of mode of teaching and learning, it must also be recognised that the processes that achieve parity of educational outcomes vary according to mode. Thus, issues of quality become linked to appropriate policy, organisation and resource distribution. In distance education, this concern leads to recommendations on such matters as resources for academic staff development; the development and use of appropriate technologies; encouragement of excellence in distance teaching; and the establishment of guidelines for disbursement of funds relating to distance education activities.

Processes of distance education

Particular means, in influencing how well something is done, may be valued above others. Thus, there is debate about the relative value of processes employed in education and distance education. An example is support for greater use of communications technology and of the techniques of distance education because of their perceived educational value, particularly for adult learners. This involves both quality and efficiency considerations and relates to increasing diversity of teaching and learning methods. Recommendations designed to foster the quality of processes employed in distance education involve consideration of course materials and their teaching and learning arrangements and of the interactions among institutions, lecturers and students.

Monitoring and evaluating

Also central to national and institutional efforts to ensure the quality of distance education are monitoring and evaluation. Issues relate to administrative responsibility, institutional policy formation and efforts to monitor and report on the quality of distance education. Further, where institutional clients have particular expectations regarding the quality of a purchased product or service, relevant information regarding such products or services should be available. Several recommendations address these matters.

Further development

The Project recognises that institutions have primary responsibility for designing effective quality assurance mechanisms. It is important to assess not only changes in quality but also the factors that contribute to these changes. Furthermore, it will be necessary to determine whether the introduction of policies and procedures may have unintended consequences that subvert the declared intentions.

The recommendations are addressed to the National Distance Education Conference, DEET, institutions engaged in distance education and schools and departments within these institutions.

The Project has also developed a set of indicators which institutions may use in monitoring and evaluating their own performance in distance education against their particular missions and objectives. This is consistent with Commonwealth emphasis on institutional self-monitoring.

It must be emphasised that a list of indicators compiled in such a way has particular shortcomings which signal the need for further work. First, the groups sampled did not cover the possible range of types of courses and mix of media with the possible result that what they emphasise is not universally applicable. Second, there are differences in emphasis among stakeholder groups which require further analysis. Third, relying on the views of current distance education practitioners gives credibility to current practice and voice to assumptions that may not be warranted over the long term or in all contexts in which distance education is practiced. Finally, as Linke (1991) has noted, the use of indicators may distort practices within institutions to conform to what is measured; where they are introduced, their effects should be monitored.

While the Project has focused on distance education, its relevance to wider practices in higher education is claimed. It is recognised that there are conflicting views about characteristics which define and distinguish distance education and about the relation of distance education to other alternative and non traditional modes of education. For statistical purposes, DEET defines external enrolment as the case where 'all units of study for which the student is enrolled involve special arrangements whereby lesson materials, assignments, etc., are delivered to the student, and any associated attendance is of an incidental, irregular, special or voluntary nature.' Other features of distance education include the use of non-contiguous communication and institutional service structures to support academics and students involved in distance teaching and learning. Clearly, other modes may exhibit some of these characteristics and the recommendations of the Project would apply.

The focus and conclusions of the Project are compatible with current investigations of quality in higher education and of the use of performance indicators. Consequently, the recommendations and the work on indicators may be seen as complementing that work.

Recommendations

Access and equity

- 1 That within institutions involved in distance education, the person with designated responsibility for distance education (see Rec. 4) be formally involved in all planning and review processes relating to distance education, in particular in the setting of access and equity targets.
- 2 That NDEC be actively involved in monitoring the extent to which distance education is employed in meeting national objectives for identified social groups.
- 3 That DEET fund a national Project to:
 - a evaluate academic program diversity at a national level, taking account of discipline, course, level of offer, admission requirements, quota, conditions of enrolment and delivery, and current levels of demand;
 - b identify means of regularly monitoring academic program diversity both within and across institutions.

Policy development, organisation and resource management

- 4 That institutions engaged in distance education activities assign responsibility for distance education to a person at a senior level of administrative responsibility.
- 5 That institutions establish specific guidelines for disbursement of funds relating to distance education activities, taking account of requirements for development (including research and course development) and delivery (including, besides academic costs, technology, academic and administrative support of students and residential schools).
- 6 That in the allocation of teaching loads, departments or schools make adequate provision for the workload associated with the preparation and revision of course materials, including involvement in peer review.

- 7 That institutions ensure that students studying in all modes have equitable access to appropriate academic and administrative support (e.g. library, study skills, counselling and computing services).
- 8 That institutions providing distance education involve staff with specialist expertise in teaching at a distance in their staff development programs.
- 9 That in the planning and review of courses, staff with specialist expertise in distance education are represented on the planning or review committees that involve external or mixed mode enrolment.
- 10 That institutions ensure that promotion criteria or codes of practice related to teaching recognise the quality of contributions to distance education including appropriate scholarship reflected in course materials.

Processes of distance education

- 11 That institutions consolidate and make publicly available their specific policies that deal with arrangements for off campus provision.
- 12 That institutions establish policies for the development, implementation and resourcing of the use of appropriate technologies in distance education.
- 13 That institutions review any policy statements on student rights and responsibilities to ensure their appropriateness to external students.
- 14 That procedures for planning and developing distance education, and monitoring and reviewing performance in distance education, in the area of course materials and their implementation address:
 - . format and presentational quality of learning materials;
 - . instructional quality including use of appropriate teaching and interactive processes;
 - . workload and assessment load;
 - . arrangements for student support.

Monitoring and evaluating distance education

- 15 That institutions with a substantial involvement in distance education include in their annual reports major achievements or developments in the areas of:
- . external course development and production;
 - . technologies used in distance teaching and learning;
 - . student support techniques;
 - . research and evaluation of distance education.
- 16 That institutions involved in distance education identify and publish a list of input, process and output indicators that they intend to use in monitoring and reviewing performance in distance education against relevant institutional objectives.
- 17 That all course materials used in distance education carry a statement of acknowledgement for input and support received from individuals and organisations involved in their development and production.

Future developments

- 18 That NDEC monitor institutional responses to the recommendations of this report by seeking specific information on particular areas covered in the recommendations.

Chapter 1 THE CONTEXT

Introduction

The National Distance Education Conference (NDEC) was convened in 1989 at the time that eight Distance Education Centres (DECs) were designated as the principal providers of higher distance education in Australia. Its principal purpose was to coordinate, and foster cooperation in, addressing national goals for distance education. At its first meeting, NDEC established working parties to examine and report on areas of national interest. One of these was the Working Party on Quality and Standards.

After discussions within the group and with NDEC, the Working Party reached the conclusion that, while quality was much talked about in the context of distance education, there had been no serious attempt to define it or its elements. Furthermore, there was no consensus on the relative importance of various features that might be taken to contribute to the quality of distance education programs. As a result, a project was proposed to examine the issues and make recommendations on how quality and standards in distance education could be defined and assured. Further, it was defined as a developmental exercise in which those involved in different aspects of distance education would contribute to the development of a set of definitions and standards of practice. This plan was supported by NDEC and the Department of Employment, Education and Training agreed to fund the project.

The call for expressions of interest from higher education institutions made reference to the fact that the assessment team that had reviewed applications for designation as Distance Education Centres had considered "the quality control mechanisms and systems established by the institution, the extent to which such mechanisms were formalised rather than at the discretion of the individual academic, and the capacity of the institution to rectify faults where these were identified." It noted the need for:

- . quality assurance in distance education;
- . an agreed definition of the elements of quality;
- . guidelines to enable DECs to assess their own operations.

Addressing these concerns, the aim of the Project to Investigate Quality and standards in Distance Education was:

to develop an inventory of standards that enables distance education provider institutions to define acceptable quality of service and to assess strengths and weaknesses in the provision of services as an aid to long term planning for quality improvement.

The anticipated outcome of the project was:

to inform specialist providers of distance courses of the standards and services that are the goals in the national provision of distance education and to assist the overall evaluation of distance education in Australia.

Terms of Reference

The Terms of Reference for the project were as follows:

1. Review the relevant literature on quality and standards in education, distance education and selected service industries and compile an annotated bibliography.
2. Survey the eight DEC's on their perceptions of what elements constitute quality in distance education and what procedures, policies and services they employ to ensure the quality of course materials and course delivery, seeking information on
 - . each service and what it provides;
 - . suggested criteria and levels of performance, encompassing both processes and products, which are thought to define acceptable quality.
3. Develop an inventory of services available from the eight DEC's in the areas of course development and course delivery.
4. Seek input from potential client institutions on proposed standards for DEC development services as they relate to client satisfaction.
5. Review current work on performance indicators and their application in higher education with the aim of ensuring compatibility or comparability of any indicators developed through the investigation.
6. Recommend an inventory of procedures and standards employing, where appropriate, performance indicators on
 - . the development procedures and the services provided by DEC's that ensure the educational and production quality of distance education materials;

the teaching, student support and ancillary services that characterise satisfactory distance education programs.

7. Prepare support materials, in the form of a guide or case study which illustrate the effective application of the indicators and standards in assessing the quality of distance education systems and services, place these standards in context, and provide advice about how to apply them and the difficulties that may be encountered.

What is distance education?

The view taken in this report is that there are no special characteristics of distance education which logically lead to conceptions of "teaching" or "learning" which would differ from the way we use those terms in relation to education generally. While it is recognised that there are conflicting views about characteristics which distinguish distance education and its relation to other alternative and non-traditional modes of education, there is nevertheless a practical way of identifying the enterprise of distance education. This practical identification follows the DEET definition applied for statistical purposes, namely, "Where all units of study for which the student is enrolled involve special arrangements whereby lesson materials, assignments, etc., are delivered to the student, and any associated attendance is of an incidental, irregular, special or voluntary nature".

Other features of distance education include the use of non-contiguous communication and institutional service structures to support academics and students involved in distance teaching and learning. Different 'modes of study' may use pedagogies commonly used in distance education and the recommendations of this Project may well apply to certain characteristics of these modes - distance education is not uniquely characterised by particular teaching and learning situations. There is, however, a need to look towards characteristics of institutional arrangements and the teaching and learning environment which attends to the needs of students who, for whatever reason, do not attend the institution at which they are studying.

A later section of this chapter addresses the use of the terms open education and distance education in relation to this Project.

Policy direction for distance education

The project has its roots in broad policy directions outlined by the Commonwealth. The White Paper on higher education (Dawkins, 1988, 4.2) saw the Distance Education Centres as:

- . playing a key role in achieving government objectives of growth and greater equity in higher education;
- . enhancing the provision of external studies by reducing duplication, fostering cooperation between providing institutions and improving overall quality, availability and efficiency of external studies courses;
- . providing a mechanism for reducing system-wide costs in the area of production of course materials;
- . providing a mechanism whereby all institutions might have access to accepted national external course materials and supporting technologies.

In particular, the policy statement drew attention:

- . the suitability of external studies for mature age students;
- . external studies as the only means of access to higher education for rural and geographically isolated students, expressing a commitment to "further substantial expansion of external study opportunities for people from more isolated communities";
- . the existence of "parity of esteem" so that a qualification gained by external means is regarded equally with a qualification gained by on-campus study;
- . the desirability of increasing the efficiency of delivery, in part through economies of scale resulting when particular course materials are used by comparatively large numbers of students;
- . the growing trend towards the use of high quality instructional packages developed for external studies to improve the quality of teaching for internal students;

proposed developments in reporting where institutions [would] be asked to specify appropriate equity goals, strategies, priorities and measures of performance as an integral part of their educational profile statements.

While these statements indicate a concern for quality, there was little indication of what was deemed to exemplify quality. The team that considered applications for designation as a DEC (Joint Department of Employment, Education and Training/Higher Education Council Assessment Team, 1989) referred to quality in only two contexts. First, they reported that in their visits to institutions they noted the quality of design and production of course materials but were unable to assess the quality of the academic content. Second, they concluded that the quality of student support warranted improvement although they did not state what would constitute such improvement.

A later briefing paper on distance education in higher education (Department of Employment, Education and Training, 1990, 3) noted that DEC's would:

- develop course packages for use by any institution teaching a particular discipline internally;
- collectively have the potential to assume responsibility for the course offerings of most non-DEC's choosing to withdraw from external provision;
- be involved in "new course developments and quality improvement projects."

It was in this climate that the terms of reference for the project were determined. A trial evaluation study on the use of performance indicators was yet to report and there was uncertainty in the higher education sector regarding the determination and use of quantitative and qualitative indicators and about what quality assurance mechanisms might be proposed by government. During the course of the project, however, three government publications set the parameters for the discussion of quality and its measurement in Australian higher education. In order to ensure the relevance of the project in the discussion, it is necessary to review its terms of reference in the context of the framework they provide.

Performance indicators in higher education

Performance indicators in higher education (Linke et al., 1991), commissioned by the Commonwealth Government in 1989, marks fifteen years' investigation of means of improving accountability and efficiency in Australian higher

education. The task of the Performance Indicators Research Group was "to develop and trial a broad range of quantitative indicators suitable for evaluating relative performance in higher education at both system and institutional levels and to report on their practicability, data requirements and appropriate conditions of use? (p9).

The Project to Investigate Quality and Standards in Distance Education clearly has roots in this ongoing investigation and may profitably take account of the premises, findings and recommendations of its more broadly based analysis.

The report identifies three categories of indicators that reflect "the different background characteristics and functions of higher education institutions" (p12):

Institutional context indicators "provide a measure of various background or input characteristics which may influence institutional performance." They "aid the interpretation of the indicators relating directly to institutional goals so that judgements about relative performance can take into account the specific context of each institution." (p17)

Performance indicators "measure the relative achievement of institutions and their constituent organisational units against their respective aims" [*italics in the original*]. (p17)

Participation and social equity indicators concern "representation of disadvantaged groups and variety of educational provision" (p12). They "are in part a reflection of institutional context but may also provide a measure of performance against particular institutional goals." (p17)

Several points made in the report are worthy of mention in the context of the present study:

First, one criterion for use as an indicator is "the existence of a valid and reliable data source", so that collation may be routine and accuracy "checked at the point of collection" (p18). Thus the report, in presenting each indicator, notes existing data sources and, where applicable, their shortcomings. This point is important for two reasons. Indicators must be judged on their practicality for collection over time and must readily be verifiable for purposes of comparison, both longitudinally and across the higher education system. This limits the number and range of indicators that may be applied on a national scale.

Second, the report rejects the notion of "an ideal reference point or indicator value", pointing to "the essential diversity of aims and organisational practices which exist throughout the higher education system and which sustain its continuing development and adaptability to change" (pp12-13). Instead, it recommends that the range of indicators "allow different institutions to express their own areas of emphasis and to identify their strengths and weaknesses in performance on the basis of their particular profile" (p131).

Third, while recognising that "educational indicators...can only be interpreted in a meaningful way by reference to comparative values" (p12), the report cautions that meaningful comparisons require attention to context and changing pressures and must be interpreted in terms of underlying aims. Indeed, it recommends that "a system of implementation [make] appropriate provision for discussion of results and informed judgements on the possible consequences" (p131).

Fourth, the report takes the view that quantitative indicators cannot "provide a comprehensive measure of educational quality" (131) and cautions against "mechanistic application of performance indicators as a substitute for, rather than an input to, qualitative judgement" (p134). In this view, indicators may be one source of information contributing to judgements of quality. There is a danger, however, that, once indicators have been selected, there will be a tendency for institutions "to direct their performance to the indicators themselves, regardless of what they reflect, rather than to the underlying issues of educational and research excellence, or indeed to any specific institutional goals." (p131)

The report uses organisational structures, educational content and research and development as its three basic dimensions of analysis. There is no attention given to other ways of identifying subsystems — indeed, to use a subsystem classification which did not broadly reflect arrangements in higher education on a national level would have defeated the purposes of the evaluation study. Consequently, the use of external load as a dimension for analysis (and the consequent generation of indicators reflecting education at a distance) was outside the genesis and terms of reference of the Performance Indicators Research Group. This is not to say, however, that the report does not have relevance in areas which apply equally to internal and external aggregations of students; however, there is a need for careful interpretation as the aggregations used in the study are not intended to distinguish issues of performance by mode of study.

For purposes of the present project, the report on performance indicators suggests that, where quantitative data are clearly defined and readily collected over time, such data may serve as useful input to inform a broader analysis of performance in distance education. In addition, quantitative information on aspects of distance education activity may provide useful background information for use, with other measures such as qualitative judgements, in interpreting overall institutional performance. The findings of the report also suggest that any quantitative indicators should be matched either to national goals for distance education at the system level or to particular profiles and strategies at the institutional level.

Finally, the particular indicators recommended in the report require analysis for their appropriateness to the distance education context. For example, to the extent that the Course Experience Questionnaire tested and put forward by the Performance Indicators Research Group reflects perceptions of classroom teaching, it will require adaptation for off campus courses.

As another example, large numbers of off-campus students will influence the interpretation of typical statistics on measures such as student program and graduate employment (since most external students are in employment and study part time) thereby linking external load to these institutional context indicators.

Higher education: quality and diversity in the 1990's

The policy statement of the Minister for Higher Education and Employment Services (Baldwin, 1991) pinpoints quality as a priority, noting "the need for credible quality assurance arrangements for Australia's higher education system, and for arrangements to systematically reward excellence in teaching as well as research" (p2). The statement announces several initiatives "to promote institutional management of quality and to demonstrate that the system is meeting expectations" (p30). These include a reference to the Higher Education Council "to investigate the characteristics of quality in higher education" (p30), grants from the Reserve Fund "to encourage and reward good teaching practices" and for projects "aimed at enhancing teaching quality" (p32), the creation of a National Centre for Teaching Excellence and a special fund to reward "good performance in the use of all available resources to attain the best quality" (p33).

The statement notes the Government's "particular interest in accountability for the use of public resources" (p29) and the fact that the "majority of OECD countries have some arrangements for quality assurance in higher education [frequently with] provision for quality assessments to be taken into account in

funding decisions" (p34). The statement rejects such intervention for Australia, however, preferring instead a system of incentives coupled with institutional self monitoring and reporting in the context of institutional circumstances and goals. In formulating recommendation, the Project needed to take account of the philosophy and directions outlined in the statement. These concern, in particular, the roles and interests of institutions and Government, the locus of responsibility and the evidence that should be amassed.

The statement is clear in assigning responsibility to institutions

to determine their mission, to define what they mean by quality and standards of performance against their own objectives, and to identify and provide the evidence necessary for them to gauge their success and satisfy their various stakeholders. (4.12)

The emphasis is on institutional responsibility for developing their own standards and criteria for quality in the light of their missions and objectives. The implication for the Project is a set of suggestive guidelines and indicators that can be adapted to particular needs.

The statement also stressed the importance of "management systems for resource control and performance monitoring" on the grounds that these "are essential to accountability which is the other side of the autonomy coin" (4.11). Applied to distance education, this suggests the appropriateness of attention to means of allocating resources and monitoring their use.

With regard to performance indicators, it is stated that "The Government has no intention of prescribing performance indicators to be used by institutions" (4.14). Instead, it sees "indicators being of most use to institutions as part of a self assessment process rather than in direct application to funding at the national level" (4.13). This suggests that the Project aim at identifying indicators that will be most useful for institutional self-monitoring. Besides quantitative indicators such as those developed in the Linke et al. study, the statement also acknowledges the usefulness of "qualitative" indicators (4.15).

The statement expresses Government's interest in "assisting institutions to establish and develop their management information systems" and in "supporting institutions' efforts to maintain and enhance quality of course design, teaching, assessment and staff development" (4.16). The Project may recommend, therefore, ways in which such assistance could be provided.

Finally, the statement makes specific reference to the DEC's in the context of technological innovation:

The Government believes that recent developments in communications and information technologies have the potential to improve both the quality and efficiency of higher education provision. It believes that technological innovation, particularly the technologies developed in the operation of the DEC's, has opened up opportunities for alternative delivery modes to be applied in higher education to enhance quality and increase diversity. (5.33)

The Project thus should recommend procedures for relating innovative technologies to quality and efficiency.

The quality of higher education

The Higher Education Council's discussion paper, The quality of higher education, was published in 1991 to facilitate national debate on the characteristics of quality, strategies for fostering it, the factors affecting it, the relationship between quality and resources, and the means of monitoring changes over time.

The paper provides a range of ways to define quality and states the Council's position which can be summarised as follows:

- . judgements about quality are appropriately made within universities, their faculties and their departments;
- . there are a range of stakeholders in higher education — the institutions, students, employers, governments — who have the right to expect to be assured about the quality of higher education;
- . it would be valuable to develop a common framework that could be used by institutions both in the ways they judge quality internally and the ways they assure external stakeholders of their quality.

In developing a common framework, it is proposed that the central theme should be the experiences of graduates who have received a quality higher education. Judging quality in institutions should involve all aspects of their operations and the basis of judgement of these aspects should be their perceived function in contributing to graduate outcomes. This position represents a complex and multifaceted view of the factors that impinge on quality, the framework within which judgements are made, and the acceptability of the framework as appropriate for assuring external stakeholders.

The relationship between judgements about quality and stakeholders highlighted in the paper was reflected in the way the present Project attempted to focus on the perceptions of stakeholders identified in its terms of reference. The Project did not, however, address graduate outcomes.

The Draft Code of Practice for University Teaching

In December 1991, the Australian Vice-Chancellors' Committee released a draft code that was intended as a 'useful model against which universities can assess and adjust where appropriate their individual teaching practices'.

The draft code contains statements which reflect the position established for the current Project. For example, the Project addressed such matters as institutional commitment through mission statements or aims, teaching excellence as a criterion for promotion, professional development programs to assist staff, review of new and existing courses, and workload issues.

While the code of practice does not explicitly deal with teaching at a distance, it is clear that, by recognising the impact of institutional and departmental management in its statements of good practice, it can readily be applied to teaching and learning at a distance.

The Project's approach to investigating quality

The Project, which developed its approach before these reports were issued, chose to focus on perceptions of quality belonging to particular stakeholders. This decision was based on an analysis of quality (see Chapter 2) that highlights the central role of values in any appraisal of the quality of education. Embedded in stakeholder views are a complex mix of uses of the term which reflect various positions. For example, quality could be variously identified as the magnitude of change within a particular student or the acceptability of the level of student work in a course. That is, quality could be both open to comparative judgements (most likely when the learning outcomes of students were subject to wider review as in Masters level thesis requirements) and potentially beyond comparative judgement (where graduates of different disciplines bring different backgrounds to a graduate diploma course and the student outcomes, while meeting a minimum requirement, vary considerably).

The Project saw considerable value in investigating stakeholder views about quality because it could then ask stakeholders to participate in framing indicators. Following Franklin (1988) such an approach is process oriented, concerned as much with performance improvement as performance evaluation, and involves the active participation of those who may be evaluated.

Such a participatory approach was seen as important to meeting the needs of institutions as they move towards self monitoring, evaluating and reporting their performance. Any indicators arising from this process would be:

- . viewed as 'convenient proxy measures' with attention given to the various qualifications about use, appropriateness, validity, etc.;
- . structured from viewpoints which positively reinforced the value of the role of the stakeholder in quality improvement.

There are problems associated with this approach as there can be difficulties in combining 'bottom-up' stakeholder views with 'top-down' management directives about quality. However, in avoiding resistance from those whose 'view of reality' might be depreciated by judgements made by others about appropriate indicators and their use, it is hoped that indicators developed through the study can be used in a developmental way so that there is an integration of top-down and bottom-up priorities within the context set by institutional priorities.

It is important to note that the investigation was limited by its terms of reference to investigating quality and standards employing the viewpoints of stakeholders such as government, educational institutions, client institutions and providers (professional and support staff working in distance education and academic staff.) The terms of reference did not involve student perceptions of quality of distance education. In the perceptions of the various stakeholders, however, it was clear that their views were structured around ways in which they might provide the best possible experiences and support for external students.

Education at a distance, open learning and the Distance Education Centres

The recent focus on the implications of increasing 'openness' in the teaching and learning milieu of higher education has been the subject of a discussion paper, *Open learning*, commissioned by NBEET and DEET (Johnson, 1990). Distance learning, considered as a category or mode, can be seen as a subset of open learning (Thorpe and Grugeon, 1987, 2). The implication of this is that it has been overtaken, outclassed and outflanked (Gawthorne, 1990).

At the level of methodologies for teaching and learning, open learning is an attempt to apply whatever technology and technique is thought appropriate to providing the learner with access and flexibility. These may involve a number of variables, including time, location, pace and choice of assessment in the course of study. The conventional dichotomy between face-to-face and distance mode thus is rendered irrelevant. Both the underlying philosophy of 'openness' and the ways that technology can be used in educational settings have resulted in calls for recognition of a range of alternatives beyond internal or external mode.

The use of a range of techniques and technologies is seen to constitute the 'cutting edge' of practice which draws support from the view that higher education institutions ought to utilise the best and most appropriate techniques available regardless of how such methods previously may have been characterised. Cross fertilisation between approaches should widen the range of instructional technique and delivery processes. Thus, face-to-face teaching will be changed by the employment of techniques of teaching at a distance; teaching at a distance may, through technology, address groups at a 'local' centre, thereby supplementing approaches which, through course materials, address individual learners.

Thus these are strong arguments which:

- . challenge the distinctiveness of education at a distance, and consequently,
- . challenge the need for consideration of distance education as a special category for policy development;
- . support the need to explore the benefits available to the institution and student if there were greater use of mixed or alternate mode delivery of courses.

Clearly, the Project is charged with making recommendations about distance education, and inherent in this is a focus on what stakeholders identify as distance education. It will be important, however, that the Project acknowledge that some of its recommendations may well have wider applications linked to open learning. A central question taken up in Chapter 6 is how to account for changing practices and possible future developments where the methodology and terms of reference of this Project have been necessarily focused.

Applying the Project's terms of reference

Term of reference 1 involved a review of the relevant literature on quality and standards in education and distance education. The analysis of the literature is provided in Chapter 2 while a working bibliography and annotations of selected works are provided as appendices 4 and 5.

Term of reference 2 involves a survey of the distance education centres on their perceptions of what elements constitute quality in distance education and what procedures, policies and services they employ to ensure the quality of course materials and course delivery. Taken with term of reference 3 which involves developing an inventory of services available from the distance education centres these two terms of reference have resulted in collecting data about policies (Chapter 3) and management for quality in distance education (Chapter 4).

The perceptions of stakeholders have been collected together and expressed as indicators in Chapter 5.

Term of reference 4 is to seek input from potential client institutions on proposed standards for distance education centre development services as they relate to client satisfaction. Appendix 3 explores perceptions from other higher education institutions and corporate clients (Education Engineering Australia, Telecom and the Australian Taxation Office).

Term of reference 5 involves a review of current work on performance indicators and their application in higher education with the aim of ensuring compatibility or comparability of any indicators developed through the investigation. The analysis to meet this term of reference is provided in Chapters 1 and 2.

Term of reference 6 involves recommending an inventory of procedures and standards employing, where appropriate, performance indicators on course development, teaching, student support and ancillary services. Chapter 5 contains performance indicators while various recommendations are made in relation to their use.

We have provided a range of materials as appendices so that the reader can consider any recommendations or work on indicators with reference to the data collected by the Project.

Chapter 2

THE QUALITY OF DISTANCE EDUCATION – WHAT DOES IT MEAN AND HOW IS IT JUDGED?

Introduction

It is hardly an exaggeration to say that, just as funding issues dominated the past ten years, so quality issues will dominate the next decade. (The Higher, 1991)

The focus on quality as the theme for the decade is an outcome of the redirection and restructuring of higher education. During this period of upheaval, distance education has emerged as a major vehicle for teaching and learning. This chapter examines the concept of quality and standards in distance education against the backdrop of higher education change and development and the broader debate about quality that has ensued, with particular reference to the current examination of quality in Australian distance education.

The development of quality as an issue in higher education

The prominent place of quality and performance monitoring on the Australian educational agenda has parallels in other industrialised countries. It is, in fact, the current phase in the intervention by the state into the affairs of the higher education system. Institutional autonomy has been replaced by conditional autonomy as governments have sought to assert a management role over education systems in an attempt to direct them towards particular sociopolitical and economic ends.

The widespread nature of this trend has been well documented. De Weert (1990), for example, analysed the reasons behind this intervention by the state and outlined its impact on systems in the countries of Western Europe. Pollitt (1990), in his review of the situation in British universities, recorded the appearance of externally imposed structures of quality control and performance monitoring in parallel with similar developments in continental Europe and North America. According to Wright (1989), this intervention by the state in Britain includes the measurement of performance, regulation of standards and efficiency improvement procedures. He views it as a means of monitoring any response of the system away from serving the material interests of those professions served by it towards new social and economic ends in tune with the political ideology of governments. He also contended that intervention has resulted because there has been a change in the public attitude towards the professions which goes beyond distrust of the ways in

which they use their power to a 'questioning of the nature of the esoteric and technical knowledge which has - traditionally - been the basis for claims to expert status'. (p151)

Interestingly, he is sceptical about any long term effects of intervention upon the system, believing that professionals will re-assert and reproduce their power base by re-establishing 'the very vocabulary within which needs are apprehended and expressed and set the criteria for what is to count as education.' (p152)

Pollitt (1990), again with reference to the British system, analysed the changes in higher education by employing Kerr's (1987) assertion that universities are experiencing a 'critical age'. While the first wave of criticism in the 60s centred upon 'greater opportunity', the theme of the second wave of the 80s was competence. The 'modernisation perspective' encapsulates four key assumptions or assertions about the present:

...first, that this is a critical phase; second that the crisis concerns a failure on the part of the universities to measure up sufficiently rapidly to the 'needs' of contemporary society; third, that prominent among these unsatisfied needs are those for demographically broader access to higher education and for enhanced 'competence'; and fourth, that the more rapid acceptance of these needs by universities requires, and is calling forth, vigorous intervention by 'society' in what was until recently regarded as the universities' sphere of legitimate autonomy. (p61)

The changes linked to this modernisation perspective were seen by Sizer (1988) to involve a change in the culture of institutions. He noted of universities in the United Kingdom that there are:

...pressures on institutions, particularly universities, to change their 'culture' from the free oligarchic and consensus model, supported by administrative styles of management, which assumes that strong professionals on lifelong tenure are allowed to regulate both resources and academic developments and judgements through collegial means...to an entrepreneurial and market economy model with executive styles of management. (p153)

The situation for German higher education was reviewed by Frackmann (1991) who commented:

With higher education entering the 'mass production' era the public confidence in the institutions' 'self management' capabilities with respect to quality seems to be somewhat injured. Without overemphasizing the analogy with industry, one might ask: What is it that forces industry to consumer orientation in the course of mass production? Undoubtedly, the search for an answer reveals the competitive environment, the existence of a market as being the driving force for consumer orientation and quality assurance in industry. No wonder that, while higher education has no longer an 'elite' but a 'mass' education function, public scrutiny is increasing as to whether higher education quality is controlled sufficiently by an environment functioning similarly as to what we witness in the economy. (p6)

Kalkwijk (1991) reviewed the issue of quality assurance in the Netherlands and noted that the legislative framework there has resulted from an intention by government to intervene to a minimal extent in the affairs of the institutions of higher education provided that they are able to demonstrate that education and research meet quality requirements. According to Vroeijenstijn (1991), the Dutch Government is interested in education quality assessment because:

- 1 The Government has the constitutional obligation to assure the quality of education.
- 2 The Government is called to account to the Parliament for the spending of money. Can the Minister defend his decisions?
- 3 The Government has its own aims with Higher Education, so mass-Higher Education is a political decision. (p2)

Performance and quality in Australia

Similar developments in Australia have been summarised by Linke et al. (1991) in a report on the use of performance indicators:

Performance appraisal in higher education has become a matter of increasing importance over the past 20 years or so throughout the developed world. The trend in Australia derives mainly from continuing pressures for expansion of higher education associated with general funding constraints. Partly as a result of these conflicting pressures, and partly because of the perceived slowness of change in higher education institutions, there has emerged a persistent and increasing call for improved efficiency and public accountability in all aspects of higher education. (p1)

This concern for university performance in Australia is punctuated by reports and activities spanning almost a decade. The *Report of a study group on the measurement of quality and efficiency in Australian education* (Linke et al., 1984) and *Quality measures in universities* (Bourke, 1986) examined the feasibility of assessing performance. More recently, the Senate Standing Committee on Employment, Education and Training posed quality of education as an issue of concern. Other developments such as the Second Tier Industrial Agreement, the Australian Vice-Chancellors' Academic Standards Program and the AVCC/ACDP Working Party on Performance Indicators have generated a climate of interest in issues surrounding 'competence'. Hattie (1990), in an extensive review of performance indicators in education, linked these developments to the changes outlined in the Green Paper (Dawkins, 1987) and White Paper (Dawkins, 1988). Thus, the recent statements, reports and initiatives described in Chapter 1 were quite simply the culmination of a progressive process of development.

It is significant that the exercise of examining quality was already underway in one part of the Australian higher education system through a Project funded by the Government. Distance education, which has received the special attention of governments around the world during the last twenty years, is an important element in the movement to mass education, lifelong learning and workplace training. It also has the dual qualities of making teaching explicit and open to review through its use of teaching and learning materials and of providing contrasts to conventional campus-bound education; both of these characteristics raise questions about parity of quality.

For some, a national investigation of quality and standards in distance education was gratifying recognition that review of higher education will take account of the distinctive aspects of distance education and recognise that particular descriptors of quality framed from the general viewpoint of face-to-face provision may need refinement. For others, the fact that distance education was the first to receive attention supported suspicion that government was extending its intervention from general aspects of the system to specific subsystems, thereby signalling an intention to broaden its control. This fear may be assuaged, however, by the emphasis on self management in the Minister's policy paper (Baldwin, 1991).

The analysis of quality of education at a distance, according to the self management approach, should take account of the distinctive characteristics of this mode as part of a broader pattern of diversity and innovation and should provide guidelines for institutional management of quality as well as measures for judgement of performance. This analysis can only be useful, however, if it is linked to the general concept of quality in higher education and the framework set by government in relation to its intervention in higher education as a whole.

Quality as approbation

In discussion of higher education policy, the issue of quality often is raised in conjunction with concerns about expansion, structural change and funding constraints. In this context, the term quality signifies approval, commendation or satisfaction — in short, it provides a means of approbation. Used in this way as an all-embracing and general term, it does not have a precise meaning and therefore can serve various political and social ends. As Karmel et al. (1985) noted:

for some it appears to serve as a synonym for excellence or efficiency, others use it as a metaphor for good educational practice and others again equate it with material provision. For many it is no more than a shorthand way of expressing value discontent with the present outcomes of education while covering up a lack of urgent policies and priorities for action...quality will always remain a subjective entity. (33)

Declaring value discontent or approval can be an expression and exercise of power. Moodie (1988) commented that 'British universities, on the whole, seem to have believed that they exemplified quality and provided, in effect, an ostensive definition of it' (p11). Excellence and quality can therefore signal anti-egalitarian values; for example, the terms take on such meaning when they become part of the political rhetoric of those who believe 'more means worse' in higher education. Quality of education features in debates when the culture of semi-elite higher education is changed by the needs of a semi-mass system.

As an all embracing and general term, quality may also be used to approve or commend other general features of a system. Gale (1991), for example, linked originality and creativity with quality, stating that 'quality is about variation, individuality, and it will only be maintained if we also maintain difference'. The conditions for achieving quality are thus the focus of her concern — where the term quality remains undefined there is value commendation about a range of factors which are thought to foster quality. Commenting on the German

higher education system, Gale concluded that in East German universities, 'controls in the name of quality actually became controls in the name of intellectual death'. Quality, for Gale, is a factor of difference, autonomy and freedom.

The notion that quality as a concept defies definition yet is recognisable in practice is commonly held by those who use the term to commend or approve. Quality (and excellence) describe judgements of those who possess implicit knowledge about the practice of the area under consideration — for example, quality research is a judgement about an activity which can be made only by those engaged in research. This view is behind positions such as that taken by the Academic Audit Unit of the Committee of Vice-Chancellors and Principals of the United Kingdom that 'it is for the universities to say what they mean by quality and standards, and to show how they are achieved' (Williams, P.R. 1991).

Quality measurement and comparison

When it is linked to performance, quality implies evaluation for comparative purposes. T. Williams (1988) noted that:

...definitions of quality tend toward something like the degree of excellence, relative goodness, grade. The question to be asked then is 'relative to what?' Two possibilities are suggested. First, we can assess quality relative to some accepted standard...if we are unable to measure achievements against some accepted standard in order to measure their quality then there may be something learned from comparison with the achievements of others. (114, 115)

Such statements quickly move to consideration of 'measures' of quality and, in so doing, invoke norms and standards through the use of norm referenced or criterion referenced indicators.

Indicators are seen to assist in making comparative judgements or assessing achievement of goals. M. Smith (1988) outlined the link between comparison and indicators:

An educational indicator is generally expressed as a number. It is intended to tell us something useful about the nature and health of education, whether at the national, state, local, school or classroom level.

An indicator must also have a point of reference to give meaning to the number. A percentage has reference points of zero and 100.

Comparisons over time offer dates as reference points; comparisons among institutions, states, or nations have built-in reference points, as well. With the addition of reference points, indicators become more meaningful, more precise, more useful. In addition to points of reference, indicators assume some common understandings - the concepts of illiteracy, drop-out rate, and SAT score, for instance - whether or not such assumptions are justified. (p488)

Numerous writers have signalled the danger of trying to reduce quality to a set of numbers. In proposing a set of performance indicators for Australian higher education, Linke et al. (1991) cautioned:

The basic function of performance indicators is to assist in determining how well a particular institution or department has achieved its respective goals. In this respect they form an important part - but only part - of a broader evaluation process, in which their proper role as an aid to expert judgement rests on establishing a clear understanding of what characteristics are to be evaluated and what the indicators can and cannot measure in relation to these characteristics.

It is apparent from the analysis of individual indicators that we may specify certain quantifiable measures of efficiency and effectiveness of performance and that these may provide useful profiles of institutional activity. However in no area of academic performance is it possible to generate systematic data which would adequately serve as the sole source of information leading to an acceptable evaluation of quality. (xiii)

This view is reflected in the Minister's policy statement:

The Government will support the further development of quantitative performance indicators, while being acutely aware of their limitations. The Government sees the main application of such indicators being at the institutional level as just one of a number of possible tools for measuring performance. (Baldwin, 1991, 4)

Quality as magnitude of change

A more specific application of measurement that focuses on the student as the product of education defines quality in terms of value-added. This is 'a measure of the difference between students' achievement at the beginning of a programme of study and their achievement at the end' (Ramsden, 1991, 130)

and purports to reflect the extent to which an individual is transformed by the educational process. By focusing on magnitude of change rather than acceptance standards or absolute performance of graduates, such an approach aims to assess quality of education independent of its public prestige. For this reason, the value-added approach is particularly attractive for institutions that admit students without normal entry qualifications.

Linke et al. (1991, 130) concluded that the value-added concept could not be applied in the assessment of quality in Australian higher education, 'partly because of the lack of any universal standards by which to assess student achievement across the diverse range of higher education programs, and partly because of legitimate differences in expected educational outcomes or goals which cannot be applied across the system as a whole'. Moodie (1988, 11) pointed to the danger of wrongly attributing performance changes to institutional inputs when he commented that in such an assessment 'nursery schools and playgroups for the under-fives probably provide the highest quality education available'.

In contrast, S.L. Smith (1991, 126-127), considering quality control and performance indicators for Canadian university education, saw some promise for attempts to measure value added, but only in the assessment of core skills that may be expected of all graduates, such as written self-expression. By way of illustration, he drew attention to the initiative of one university where all students are assessed on entry and must complete a writing program within two years, noting that the initial assessment could be repeated upon exit to provide a measure of value added.

It is interesting that in their consultative paper *Quality tuition* a working party of the Open University (UK) have employed the concept of value added linked with quality in terms of learning outcome to define quality. They note that:

Quality tuition within the OU can be defined in two ways. Firstly it can be defined as process. It is the process which enables each unique individual student (within the immense diversity of the OU student population) to 'grow' as appropriate through active engagement with course materials, with the help of tutors and counsellors ...

Quality tuition can also be defined in terms of the learning outcome. Quality tuition will thus have been achieved if, against the judgements of the constituencies ... a state is achieved when every student finishing his

or her studies with the University has been enabled to develop to his or her full intellectual potential and to his or her full satisfaction within the chosen area of study. (p2)

Quality management

The value-added perspectives treat the graduate as a product of the system; a consumer orientation treats education as a service 'product' which the student 'buys'. Frackmann (1991) attributed concern for quality in Germany to a public tendency to apply market concepts to their expectations for higher education as the system expanded. In some countries, however, higher education operates very much in the competitive market. This is the case in the United States, and particularly in the area of continuing education, where competitive advantage is a dominant concern (Baden, 1987). As higher education in other countries widens its market and becomes more entrepreneurial, the consumer orientation becomes salient.

The 'consumer' can also refer to Government which, through funding public institutions, 'purchases' educational services. Marsh (1991, 16) commented that:

The notion of quality which pervades much of Government thinking is strongly linked to the notions of service and accountability derived from the market philosophy which has been increasingly applied to all public services. Associated with this philosophy is the concern that public services should demonstrate value for money and responsiveness to idealised customers, free to shop around for the best available service they can find.

According to Marsh, the commercial quality culture:

...emphasises quality of service as its goal and operates through quality systems which will deliver measurable indicators of quality to potential customers. Such systems are supposedly neutral and objective, seeking to meet the stated or implied needs of the customer rather than pursuing some abstract notion of quality...

The relatively passive term quality assurance (literally meaning to ensure the happening of quality) is rapidly being augmented by the harder-edged notion of quality management (implying the taking control of quality by executive action) and the associated requirement for quality systems, institutional audit and performance indicators.

While particular approaches to managing quality have received little attention in the higher education literature, allusion has been made to 'total quality management', described by Marsh as the 'evangelical' version of the commercial quality culture. This approach:

focuses on customers (internal and external) and quality (which can be defined in terms of meeting customers' needs) as means of improving organisational performance. It emphasises the continual improvement in the quality and cost effectiveness of all processes, goods and services, through committed leadership and the creative involvement of all staff at all levels employing relatively straightforward statistical analysis techniques. (Cutting, 1991, p367)

With total quality management, every worker has a customer either within or outside the organisation. To manage for quality improvement therefore depends upon identifying the complex chain of inputs and outputs, noting where the outputs of one area become the inputs to another. While total quality management approaches have been employed in private industry and government departments, their impact in education is recent and so far appears limited to training programs, particularly those involving partnerships with industry.

Quality and values

The important place of values has been stressed in the quality debate. Linke et al. (1991) made this clear in an analysis of the relationship of quality to other terms linked to performance — productivity, efficiency, effectiveness and evaluation:

For evaluation purposes it is essential to distinguish between productivity in higher education, which reflects the effectiveness and efficiency of institutional operations, and quality of institutional performance. We tend to speak of efficiency of performance as referring to the level of achievement of certain specified goals in relation to particular inputs or efforts. It has no connotation of quality or value. We may speak of effectiveness of performance as referring simply to the level of achievement of institutional goals. It has no connotation of quality or value and no reference to particular inputs or efforts. Quality refers to judgements of excellence of performance and to the value or worth of what has been achieved. However, this does not necessarily reflect the significance or importance of the performance in question — 'importance'

refers to estimates made of an activity's influence in the broad arena of human knowledge and experience, and not to how well something is judged to be done.

A statement about quality, then, is viewed most appropriately as a way of conveying comment on how well something is done and how worthwhile the achievement. Such a statement is relative and not absolute in that its meaning is best determined in relation to what others think. It has to be recognised, however, that perceptions of quality may be partly social, partly cognitive and partly political, and may also reflect factors other than the excellence of the activity. (p128)

The last sentence is particularly important in pinpointing the basis of sensitivity in discussions of quality. Judgements about quality are inextricably bound to values held by social groups. Poole (1988) noted that:

...fundamental questions concerning the meaning of quality need to be asked: (1) quality in terms of what (student satisfaction; performance indicators; market forces; quality of instruction?) (2) quality for whom (young people as clients of the system; for administrators as part of public accountability; for institutions of higher education; for employers?) and (3) quality in terms of whose interests (young people, the economy, the nation, international corporations?). (p51)

In this analysis, therefore, any determination of quality is a complex expression of sociopolitical choice. Partington (1990) also made this point when he demonstrated that conceptions of quality are linked to particular constructions of education (the instrumentalist, the radical-reconstructionist, the liberal and the child centred) and pointed to the ways in which the structure of discourse about quality differs significantly between such constructs. Beneath these discourses lie a wealth of sociopolitical values which readily bubble to the surface, both influencing and forming the basis of judgements about quality.

The quality of education at a distance

For the purposes of this report the investigators chose to follow the work of Linke et al. (1991) in noting that statements about quality convey comment on how well something is done and how worthwhile the achievement. A statement about the quality of distance education, therefore, should contain both of these elements.

Worthwhile achievements may be outcomes of value or worth that lie outside educational processes. Education at a distance, because it is closely linked to government goals for mass education and, in fact, an instrument for achieving these goals, can be seen to serve the interests of the nation and the economy. While any national goals for higher education may apply to distance education, there are particular goals that are especially relevant to this mode. For example, one commonly acknowledged function of distance education is to widen access to higher education, thus contributing to the achievement of national goals for social equity, lifelong learning, workplace education and links with industry that are thought to contribute to economic, cultural and social progress. In this context, distance education is clearly the means to achieve such ends, often with the inference that education at a distance is particularly effective, especially where it enables particular groups to participate in educational processes.

Statements about the quality of distance education also may focus upon worthwhile achievements within the educative process itself. Value is attached to certain generic skills, a body of knowledge and professional or technical skills considered to be the appropriate attributes of graduates, and thence to the academic content of courses and the communication channels thought necessary to achieve these aims. The inevitable comparison of distance education with other forms of teaching and learning may conclude equal achievement and, hence, 'parity of esteem'. Alternatively, distance education may be perceived deficient in its ability to convey particular academic content or develop particular skills or in its provision of communication channels and facilities. In the latter case, the conclusion of lesser quality may be drawn from assessment of individual elements of the educational package and process rather than from assessment of graduate achievement in the end.

Thus, the quality of distance education may be assessed in terms of the achievement of sociopolitical ends, the performance of graduates and the mode's success in providing appropriate content and communication. There are three implications of this analysis.

First, when value or worth is outside the educational process, distance education may be valued in itself as an effective means of achieving sociopolitical ends. In this context we can identify the ways in which national policies accord value to certain outcomes. Consequently, matters of access and equity, for example, become linked to quality of distance education.

Second, where value or worth lies within educational processes, distance education and face-to-face education (and variants of the two) may be directed towards and achieve identical educational outcomes. While educational achievements are fully valued, regardless of mode of teaching and learning, it must also be recognised that the totality of processes that achieve parity of educational outcomes vary according to mode. This totality of arrangements described by policy, organisation and resource distribution is valued in the way that it achieves excellence in outcomes - different mixes of processes may be valued less and represent inferior quality.

Third, particular means, in influencing how well something is done, may be valued above others. Here debate is about the intrinsic value in particular processes employed in education and distance education. An example is support for widening use of technology or the techniques of distance education because of their perceived educational value. This involves both quality and efficiency considerations and relates to increasing diversity of teaching and learning methods. In-so-far as distance education is identified by its reliance on technology, such issues become part of the debate about quality of distance education.

The relevance of current literature in the field of distance education to the quality debate

The literature of distance education is yet to analyse quality of distance education in terms of the areas identified above. Assumptions about what contributes to quality, however, are implicit in descriptive and prescriptive writing. In some cases, terms and procedures are adopted from industry. Guri (1987), for example, wrote about quality control systems and Lewis (1989) about "conforming to specification"; for both the specifications and processes are seen as the key to quality. Other writers have used parity with face-to-face education as a benchmark (Farren and Guiton, 1987; Tate, 1986).

Although some writers (e.g. Scriven, 1991; Viljoen, Holt and Petzall, 1991) have stressed the importance of students' views, emphasising that the goal of education is to satisfy their needs, more often the focus is on specifics such as the quality of course materials or the impact of a new technological development in allowing particular processes to occur thereby affecting the quality of distance education. For example, the Australian and South Pacific External Studies Association Biennial Forum held at Charles Sturt University in 1991 which addressed the theme 'quality in distance education' saw the majority of papers on how aspects of practice

could be linked to quality improvement. Papers addressed areas such as technology including audioconferencing (Thompson, D. 1991), television, (Moodie, 1991), videoconferencing, (Harris and Hague, 1991) and Email and computer applications (Howse, 1991; Thompson L, 1991); course and instructional materials development; (Bottomley 1991; Warn, 1991; Cauchi, Clift and Harris, 1991; Kemp, Nouwens and Towers, 1991); management for quality (Prebble, 1991, Inglis, 1991); quality in teaching and learning from the viewpoint of specific disciplines (Elliot, 1991; McIlroy, 1991; Leys, 1991; Smith, 1991).

This tendency to assume that the experts know best has been criticised by Barache (1988) who describes the approach as "bringing to the consumer that which is assumed good for him" (p13). Paul (1990, p33) has pointed out that "because so little is known about how people learn and because of the overwhelming influence of personal, as opposed to institutional, factors on a student's performance, the [choice of strategies and services to increase interaction with staff and students] is often a roulette game, an expensive hit-or-miss approach with marginal impact on completion rates and increased costs per student."

While it is the case that the majority of the works in the literature of distance education address quality from a limited framework or with reference to a particular process or aspect, there have been some attempts to provide a more global analysis, particularly where writers have adapted a 'value added' or total quality approach. However, such approaches have had difficulties in identifying how to apply such concepts within the area of distance education (and the same sort of arguments about difficulties in applying the concept can be made for the general area of education as well).

There is a further problem associated with exploring quality in distance education which arises from the 'industrialised' nature of the area - distance education is a collaborative undertaking where division of labour creates roles and responsibilities which are more overtly managed than in general educational activities. There is often 'compartmentalisation' of expertise and roles based around demarcation of authority. Within academic systems authority for educational decision making is frequently challenged, and resolution often through complex systems representing power groups. Those professionals engaged in teaching see their role as central to the quality of the enterprise and have encapsulated this authority in the term 'academic freedom' - intervention into issues related to teaching and learning within disciplines is always challenged especially where intervention is by others

outside of the academic or discipline based sub-culture. Consequently, investigating teaching and learning at a distance by other than those teaching at a distance can be seen as an infringement upon academic freedom and therefore an illegitimate intervention. Thus much of the literature of distance education deals with issues which surround teaching such as events prior to teaching (the writing of course materials), advising on the choice of media delivery systems, establishing institutional student support, the outcomes of teaching (persistence, withdrawal etc), the impact of technology and resource management, etc.

Using the framework provided involves looking at literature which addresses the identified ways in which the term quality can be applied within distance education. Quality of distance education in terms of the sociopolitical ends of access and equity has been explored in the Anwyl, Powles and Patrick study, *Who uses external studies? Who should?* (1987). Arger (1987) has also taken up sociopolitical issues in relation to Third World use of distance education while Nunan (1988, 1991) has elements of political analysis within writings about distance education in Australia.

The second area, that of valuing the ways in which the totality of arrangements contribute to achieving excellence, is not well represented within the literature of distance education. Few studies have attempted to draw together such areas and ground their analysis in the practices which define the operation of the system. One study, *Quality tuition* (1990) however, is illustrative of this approach in that it attempts to address quality (from the viewpoint of a two-sided definition) in the areas of course production and maintenance, academic support and supports which underpin the delivery of quality tuition. Recommendations focus upon policy, organisation and resource distribution to achieve quality outcomes from the viewpoints of particular stakeholders. *Quality tuition* is, in fact, a form of institutional review which is necessarily concerned with distance teaching and learning as it involves arrangements made by the British Open University.

The third area, that of ascribing quality to particular processes employed within distance education is particularly well represented. Processes such as interactivity can be influenced by technologies, techniques employed within teaching, devices employed in writing course materials and the like - such processes are appraised from both quality and efficiency considerations. The previous listing of works from the 'quality in distance education' conference illustrates this way of writing about the quality of distance education.

Applying the term quality within the project

The Project to investigate Quality and Standards in Distance Education has worked to explore its terms of reference through adopting a broad definition of quality - namely, a statement about quality involves views on how well particular educational activities are done and how worthwhile the achievement. In addition, the Project has worked from the position that:

- 1 Judgements about the quality of distance education can be made from the different frameworks of stakeholders.
- 2 All stakeholders have the right to expect to be assured about the quality of distance education. However, the Project's terms of reference constrain it to a limited range of stakeholders.
- 3 The Project will attempt to draw together views about factors which impinge upon the quality of education and provide recommendations which address managers, producers and clients of distance education. In drawing together these views the focus will be on how institutions manage for quality.

Chapter 3

INSTITUTIONAL POLICIES -

THE ROLE OF THE FRAMEWORK FOR DISTANCE EDUCATION IN DEFINING AND ACHIEVING QUALITY

Introduction

Institutional statements about distance education concern how well particular educational activities are done and how worthwhile the achievement. Consequently, they address both the quality of education achieved through distance education and the quality of educational processes within distance teaching and learning.

As we have already seen, education at a distance, because it is closely linked to government goals for mass education and, in fact, provides an instrument for achieving these goals, is imbued with sociopolitical values. Institutional policies, like national policies, accord value to certain outcomes which are linked to distance education. The worth of these intended achievements form part of any consideration of quality.

The Project sought published policy statements from each of the universities designated as Distance Education Centres. The policies were analysed to identify the range of concerns and commitments to complex value issues surrounding the institution's involvement with distance education.

It may be expected that the policy statements from institutions broadly reflect the social purposes attributed to distance education through government policy initiatives. For example, *A fair chance for all* (1990) details ways in which government intends to increase access to higher education, raising equity issues associated with the aim of enabling 'Australians from all groups in society (to) have the opportunity to participate successfully in higher education' in such a way that 'the balance of the student population.....reflect more closely the composition of society as a whole'. *A fair chance for all* sees a role for distance education in achieving greater access to education for the particular targetted groups identified. Institutional policy statements about distance education reflect such concerns and interpret these directions in terms of worthwhile achievements, often expressed in mission or goal statements of the institution. How well the institution applies itself to meeting such missions or goals is also a factor of the quality of education at a distance.

National policy statements about the socially desirable goals of educational systems connect distance education to the quality of education through common themes such as concern for access, efficiency of delivery, parity of esteem, the purposes of mixed mode provision, the role of technology in distance teaching and learning, and equity. Consequently, it would be expected that these themes or variants would be translated to each institutional setting and feature as a part of an institution's policies in distance education.

Institutional policies related to distance education

The documentation provided by institutions revealed a number of common features. The following outline selects statements from the range of documentation to illustrate the context within which distance education is seen to operate and the general purposes distance education serves in meeting institutional goals.

Institutions define and determine what they mean by quality of distance education against the range of objectives represented through the following:

1 *Views about the need for education at a distance*

Illustrating the ways that institutions saw the need for education at a distance, are statements which identify a range of reasons why potential students are unable to undertake studies. The institutions indicate a general commitment to attending to these situations by providing distance mode courses.

Typical examples are:

... as the most geographically isolated ...(the institution) determined early in its existence that it would do all within its power to ameliorate educational disadvantage wherever and whenever it could. As a consequence, (it) has developed a range of programs to offer to persons who are geographically disadvantaged as well as to those who for reasons of physical disability, work commitments, domestic circumstances or other reasons are unable to undertake on campus study.

... (the institution's) commitment to distance education means that the same opportunities can be offered to students who cannot attend on campus lecture programs because of work, family commitments or location.

The institution has a mission 'to maximise access to a range of high quality courses regardless of the student's place of residence, work commitments or mobility.

2 *Distance education and educationally disadvantaged groups*

There are, of course, access (and equity) issues related to how well higher education serves, and is used by, groups within the community which have low participation rates.

Typical examples of statements of how distance education is involved with meeting the needs of educationally disadvantaged groups are:

The commitment of (the institution) to increasing access to higher education generally and particularly through its external studies operation is second to none in Australian higher education. This can be demonstrated in relation to Aboriginal people, women, students with TAFE qualifications, the visually handicapped and those who are geographically isolated.

Distance education...has provided the key to higher education access for many remote, isolated or otherwise disadvantaged students. It provides access to a higher than normal proportion of students of low socio-economic status.'

...the centre's admission policy is sufficiently flexible to accommodate applicants with a variety of academic and work experience backgrounds. Applications are also invited from mature age people.

The institution made available special entry for mature age students in rural areas.

In external studies (the institution) offered...courses which were relevant to specific groups of employees who could not attend on campus i.e. prison officers, police officers etc. Pre tertiary courses for Aboriginal students and courses in Aboriginal Education were also offered.

...(the institution) aims 'to develop and implement admission policies that recognise educational and social disadvantage in general and the particular disadvantage experienced by most Aboriginal people'.

3 ***Articulation as an access issue***

To foster access to particular courses some institutions indicate a commitment to articulation. For example,

...a general Articulation Agreement (has been made) with TAFE to ensure easy transition and cross crediting for students who sought entry to higher education through post secondary TAFE College.

...the institution aims 'to improve educational effectiveness by implementing programs which enhance articulation and credit transfer'.

4 ***Cross enrolment and cross crediting***

To provide an extended choice of subjects within the university system, policies indicate support for cross enrolment and cross crediting arrangements. A policy statement indicated 'cross institutional enrolments are freely permitted.'

The support for cross enrolment and cross crediting, within external mode, is seen as a way of avoiding unnecessary duplication of effort in the production of courses and their materials. Institutions typically note:

A strong commitment to avoid unnecessary duplication of course offering and to foster state wide and national co-ordination through network arrangements for cross enrolment and course provision in the external mode.

...(the institution) was to participate in the joint development of a state wide system of external studies and student support services in collaboration ... with other institutions.

Further, (the institution) supports the determination of the Commonwealth both to maintain the present dispersed system of external studies provision and to achieve a desirable degree of rationalisation by reducing duplication where this is wasteful, fostering co-operation among providers and improving the overall quality, availability and efficiency of external teaching within the higher education sector.

5 *Mixed mode and flexibility*

Within a particular institution the availability of distance mode studies, as well as face-to-face tuition in the same area, is seen as a benefit. The resulting flexibility in the way such courses can be delivered increases the possibility that various students will be able to participate and progress through the course. Institutions note:

Flexibility in administrative arrangements is seen to increase the options of external students and may therefore increase access. Course options are greatly increased through enabling students to choose a mixed mode of study.

Mixed mode enrolment provides opportunities for study in both the internal and external modes concurrently or consecutively and thus provides opportunities for study for non school leavers and disadvantaged groups. The importance of this mixed mode of enrolment in relation to achieving the Commonwealth's equity objectives of improved access and progress of disadvantaged groups is stressed.

...(the institution) has made this mixed mode enrolment option available and in any one semester one third of all OTHD students are enrolled in at least one external mode course and by graduation over sixty percent have experienced mixed mode study.

Flexible teaching arrangements are also seen to assist disadvantaged students.

In order to increase access for disadvantaged groups the institution has deliberately adopted an approach to course provision that emphasises the use of flexible learning and delivery strategies.

...weekend and vacation schools provide access to other students, academics and library resources.

6 *Parity of esteem*

Parity of esteem between modes generally follows from mixed mode participation. Institutions note:

Course flexibility ... (range of courses, flexibility in completion) ... was inherent in our initial brief in the development of two equivalent study modes.

Prima facie, all programmes (except veterinary studies) at ordinary degree, honours and masters by course work level may be developed externally.

...the provision of full majors was inherent in our initial belief in the development of two equivalent study modes, and it facilitated ease of movement between modes to meet changing student circumstances.

The 'parity of esteem' between modes provides the academic conditions for viewing external studies as an alternative and equivalent mode which should be potentially available to all students. Institutions characteristically note that external studies should be:

...a viable alternative learning mode available to students by choice rather than a substitute education for the geographically disadvantaged;

available equally to students in the metropolitan area and in country centres

7 *Academic services*

The importance of equitable provision of academic services is addressed primarily with reference to the role of the institutions' libraries in meeting special needs of external students:

The library provides a service for two groups of distance education students - those living in the vicinity ... who are expected to borrow in person, and those living further afield who are entitled to have material posted to them.

Discussion and recommendations

The provision of distance education is clearly linked with a concern for providing access to university courses. The provision of access can be seen in terms of:

- . providing, for any student who meets admission requirements and is selected, the means to study a course where the student either cannot, or chooses not to, attend the institution.

- . providing a greater range of courses by distance mode.

making available greater opportunities for those groups within the community which have low participation rates. Here access is more closely linked with concerns for equity, as policies specify targets for participation involving particular disadvantaged groups.

Increasing access does not necessarily improve equity. While institutions would like to believe that increasing access will result in greater representation of disadvantaged groups in higher education courses, this is not necessarily the outcome of increased access. For example, increasing access through mixed mode provision may simply make it more convenient for those who are already over-represented in higher education. Also, mixed mode studies can be a pragmatic solution to overcome timetabling/staffing/space concerns. However, there are possible learning advantages for some students in being able to choose between different learning styles provided by internal, external or mixed-mode provision. Further, the cross-fertilisation of methodologies and innovations in different modes is seen to be of value for both institutions and students.

It is clear that institutions designated as Distance Education Centres see, as part of their mission, the achievement of particular objectives associated with access and equity as a function of their ability to provide distance education. At this level, quality and standards of performance are strongly linked to strategic decisions about the profile of courses and the external load in courses. Consequently, the translation of the objectives in these areas into targets and the mechanisms to report and evaluate progress towards such targets are important areas and involve management and monitoring of the external load of the institution.

Recommendation 1

That within institutions involved in distance education, the person with designated responsibility for distance education (see Rec. 4) be formally involved in all planning and review processes relating to distance education, in particular in the setting of access and equity targets.

This recommendation is to ensure that institutions take account of the role of distance education in setting access and equity targets and that in involving the designated person responsible for distance education there is attention given to setting achievable targets within the resources available to support distance education.

Recommendation 2

That NDEC be actively involved in monitoring the extent to which distance education is employed in meeting national objectives for identified social groups.

This recommendation arises from the need for national monitoring to inform decision making. NDEC can provide a suitable forum to monitor and appraise efforts which utilise distance education in meeting national objectives.

Recommendation 3

That DEET fund a national Project to:

- a evaluate academic program diversity using distance education at a national level, taking account of discipline, course, level of offer, admission requirements, quota, conditions of enrolment and delivery, and current levels of demand.
- b identify means of regularly monitoring academic program diversity both within and across institutions.

This recommendation addresses the need to identify, at a national level, any barriers to access of existing courses. In addition, it identifies elements of a database which would enable the identification of gaps in national provision of distance education thereby assisting policy formation at a national level. The recommendation is directed towards mapping and improving access to courses and providing information which relates current access to levels of demand, thereby providing a national picture of the role of distance education and other modes in meeting national objectives for access and equity.

Chapter 4

MANAGEMENT FOR QUALITY IN DISTANCE EDUCATION

Introduction

The analysis of policy statements from institutions indicated emphasis on institutional or national goals for distance education. Interestingly, 'second order' policy guidelines to achieve such institutional or national goals, especially in relation to the management of resources, were not provided by institutions.

It cannot be concluded from this that such policies do not exist, either in explicit form in the minutes of decision-making bodies or in the terms of reference of committees and organisational units of the institution. *De facto* policies may also be reflected in institutional practice as an application of the rhetoric of mission statements. While acknowledging this, the need for codified guidelines in relation to resource management was recognised as a factor impinging upon the quality of distance education by stakeholders not involved with management or resource allocation within institutions. While it is recognised that there are considerable difficulties in addressing such resource issues it is felt that there is a chain of accountability which should be identified through such 'second order' policy arrangements within institutions .

The following recommendations address management for quality. The basis for particular recommendations often lies with views put by particular stakeholders, particularly those engaged in teaching at a distance and those providing support to underpin the delivery of quality distance education. The pattern of recommendations has previously been explained and this chapter deals with recommendations in the area of policy development, organisation and resource management.

Recommendation 4 – That institutions engaged in distance education activities assign responsibility for distance education to a person at a senior level of administrative responsibility.

With increasing devolution of managerial responsibilities to cost centres based on academic schools/departments there is a need to ensure that institutional goals are not dissipated by the sectional interests of schools/departments. This recommendation points to the need to assign responsibility at an institutional level for those distance education activities which are appropriately organised at an institutional level and for goals which reflect institution wide purposes.

Recommendation 5 - That institutions establish specific guidelines for disbursement of funds relating to distance education activities, taking account of requirements for development (including research and course development) and delivery (including, besides academic costs, technology, the academic and administrative support of students and residential schools).

This recommendation identifies the need to link the planning stage of development and delivery issues to funds available for distance education activities. Such linkings should occur at both institutional and school/department level, but it is especially important that guidelines exist at an institutional level as increasingly delivery issues are related to the provision of and access to technologies, which can only be efficiently managed at an institutional level.

Recommendation 6 - That in the allocation of teaching loads, departments or schools make adequate provision for the workload associated with the preparation and revision of course materials, including involvement in peer review.

Workload issues have industrial and other implications and responsibilities in these areas rest with institutions and heads of schools/departments.

The allocation of time for preparation of course materials represents a commitment of monies in advance of receiving enrolment linked funds. Further, the expenditure on preparation is the same regardless of enrolment. This difficulty, and the problems associated with allocation of workload weightings for the extensive preparation necessary for quality external course materials, has meant that the resolution of what constitutes 'adequate provision' is contested within the institution. Nevertheless, the factor of adequate workload provision for the preparation and revision of course materials is frequently cited as the key quality issue for staff engaged in the preparation of teaching and learning materials. This recommendation locates the responsibility for allocation at department or school level and assumes that the impact of an allocation will flow to institutional management decision making levels through normal staffing/resource allocation bids.

Recommendation 7 - That institutions ensure that students studying in all modes have equitable access to appropriate academic and administrative support (e.g. library, study skills, counselling and computing services).

The studies involving academics as stakeholders indicated the importance of 'student support' for effective distance education. The quality of distance learning is a factor of the systems the institution has developed, which enable the external student to access support services. The importance of library services as a central factor in the quality of distance learning was mentioned by academics. At issue here is the call for institutions to satisfy themselves that students, whatever the mode, receive appropriate and equitable levels of support.

Recommendation 8 - That institutions providing distance education involve staff with specialist expertise in teaching at a distance in their staff development programs.

It was clear from the survey of services provided by distance education units that staff attached to these units frequently provided staff development directed towards the improvement of distance teaching and learning. In many cases the staff roles were limited to a focus upon instructional design for the preparation of course materials, but in others there were staff involved with the full gamut of issues associated with teaching and learning at a distance. Where institutions also had a specialist unit responsible for the general improvement of university teaching/learning and/or research activity, the relationship between these 'providers' of staff development expertise was unclear. In some instances this was not a problem due to the limited instructional design/editorial input role undertaken by staff of a distance education unit. However, where institutions sought to move staff development in distance teaching and learning beyond materials development issues to matters such as delivery systems technologies and their use, or student support techniques for external students, there is the need to resolve responsibilities and coordinate efforts.

This recommendation recognises both the desirability of employing relevant specialist expertise to the area of distance teaching and learning and the need to disseminate skills and techniques of distance education within staff development programs aimed at the improvement of teaching and learning in higher education.

Recommendation 9 - That in the planning and review of courses, staff with specialist expertise in distance education are represented on the planning or review committees that involve external or mixed mode enrolment.

This recommendation is aimed at ensuring that academic staff receive appropriate advice and support during the planning stage or review of courses so that issues surrounding materials production, the use of media and communications technology and the establishment of student support mechanisms can be explored and costed prior to production work and teaching. The infusion of specialist expertise is recognition that the administrative needs and learning environments of external students differ from internal or face-to-face students and appropriate recognition of this is a factor impinging upon the quality of distance education. Further, at a practical level, the involvement of such expertise at a planning phase allows for increasingly focused sensitive staff development activities which are 'located' in the practical needs of planning or review issues.

Recommendation 10 - That institutions ensure that promotion criteria or codes of practice related to teaching recognise the quality of contributions to distance education including appropriate scholarship reflected in course materials.

In line with the AVCC statements regarding institutional and departmental 'valuing' of good practice this recommendation seeks to clarify how institutions recognise good practices in teaching and learning at a distance. There are often ambiguities in the ways that institutions value the fusion of scholarship and teaching within good teaching materials and institutions may wish to clarify the 'publication status' of scholarship contained within course materials, particularly within the context of promotion and tenure criteria.

The next chapter looks at indicators for monitoring and evaluating the quality of distance education. As such indicators are concerned with inputs, processes and outcomes there is, inevitably, overlap between the recommendations of this chapter and the listing of indicators. Where indicators are broadly conceived, the statement of the indicator and any appropriate standard or benchmark can often encapsulate the substance of a recommendation aimed at quality improvement. Consequently, the next chapter contains a number of recommendations aimed at institutions and schools/departments which deal with the processes of distance education - equally, some of the recommendations of this chapter are reflected in the tabulation of indicators under the heading Policy Development and Management.

Chapter 5

INDICATORS FOR MONITORING AND EVALUATING THE QUALITY OF DISTANCE EDUCATION

Introduction

The terms of reference of the Project included the development of performance indicators for the area of distance education. Such indicators were to cover both the provision of services to support distance education and the processes and outcomes of distance teaching and learning. A further term of reference directed that the Project's work on performance indicators in the area of distance education should take account of current work on performance indicators in higher education.

Thus, the investigation sought to identify appropriate indicators of quality for the area of distance education acknowledging the following factors:

- 1 the range of performance indicators identified in *Performance indicators in higher education* (Linke et al. 1991).
- 2 the framework for the use of indicators within higher education set out in *Higher education: quality and diversity* (Baldwin, 1991). Institutions would determine their mission and define what they meant by quality and standards of performance against their own objectives – they could also select relevant indicators as a means of gauging their success.
- 3 distance education involves a partnership of academic teaching in discipline areas and institutional support services for academics and external students. Both these stakeholders within institutions would need to be considered.
- 4 the relevance and interpretation of indicators of quality may be different for particular stakeholders involved in distance education.

Performance Indicators in higher education—its relevance to the project

Our review of *Performance indicators in higher education* involved looking at the purposes of the study and recommendations in relation to the terms of reference of the Project. The reports, in dealing with institutional context indicators, performance indicators, and indicators relating to participation and social equity, provided indicators where data was aggregated by academic organisational units (schools/departments) and area of knowledge

(discipline area). The indicators cover all modes of study (unless specific qualifiers were identified). The overall stance regarding the application of indicators advocated within the report is for their use 'only as an adjunct to inform expert judgement, rejecting any prospective application for funding or other purposes based on a purely mechanical or formula approach'.

The Project, in considering data about external mode, chose the usual approach of regarding the mode as a subset within commonly used aggregations (eg external mode within the unified national system, external mode within individual institutions, external mode within schools and departments). When considering the recommendations in *Performance indicators in higher education*, any focus upon a single mode as a subset of aggregations presents two possibilities for interpretation, namely:

- 1 subdivisions by mode within the levels of aggregation do not cause problems with interpretation of the indicators in terms of the original purposes and context for which the indicator was meant to apply
- 2 subdivisions by mode within the levels of aggregation distort the usefulness of the indicator in that mode-specific factors cause problems in using the indicator to assist judgements about the particular mode in question.

Given the recency of *Performance indicators in higher education* it was not possible to review recommendations in the light of the above possibilities as we lacked an empirical base for deciding between them. The following points simply highlight the relevance of *Performance indicators in higher education* and suggest the need for further work in this area:

- 1 Two indicators, (academic activity cost per student (C11) and (total recurrent cost per student, (C12) have, to some extent, been considered in a previous mode specific study on cost relativities between internal and external studies.
- 2 In the area of performance indicators for teaching and learning it is important to note that the recommended indicators are aggregated at discipline, AOU or program level. While indicators such as program completion rate, mean completion time, student progress rate may reveal distinctive results for external load, the report has defined the characteristics of the indicators in these areas to have meaning for the particular chosen level of aggregation or condition of use. Thus the study acknowledges that (program completion rate), (P3)

should only be used for full time students in a program of a particular size. Interestingly (perceived teaching quality) (P1) may require minor adjustment in language and terminology to account for external teaching and learning, and, in this form, be applicable at a 'branch of learning' level of aggregation.

- 3 In the area of institutional context indicators, the two areas of support staff ratio and distribution of recurrent expenditure may be used to assist with describing, auditing and evaluating quality of distance education. Support staff per number (and/or variety) of courses in external mode and support staff dealing with the needs of external students per external EFTSU load are possible indicators here. Also, it would be possible to look at the distribution of recurrent expenditure which services the external load of an institution. While there are obvious difficulties in achieving agreement upon how to define and categorise expenditure, it is nevertheless useful to explore categories such as relative expenditure on infrastructure support for production and distribution of course materials and library expenditure tailored to meet the needs of external students against the total operating grant. However, it is acknowledged that categorisation of expenditure depends upon an accepted definition of external load and that overlap at the level of infrastructure to support teaching and learning (for whatever mode) makes the gathering of data a difficult undertaking.

Clearly, this is an important area and reporting the way in which external load is allocated resources within institutions would be assisted where institutions used such indicators. However, differences in structure, resource allocation policy, and historical factors influence interpretation of these institutional context indicators and these factors would mean that comparisons between institutions could not be made on the basis of such indicators.

- 4 Because of the importance of distance education in assisting institutions in reaching targets in the area of participation and social equity, it is important to highlight any relevant indicators related to this area. For example (academic program diversity) (S3) could be used to look at the profile of access through external mode thereby assisting with reporting upon participation. Here the issue for external

provision is one of deciding the appropriate level of aggregation - for example, should an indicator for external load apply at a national rather than institutional level on the basis that distance teaching institutions accept external students on a national (and indeed, international) basis?

There is a need to monitor the use of indicators proposed in *Performance indicators in higher education* and compare the consistency of subset data relating to mode specific arrangements to that derived from all modes. Institutions should be encouraged to include indicators recommended in *Performance indicators in higher education* within any mode specific monitoring and evaluating.

We now move to those indicators which result from the investigations within the Project.

How the Project generated indicators relevant to judging the quality of distance education

Since our earlier analysis highlighted the central role of values in any appraisal of the quality of education, the Project chose to focus upon perceptions of quality belonging to particular stakeholders. Embedded in these views is a complex mix of uses of the term quality - for example, quality could be identified as the magnitude of change within a particular student or the acceptability of the level of student work arising from the course. That is, quality could be both open to comparative judgements (and, this was more likely where the learning outcomes of students were subject to wider review as in Masters level thesis requirements) and potentially beyond comparative judgement (where graduates of different disciplines bring different backgrounds to a graduate diploma course and the student outcomes, while meeting a minimum requirement, vary considerably). Other views about quality would arise through the role of stakeholders within the education process - those involved in the provision of services, for example, saw their efforts to support teaching and learning as contributing to quality and consequently saw 'management for quality' as fundamental to quality improvement.

Despite these complexities, investigators saw considerable value in investigating stakeholder views about quality because they could then ask stakeholders to participate in framing indicators based on these views. The position of the Project has already been put in Chapter 1 in the section on interpreting the Project's terms of reference.

The methodology adopted by the Project was to sample the views of stakeholders (those engaged in producing and teaching external courses, institutional clients) in an attempt to account for the complex nature of judgements about the quality of distance education. As we have already noted the terms of reference limited the stakeholders to those above.

Views from stakeholders were gained through:

- canvassing views of service providers by asking representative groups within institutions to nominate indicators which would be useful in appraising the quality of distance education. (Appendix 1 contains details.)
- a limited number of case studies involving groups of academics teaching particular discipline areas. (Appendix 2 contains details.)
- seeking structured responses from institutional clients to either a draft listing of indicators or to questions about factors influencing quality. (Appendix 3 contains details.)

The stakeholders

The first group of stakeholders, those providing services to academic staff and external students are a particularly interesting group as they:

- generally involve both academic and administrative staff.
- provide services to teaching academic staff and are largely regarded as 'administration' or 'academic administration'.
- are frequently exposed to the tension between professional values and bureaucratic expectations - that is, the administrative framework within which distance education staff operate may define limits to the autonomy of academics in particular areas and the framework is often implicitly challenged by academics.

Consequently, it would be expected that the perceptions of this group would involve staff development, instructional design, production management, student support and counselling, and other technical issues arising from supporting external students. Any focus upon performance which spans academic and bureaucratic values can challenge the academic autonomy of teachers and the group had particular views about how well others should perform as well as how well they could or should perform, given their role in the cooperative undertaking of providing services.

In addressing the second group of stakeholders, academics who teach at a distance, the Project decided to seek views about the quality of distance education by studying different discipline areas. There were three major reasons for choosing to study different discipline areas. First, as we have seen, quality in education (and distance education) is a diffuse concept involving multidimensional considerations (Hughes, 1988). It was felt that this complexity could be addressed through seeking the collective perceptions of the group by asking them to focus upon their activities in providing studies in their discipline area to external students. Second, it was considered that issues about means (that is, how an area is taught/delivered at a distance) were likely to interact with ends (i.e. what is taught, what should be taught) and it would be important to allow for such complex interplay. The natural site for this interaction is in curriculum and teaching matters and it was thought that such matters would best be articulated through considering the course or discipline area rather than the concerns of individual teachers. Third, the focus upon a particular discipline area may reveal special considerations arising from the provision of the discipline itself - that is, particular means or techniques employed in providing the area to external students might be judged with reference to the discipline itself. While there may be generic or universal factors which impinge upon quality in education at a distance, there may also be criteria used to judge quality which are derived from an understanding of the particular discipline.

In seeking perceptions of academic staff regarding what constitutes quality in distance education and what mechanisms may foster quality improvement, the Project used a case study approach which sought to identify beliefs which revealed consensus or contestation within the group.

The Project investigators had hoped for a number of studies which would cover a range of discipline areas, a range of level of awards, and a range of delivery techniques. While the studies presented by the Project are useful and provide 'indicators' of quality in distance teaching and learning it is clear that there is need for further extensive work in recording practitioner theories and practices in the area of quality improvement of distance teaching and learning.

The third stakeholder, institutional clients, presented a range of views about quality often from distinctive and unique perspectives associated with both what they would regard as 'client satisfaction' with the provider (Distance

Education Centres) and the projected needs of their students. Details of the ways in which information was collected from this heterogeneous group are contained in appendix 3.

Indicators of the quality of distance education

The authors have drawn together the views of these stakeholders in a listing of indicators in an attempt to cover the diverse activities of distance education.

As we have already noted a listing of indicators compiled in this way has shortcomings which signal the need for further work. First, the groups sampled did not cover the possible range of types of courses and mix of media with the possible result that what they emphasise is not universally applicable. Second, there are differences in emphasis among stakeholder groups. Third, relying on the views of current distance education practitioners gives credibility to current practice and voice to assumptions that may not be warranted over the long term or in all contexts in which distance education is practiced.

The indicators have been organised under policy development, organisation and resource management (policy development and management, service provision, staff development) and processes of distance education. The following tabulation displays indicators providing information about the area under consideration, their applicability according to 'level of aggregation' and a statement about standards or benchmarks.

Policy development and management

Area under consideration	Applicability	Standard/benchmark or elaboration
1 Policy framework for distance education within an institution	institutions	<ul style="list-style-type: none">· existence of specific guidelines for disbursement of funds related to distance education activities· existence of a consolidated listing of policies related to distance education
2 Reporting achievements and developments in distance education	institutions	detail within annual reports of institutions (or similar) of developments in: <ul style="list-style-type: none">· external course development and production· technologies employed in distance teaching and learning· research and evaluation of distance education
3 Acknowledgement of expertise in distance education within promotion/tenure criteria	at institutional level	<ul style="list-style-type: none">· existence of institutional approval 'code of practice' in relation to teaching and appropriate recognition by this code of the practices of distance teaching and learning· application of the above criteria within selection processes related to promotion/tenure

Area under consideration	Applicability	Standard/benchmark or Elaboration
4 Provision of release time for academic staff engaged in course writing and peer review	provision within schools/departments	appropriate levels of support- eg 1/3 to 1/2 load release per semester subject equivalent to 1/6 full time student load

Staff development

Area under consideration	Applicability	Standard/benchmark or elaboration
1 conduct of professional development programs for academic staff	institution or distance education unit	formal document outlining the strategy for professional development to improve distance education available
2 conduct of staff awareness program in relation to institutional distance education policy	institution and distance education unit	<ul style="list-style-type: none">existence of specialist induction program for new staffrecognition of this function within the role statement of a staff member of the institution
3 access to expertise/ advice on materials design	provision within institution	<ul style="list-style-type: none">identified program of staff development directed towards materials designcourse team membership of persons with specialist expertise in distance education during planning/development stagesavailability of institutional 'guides' to materials design
4 access to expertise/ advice on instructional media	provision within institution	<ul style="list-style-type: none">identified formal liaison mechanism between distance education unit and relevant service provider as a service provided by the distance education unitidentified mechanism regarding approval of costs related to employing instructional media within the delivery process
5 access to expertise/ advice on the use of computer/communication technologies employed for external delivery	provision within institution	<ul style="list-style-type: none">as above

Service provision

Area under consideration	Applicability	Standard/benchmark or elaboration
1 Institutional responsiveness to student enquiries	distance education unit	existence of a published statement about the response time to contact students
2 Receipt of learning materials	distance education unit	number of late starting students/subjects attached to schools/departments
3 Timely pre-preparation of materials by academic staff	schools/departments	. published guidelines to staff on schedules for production . existence of targets related to the percentage of the total of course materials which are prepackaged in advance of the semester in which they are offered
4 Technical quality of learning materials	distance education unit/ Printing facility	number of student and staff complaints

Processes of distance education

Area under consideration	Applicability	Standard/benchmark or Elaboration
1 Availability and use of preparatory materials to assist students in their role as an external student – generalised information related to the distance learner	distance education unit /Study Skills Coordinator/ Student Support Services	<ul style="list-style-type: none">existence of specific support mechanisms eg 'taster units'counselling contact prior to course commencement available where needed
2 Review of 'instructional blueprints' by expert panel against academic and distance teaching criteria	Schools/ departments with distance education professional staff	<ul style="list-style-type: none">adequate representation of subject expertise for content validationadequate representation of specialist expertise in distance educationreview processes carried out against agreed criteria
3 Study materials and processes: <ul style="list-style-type: none">account for student backgroundappropriate materials and learninginteractions	Schools/ departments and distance education unit	existence of: <ul style="list-style-type: none">clearly defined minimumprovision of a range of clear starting points dependent upon student backgroundsassistance to students in clarifying their own background knowledge and skillsenunciation of realistic learning objectivesidentify and, where appropriate, provide necessary resource materialappropriate breadth and depth of learning activities to challenge each student intellectuallyprovision of opportunities for interaction with staff and other studentsprovision of academic support in regular and informative assessment and self assessmentdemonstrable linking of assessment with the objectives of the topic of study

Area under consideration	Applicability	Standard/benchmark or elaboration
4 Perceived teaching quality	schools/departments	Possible trial use of Course Experience Questionnaire - Indicator P1 Linke (1991) p58
5 Variety of interactions	schools/departments	During the period of student study the use of one or more of: <ul style="list-style-type: none">• phone contact with individual students• audio/video conferencing of groups of students• fax, Email computer conferencing• extended correspondence; journals• on-campus schools/workshops
6 Lecturer availability to students	schools/departments	<ul style="list-style-type: none">• notification to students of a variety of contact mechanisms• notification to students of times that a relevant staff member is available to deal with academic matters
7 Assignment marking	schools/departments	<ul style="list-style-type: none">• existence of a published norm for turn around time for assignments• existence of guidelines for marker feedback to students including the incorporation of teaching objectives within the response to assignments• existence of policy regarding flexibility in extensions to submission dates

Area under consideration	Applicability	Standard/benchmark or elaboration
8 Student feedback on the quality of student support and administrative services supplied by the institution	institution, distance education unit, Library	existence of questionnaire or monitoring mechanism to enable collection of information on student satisfaction with learning support
9 Monitoring student progress and achievement student progress rate	schools/departments	application, on a trial basis, of the use of Student Progress Rate = <u>passed subject load</u> /certified subject load—see Linke (1991) p70.

Discussion

We have already noted that the methodology used to generate the above indicators has both strengths and weaknesses. However, as we have already briefly noted, the recent Draft Code of Practice for University Teaching (AVCC, 1991) reflects many of the issues raised.

The Draft Code, like the listing of indicators provided for Quality and Standards in Distance Education, covers the role of the institution, the department and individual teachers. Parallels exist in the areas of recognition for teaching excellence, the existence of professional development programs, the provision of resources so that teaching may be conducted as a scholarly activity, the provision of time and resources for staff to develop subjects and teaching materials, the need for monitoring and review of subjects and teaching materials, and the characteristics of good teaching, assessment, and efforts necessary to promote student learning. While the draft code does not make explicit mention of external mode delivery or the needs of external students it nevertheless highlights characteristics of good teaching and learning which, for distance education, are evident in study materials and processes employed in distance education, and the support services provided by the institution. The indicators of quality and standards of distance education generally focus upon particular aspects of processes relevant to distance education and can generally be linked with a broader statement about quality within the draft code.

The indicators identified by the study require a further phase of specification and elaboration (especially in deciding appropriate standards or benchmarks) prior to their application in assisting judgements about the quality of distance education within a particular context. Given this situation there is clearly the need for further work to monitor the ways in which indicators such as those listed (and others) are used in practice and to evaluate whether such indicators are indeed useful in assisting judgements about quality.

Further Recommendations

As we have already noted in chapter 4, recommendations about quality improvement are linked to the indicators identified in the particular areas and this next section outlines recommendations about the processes of distance education.

Recommendation 11 – That institutions consolidate and make publicly available their specific policies that deal with arrangements for off campus provision.

Any review of an institutions' policies, goals, and targets for external load will be facilitated by a coordinated and consolidated policy framework which has been approved by the governing body of the institution. Institutions designated as Distance Education Centres might model the production of such policy frameworks, and a published and consolidated listing of policies may assist policy development in other higher education institutions.

Recommendation 12 – That institutions establish policies for the development, implementation and resourcing of the use of appropriate technologies in distance education.

Many academic staff report that institutions are unable to provide technologies and support necessary to implement their needs for distance teaching and learning in their area. For example, staff teaching external students often request desktop computing facilities, connection to AARNet, and support for E-mail systems (which would enable students who have access to personal computers to carry out interactive communications) only to find that institutions are not able to provide adequate access to such technology for staff or support such uses of technology with technical advice and back-up service. At the basic level of audio conferencing some institutions have low levels of support in assisting with the use of teleconferencing (either administrative or technical) thereby effectively discouraging the use of the technology. It is ironic that a key area of innovation and growth within distance teaching and learning is in the application of computer based technologies (with production technologies such as desktop publishing systems, video production etc and communication technologies such as E-mail, video conferencing etc) yet the operational units within Distance Education Centres which provide support for distance teaching and learning are not resourced to move into using technologies extensively. There is a major need for Distance Education Centres to develop infrastructures which enable the efficient use of communication and information technologies within higher education, particularly distance education and open learning. This recommendation is directed towards starting processes which are aimed at entrenching the use of such technologies within normal delivery processes of distance and open education.

Recommendation 13- That institutions review any policy statements on student rights and responsibilities to ensure their appropriateness to external students.

Some institutions have published a 'Charter of student rights and responsibilities' which deal with a range of academic and administrative matters.

The idea of a Student Charter has been taken up in *Quality tuition: optimum academic support for all students* (1990) a consultative document prepared by a range of 'stakeholders' in the quality analysis of the British Open University. In the view of this review group such a charter would be distributed to every student upon registration in a course, and would cover course materials, assessment, administration, all forms of academic support, counselling, feedback, financial assistance etc. Under these headings 'information should be given about the student's rights and entitlements, together with a carefully worded indication of what students are not entitled to, but may sometimes expect'. (p18)

This recommendation acknowledges the need to provide information which covers the circumstances of external students.

Recommendation 14 - That procedures for planning and developing distance education, and monitoring and reviewing performance in distance education, in the area of course materials and their implementation address:

- **format and presentational quality of learning materials;**
- **instructional quality including the use of appropriate teaching and interactive processes;**
- **workload and assessment load;**
- **arrangements for student support.**

The information gathered relating to 'nominated indicators' supports the importance of the factors identified in judgements about the quality of course materials and their implementation. Further, materials produced by Distance Education Centres or other higher education institutions in conjunction with Distance Education Centres may have national and international use if purchased and purchasers' expectations regarding appropriate quality should be met by the system. Institutions would be expected to detail appropriate benchmarks for the above areas.

Recommendation 15 – That institutions with a substantial involvement in distance education include in their annual reports major achievements or developments in the areas of:

- . **external course development and production**
- . **technologies used in distance teaching and learning**
- . **student support techniques**
- . **research and evaluation of distance education**

Dissemination of information about centres of excellence in distance education is useful for clients of the system – students, other higher education institutions, and corporate bodies. The publication of such information in a consolidated form with other contextual information about the institution will enable interested parties to effectively gauge the strengths and special interests of particular Distance Education Centres.

Recommendation 16 – That institutions involved in distance education identify and publish a list of input, process and output indicators that they intend to use in monitoring and reviewing performance in distance education against relevant institutional objectives.

Notwithstanding the central role of institutional self monitoring, it is important that Distance Education Centres are able to clearly identify their quality improvement role in the area of distance education. Other higher education institutions, as clients of the Distance Education Centres, should be aware of the quality assurance processes that Distance Education Centres have in place.

Recommendation 17 – That all course materials used in distance education carry a statement of acknowledgement for input and support received from individuals and organisations involved in their development and production.

This recommendation is directed at providing information to assist clients with appraising the quality of course materials by identifying various inputs.

Chapter 6

REVIEW AND FUTURE DEVELOPMENTS

Review

The project to investigate quality and standards in distance education has attempted to address its terms of reference against a background of change in relation to the purposes of Distance Education Centres within the higher education system and the developments in the agenda for quality in higher education.

The timing of the project was significant in that:

- its terms of reference are likely to have been more restricted had they been developed after the release of *Quality and diversity* and the HEC discussion paper.
- during the project there was further questioning of both the role of Distance Education Centres and the means by which 'distance education' might be identified. Debate about a multiplicity of modes and methods incorporating various aspects of 'distance mode' and open learning as rival/complementary concepts served to highlight difficulties in identifying factors influencing the quality of distance education.
- the project sought to build upon current work on performance indicators and awaited publication of reports in this area.

A further factor influencing progress with the investigation was the diversity of systems and procedures within institutions designated as Distance Education Centres and the instability of the management and structures supporting distance education due to reviews and changes brought about by amalgamations.

Early in the project the reference group questioned the omission of 'student perceptions of quality' from the terms of reference. It became clear that the way that the terms of reference had limited the stakeholders to 'providers' of distance education (with the exception of corporate clients) implied constraints upon the way in which the project would view quality – for example, if quality of education was to be linked to 'value added' in the student then the omission of a student perception of quality (or a perspective of quality framed from the student attributes which signify excellence) was important. The investigators recognised this feature in the terms of reference and, given the scope and complexity of the existing terms of reference, took the view that to include students as stakeholders would necessarily involve a larger and more complex study than that already proposed.

The investigation could not be considered a research study about factors impacting upon the quality of distance education. Because data was collected at different institutions, the investigation employed different methodologies depending upon the context of participants. Drawing together such data and proposing generalisations is a difficult undertaking. To assist the reader in evaluating our interpretation of the information from the various sources we have provided extensive appendix material containing 'raw' data.

A further area of concern was the limitations imposed by the practical problems of conducting case studies in relevant and different areas involving varied educational techniques. The investigation was not able to explore quality factors arising from approaches which employ technologically advanced delivery systems. Consequently a case could be made that the recommendations arise from, and are directed towards improving, a model of distance education representing an augmented form of correspondence education.

Nevertheless, the investigation has provided a range of recommendations which, if addressed, would have a significant impact upon institutional practices. The thrust of the report is to provide recommendations and indicators which might form the basis of any institutional review of its procedures which ensure quality distance education. Clearly, the materials of the report would require integration into the overall institutional strategy and should not be considered in isolation. This is particularly evident where recommendations are addressed to sections of the academic structure of institutions and therefore involve other considerations for successful implementation.

If the success of the report is to be gauged by the extent to which institutions employ the listed indicators or engage with the substantive issues in the recommendations, issues about the appropriateness of indicators, the costs of collecting information, and the extent to which the indicators assist evaluative judgements will be central. Such practical considerations have meant that the suggestions about standards or benchmarks have been broadly framed so that institutions can insert their own fine-structure depending upon context, cost, stage of development of quality considerations etc. Because of this planned flexibility there is a need to monitor and refine particular indicators and research both their intended and unintended effects upon quality in distance education.

Future developments

At a time when many Universities are developing policy approaches to addressing quality within their institution it would seem self evident that institutional responses would cover particular areas identified in this report.

Recommendation 18 – That NDEC monitor institutional responses to the recommendations of this report by seeking specific information on particular areas covered in the recommendations.

This recommendation acknowledges the need for an expert body such as NDEC to look at the ways that institutions assure quality in distance education. Clearly different institutions will have different priorities in relation to their educational programs and practical considerations will mean that institutions will determine what they mean by quality and standards in terms of the policies and procedures that they develop. Consequently, any assessment of the quality of distance education within the higher education system will require the monitoring of the areas of information addressed and the methods of arriving at an assessment of quality considered in relation to declared benchmarks or standards.

There are a number of possible developments which would assist work in appraising the quality of distance education.

- 1 There should be consideration given to funding a developmental project which attempts to report on ways in which the recommendations of this project were addressed within a particular institutional context. Such a study may well consider broad institutional concerns as well as changes which follow at a departmental/school/discipline level.

- 2 There should be consideration given to funding studies which focus upon the use of delivery technologies within distance education and the grounds for claims that the use of such technologies improves the quality of distance education. In particular, consideration should be given to addressing a range of issues arising from introducing new technologies – administrative and technical support, teaching capacities, implications for access to the technology and equity issues, the means of evaluating effects through student feedback and other mechanisms, the unintended consequences of the use of such technology etc.

Appendix 1

INDICATORS OF QUALITY OF DISTANCE EDUCATION THE VIEW OF STAFF FORMALLY ATTACHED TO DISTANCE EDUCATION CENTRES

Introduction

This appendix considers the views of one stakeholder – those staff that are formally involved in supporting the efforts of those teaching at a distance. In the majority of cases such staff belong to the Distance Education Centre (or Distance Education Resource Centre, Open Learning Institute or similar) and are those who advise, manage, or provide technical and administrative services to support distance teachers or external students.

The methodology employed by the Project was to ask institutions designated as Distance Education Centres to assemble a representative group of staff. Staff in this group were asked to interpret their individual roles in ways which represented an ideal situation in relation to the provision of quality services which might result in excellence in education at a distance. The instructions to conduct the exercise dealt with its purposes, ways of getting started, the characteristics of indicators, ways of refining statements, and what would happen to the indicators that were nominated. Details of the approach are provided at the end of this Appendix.

The returns from the four institutions involved in this part of the project were compiled and re-circulated to institutions requesting that areas be reviewed in the light of the compiled information and, if necessary, the initial materials provided be changed in the light of this review. The following presents the nominated indicators – note that there are areas of overlap representing different approaches to the same area.

Area under consideration	Indicator or elaborative statement
1 Policy framework for distance education within an institution	<ul style="list-style-type: none">. existence of explicit written policies. evidence of implementation and resourcing of policies. staff awareness of institutional distance education policy
2 Academic and support staff <ul style="list-style-type: none">. policies for appointment and professional development of all staff in relation to necessary specialist skills required for distance education. reward structure and career paths.. staff development of academic teaching staff	<ul style="list-style-type: none">. existence of professional development programs in distance education. evidence in promotion criteria of recognition of excellence in distance teaching. access to adequate expertise and media to facilitate production of materials, which include:<ul style="list-style-type: none">- AV and electronic- editorial, print, graphics- design and evaluation- reproduction. provision of release time for academic staff writers. increased use of non-traditional media for DE/open learning delivery. increased student support through use of communication technologies and study centres
3 Meeting market needs	<ul style="list-style-type: none">. evidence of courses responding to the needs of 'community groups'
4 Research and development in distance education <ul style="list-style-type: none">. in relation to students. in relation to teaching and learning. in relation to policy development and implementation	<ul style="list-style-type: none">. existence of an inbuilt program for staff to monitor programs. adequate resources allocated for research and development. rates of success of staff in attracting external funding for research and development in distance education.
5 Enrolment <ul style="list-style-type: none">. refusal of student admissions	ratio between qualified students admitted and students refused entry.
6 Presentation of learning materials <ul style="list-style-type: none">. technical quality	number of complaints
7 Student preparation for distance learning <ul style="list-style-type: none">. availability of preparatory materials to assist students with distance learning	inventory of materials and face to face contact given prior to course commencement
8 Receipt of learning materials <ul style="list-style-type: none">. availability to student. dispatch of learning materials to students	number of late starting students/subjects <ul style="list-style-type: none">. students receive materials on confirmation of enrolment or by the week prior to semester commencing. academic staff are made aware of delivery services and deadlines for these in their induction. standard materials are delivered in one or at most two dispatches; other dispatches are for incidentals

Area under consideration

Indicator or elaborative statement

9 Study materials and processes

- . accounting for student background
- . appropriate materials and learning interactions

- existence of
 - . clearly defined minimum entry competencies
 - . provision of a range of clear starting points dependent upon student backgrounds
 - . assistance to students in clarifying their own background knowledge and skills
 - . enunciation of realistic learning objectives
 - . identify and, where appropriate, provide necessary resource material
 - . appropriate breadth and depth of learning activities to challenge each student intellectually
 - . provision of opportunities for interaction with staff and other students
 - . provision of academic support in regular and informative assessment and self assessment
 - . demonstrable linking of assessment with the objectives of the topic of study
 - . publication of a manual of national standards for production of print and non-print DE materials
 - . materials for 80% of subjects pre-packed in advance of semester in which they are offered

- . standards of production for printed materials
- . timely pre-preparation of materials by academic staff

10 Design and development of a sample module

- . facilitation of more efficient development, writing and production of a new unit.

Record instructional designer, education officer and production time spent on each new unit for a semester, and compare total time spent on units with sample module to time spent on those without sample module.

Lecturer acceptance of, and support for, the 'sample module' approach.

Compare the instructional strategies, design and layout of subsequent modules with the sample module.

Monitor feedback, from student evaluation questionnaires, on the unit's instructional quality.

11 Design and development of learning packages

- . assistance for subject matter specialists engaged in distance, mixed mode and continuing education activities in instructional materials design and development

Instructional blueprint of each unit is well documented, through use of checklist.

Instructional blueprints are assessed as high quality by an expert panel.

Sample modules are produced and reviewed prior to further unit development.

Unit development and production meet deadlines.

Evaluation findings, including student performance and student feedback, impact on subsequent design and development of unit.

Number of staff participating in instructional design workshops and seminars.

Workshop feedback, formal and informal, is monitored.

Area under consideration	Indicator or elaborative statement
12 Print production cycle <ul style="list-style-type: none">provision of efficient processes for managing the degree of change to study materials, hence reducing work-load and materials wastage.	<p>Record the number of changes to the pre-production information.</p> <p>Record the number of changes to the database during the time leading up to the production of the materials.</p> <p>Monitor the number of pieces in each category, eg 'New', 'Major', 'Minor', 'No change'.</p> <p>Estimate the approximate number of hours' work required for the next production period.</p> <p>Monitor the history of a unit showing its adherence to the production cycle or otherwise.</p>
13 Student support <ul style="list-style-type: none">student support and open learningshared use with DETAFE of study centresrange of technologies usednational credit transfer bankflexible administrative policiesfurther development of TV OL Project	<ul style="list-style-type: none">evidence of institutional structures, resources and procedures to enable criteria of immediacy, accuracy, consistency, completeness and appropriateness in student support to be metevidence of student satisfaction with support services providedincreased enrolments in rural areaslowered attrition rateincreased participation by under-represented groupsincrease in number of courses/subjects offered by DE
14 Institutional responsiveness—student enquiries <ul style="list-style-type: none">requests for information responses to enquiries, liaison arising from student contact	<p>Monitor traffic in and out and response times for enquiries.</p> <p>Record statistics in comparison to previous periods of time.</p> <p>Modify procedures to counteract 'bottlenecks' to solution of enquiries.</p> <p>services within 24 hours</p>
15 Student assignments <ul style="list-style-type: none">marking turn aroundProcessing of student assignments within the DEC and by academic staff.marker feedbackmarker reliability	<p>maximum of 10 days from receipt of assignment</p> <ul style="list-style-type: none">same day turnaround of received assignmentsreturn to students within 2 weeks of receipt <p>minimum of 50 pertinent, succinct and encouraging words per assignment</p> <p>analysis of variance for difference in marks given by different markers</p>

Area under consideration

Indicator or elaborative statement

16 Student completion

- . attrition rate
- . time taken to complete

- . continuation rate
- . graduation rate
- . career success

ratio of overall commencement and overall completion
average number of active semesters from commencement to completion

17 Copyright

- . provide external students with ready access to existing learning resources from a variety of sources.

Monitor the number of copyright applications per semester.

Record the number of items submitted without complete documentation.

To meet the requirements of the copyright act and of the CAL agreement as it relates to study material.

Record time spent on copyright processing by Education Officers and copyright clerk (there may be an increase in time spent on advice to writers earlier).

To ensure DEC staff receive adequate bibliographic information when copyright material is submitted by writers.

Monitor number and total amount of copyright fees paid per semester.

To ensure DEC has adequate time to process copyright applications and receive responses before study material is due to be printed.

Monitor number of copyright disputes with publishers.

Monitor number of pieces withheld from printery, or with copyright material removed, due to copyright delays.

To minimise the cost to DEC of payments incurred by the production of copyright material.

Undertake random copyright checks on individual units to ensure that legal requirements are satisfied.

A group from another Distance Education Centre, not involved in nominating indicators, reviewed the listing and provided the following comments or additional statements.

Area under consideration	Comment or additional statement(s)
1 Policy framework for distance education within an institution	Accept
2 Academic and support staff	Add: existence of appropriate professional (distance education) staff in Distance Education Centre.
3 Meeting market needs	Add: relevant and 'up-to-date' content and technology.
4 Research and development in distance education	Accept
5 Enrolment	General concern was expressed about this statement given: (i) Present over enrolment; (ii) Special entry provisions under equity programs.
6 Presentation of learning materials	Accept
7 Student preparation for distance learning	Some concern expressed about 'face-to-face contact'. Does this include video conferencing or other appropriate media contact?
8 Receipt of learning materials	Accept
9 Study materials and processes	Add: Provision of student support of interaction
10 Design and development of a sample module	General concern expressed about the time spent in recording details for each new subject given the differences which may occur such as: (i) Subject only in print mode (eg Literature) as against a multi-media production of an Environmental Science subject;

Area under consideration	Comment or additional statement(s)
11 Design and development of learning packages	(ii) Difficulty of content; (iii) Experience of Subject Author(s). First external subject or many previous external subjects. The general concern expressed was what will the indicator achieve?
12 Print production cycle	Accept The comment here was that this was of less importance than most of the other indicators. The number of changes may indicate a necessity to be 'up-to-date' or required because of changed circumstances.
13 Student support	Add: Counselling services appropriate for distance education students. (This was seen as not necessarily indicated in the first statement for this section.)
14 Institutional responsiveness-- student enquiries	Accept
15 Student assignments . marker feedback	Concern was expressed about this indicator. Additional comment was: (i) increasing awareness by markers for students by providing marking keys, evaluation criteria as well as encouragement.
. marker reliability	Monitor the difference in marks given by different markers. (There are a variety of measures that could be applied.)
16 Student completion	Some concern expressed over this whole section in terms of what the indicators achieve. How would career success be measured in terms of studies?
17 Copyright	General comment indicated that this was an unimportant indicator. It was an institutional necessity and may have economic parameters (eg, try to reduce costs) but was not seen as a suitable performance indicator.

Thus, there was general support for the indicators with the following exceptions:

- . enrolment - the points made by the review group are important in the context of the linking of access and equity arrangements with distance education. Matters dealing with characteristics of the student enrolment have been considered in *Performance indicators in higher education* (Linke et al. 1991) and covered under Student Preference Ratio, Student Application Rates, Student Offer Ratio, Average Student Entry Score.
- . design and development of a sample module - the use of 'time spent' as an indicator is open to challenge because of the impact of context. However, there are other elaborative areas such as 'lecturer acceptance' and monitoring student feedback.
- . print production cycle/copyright - these are seen to be less important and matters which impact upon efficiency
- . student completion - matters dealing with student completion rates have been fully discussed in *Performance indicators in higher education*. Because student completion indicators need to be aggregated at AOU or academic program levels such indicators and their interpretation are a matter for AOU's.

Consequently, for staff who advise, manage or provide technical and administrative services to support distance teachers or external students there seems to be acceptance of areas 1,2,4,6,8,9,11,13,14,15, but various qualifications about the general applicability of indicators attached to these areas.

An initial attempt by the project investigators to re-organise and simplify the indicators resulted in the following tabulation which divides indicators according to inputs (In), processes (P) and outcomes (O). It was felt that this form of organisation might assist institutions in their choice of relevant indicators.

Indicator statement	Applicability	Standard/ benchmark
In 1 access to expertise/ advice on materials design	provision within institution	
In 2 access to expertise/ advice on instruct- ional media, particularly audiovisual	provision within institution	formal liaison between DEC and relevant provider as a service provided by the DEC
In 3 access to expertise/ advice on the use of computer/communication technologies employed for external delivery	provision within institution	
In 4 provision of release time for academic staff engaged in writing course	provision within Academic Organisa- tion Unit (AOU)	various levels of support - approx. 1/3 - 1/2 release per subject equivalent to 1/6 full time student load
In 5 earmarked monies from institutional sources for research, development, quality monitoring of distance education	institution	
P1 conduct of staff awareness program in relation to distance education policy	institution and DEC	<ul style="list-style-type: none"> . specialist induction program for new staff . formal recognition of the function within the role statement of a staff member of the institution

Indicator statement	Applicability	Standard/ benchmark
P2 conduct of professional development programs for academic staff	DEC	formal strategy document for professional development available
P3 Availability and use of preparatory materials to assist students in their role as an external student - generalised information related to distance learner	DEC /Study Skills/Student Support Services	<ul style="list-style-type: none"> . face-to-face contact prior to course commencement . simulated learning and support exercises through preparatory materials
P4 process to ensure that academic staff are made aware of production and dispatch deadlines	DEC /Production Services	<ul style="list-style-type: none"> . induction program . regular bulletins to contact staff
P5 review of 'instructional blueprints' by expert panel	DEC /Academic Organisation Units	<ul style="list-style-type: none"> . adequate representation of subject and instructional expertise . review against explicit and agreed criteria
P6 decisions arising from student feedback to be incorporated into redesign/redevelopment of materials.	DEC /Academic Organisation Unit	
O1 existence of explicit written policies	institution and DEC	formal acceptance of policies by governing body of the institution

Indicator statement	Applicability	Standard/ benchmark
O2 existence of explicit resourcing policies related to the external load of the institution	institution	<ul style="list-style-type: none"> . formal acceptance of policies by governing body . DEC or DERC operations designated a cost centre
O3 evidence in promotion criteria of recognition of excellence in distance teaching	institution	
O4 success of staff in attracting external funding for research/ development/ consultancies in distance education	institution	rates of success and total grant monies received
O5 technical quality of learning materials	DEC /Printing Facility	number of student and staff complaints
O6 availability to student of learning materials prior to the start of the semester	DEC /Academic Organisation Units	numbers of late starting students within AOU areas
O7 existence of a published turn around time for assignments	DEC	<ul style="list-style-type: none"> . published standard or norm for institution, or . published standard or norm for Academic Organisation Unit
O8 existence of a published statement about the response time for an enquiry involving services provided by DEC support staff	DEC	

Indicator statement	Applicability	Standard/ benchmark
O9 consideration of attrition data for external load taken by Academic Organisation Unit as part of the review process for the AOU	DEC /Academic Organisation Unit	

Appendix 2

QUALITY OF DISTANCE EDUCATION VIEWS OF THOSE WHO TEACH AT A DISTANCE WITHIN PARTICULAR DISCIPLINE AREAS

Introduction

Studying academics' perceptions of the quality of distance education in particular discipline areas is a complex undertaking involving the identification of perceptions (i.e. understandings, comprehensions, feelings, viewpoints) about factors influencing the quality of teaching and learning at a distance. Through a number of similar studies in different discipline areas or with specific groups of staff (e.g. those employing specialist delivery technologies in programs) the investigators hoped to construct a larger, albeit limited, picture of how academics see quality in distance education. The collated results of such studies may well reveal general and specific features of quality and point to a number of possible generic and specific indicators which might be appropriate for use by academic staff when describing or appraising issues about quality in distance education within their area.

Participating institutions were provided with a case study on academics' perceptions of quality in distance education as a possible methodology which might be employed when conducting an investigation with this group of stakeholders. (Case Study 1). A modified form of this approach was used in Case Study 3, while a group approach to nominating key indicators was used in another institution (Nomination Study 2).

Case study 1: Report and summary of work undertaken

This study involved a group of six academics teaching post graduate awards in religion and religion education. There has been strong demand for their courses by interstate students and staff have national reputations as teachers-at-a-distance, and national and international reputations as academics. After individual interviews with staff, edited transcripts were circulated to all participating in the case study. Three group sessions followed where staff explored various issues raised in the transcripts.

To illustrate some of the issues which arise from such a case study, it is interesting to provide an outline of the results and a summary of some impressions that were gained.

The 'results' of the case study can be summarised in the form of an outline of the indicator areas which arose from the group discussion. Four areas were identified and it was believed that if the matters contained within the elaborative statements about aspects of these areas were addressed, any changes would influence the quality of teaching and learning at a distance. The structure for the areas is derived from a 'transmission model' of pedagogy and represents an educational position broadly held by the group. Briefly, the structure can be outlined in the following way

Area 1: General institutional support mechanisms for teachers and students

- . access to staff development concerning teaching at a distance
- . workload and other acknowledgement for materials preparation
- . access to technology used for distance teaching and learning
- . support for students provided by the Distance Education Centre
- . institutional support – library services
- . acknowledgement of ability/familiarity with studying externally

Area 2: Preliminaries to course delivery – course specific support

- . participation in peer review of teaching materials

Area 3: The teaching and learning process

The instructional component

- . ensuring student access to resources
- . skills in teaching at a distance

The internalisation component

- . teacher planning for student internalisation
- . variety of student/teacher interactions
- . encouragement for students to contact other students or interested parties as part of their learning environment

The presentational/assessment component

- . responding to student learning through assignments
- . provision of variety/choice in the types of assignment requirements

Area 4: Monitoring and evaluation

- . using evaluative information within planning phases
- . diagnosis of student assignments to seek evaluative information
- . formal evaluation

For each of the points in these areas a statement provided further elaboration - in many instances the elaboration describes process or desired outcome thereby providing an 'indicator' of performance. Unfortunately, a discussion of these elaborations is outside of the scope of this paper. However, to give an idea of the nature of the case study we provide sample sections of the report (Nunan, 1991). The first section reports issues which were discussed during the first group session and has been provided to illustrate the ways in which issues about quality were seen as problematic. The issues explored were:

the tension between two forms of 'judging quality'. One approach involved the idea of judging what is 'valued-added' for individual students. A quality program means that, for the majority of students, it identifies the student starting points (entry knowledge/skills) and enables the 'adding of value' from this starting point. Judgements about quality according to this view stress the learning resulting from the program relative to where the students begin from. Outcomes of students may be quite unequal even for graduates of the program. Another approach is to focus upon student outcomes and insist that a certain normative level of achievement occurs across the totality of outcomes. An analysis of 'quality' should acknowledge this tension as those teaching the program are continually called upon to make judgements by applying either or both views of quality.

the balance of trade-offs between the 'value-added' and normative view. These may be set differently for different programs. For example, student outcome judged against a normative standard is usual for Masters work where external examination of a thesis is a requirement. That is, quality is articulated differently for different programs.

the need to place importance upon transactions between (among) teacher and learner(s). Judging quality in education at a distance involved the process of valuing transactions for educational worth. The basis of the valuing is to be found in the general conceptual framework surrounding the idea of education. Education at a distance, while distinctive, is not a discrete education genre. (p7)

The following section gives a glimpse of the impressions of the investigator after the initial interviews:

First, quality in distance education within a discipline area was seen largely in terms of those curriculum and teaching issues over which the group had absolute control. The one notable qualification was the role of Library in providing 'search and supply' services. Interestingly, the Distance Education Centre was seen to carry out a technical role. It was seen as a pipeline between the institution and student, which should be established as rapidly as possible in order to carry the appropriate course materials, communications, assignment traffic, and the like. While such services provided by the Distance Education Centre were essential it was clear that issues of 'quality' from the viewpoint of academics was not about such technical matters, and, instead, involved factors more intimately connected with teaching and learning. This can help to explain the special importance of library services. They, in effect, were often central to students being able to achieve the particular teaching and learning strategies which encompass practices that were identified as contributing to 'quality' in distance education. Delivery services supplied by the Distance Education Centre, on the other hand, were a further step removed from values embedded in teaching and learning strategies. Because they are rarely initiated by or concerned with the needs of individual students, they were 'conduits' of a technical nature. It was only when the Distance Education Centre could demonstrate a form of partnership or involvement in matters which involve what academics view as teaching or learning issues that the Distance Education Centre could be seen to have an impact upon quality. For example, one academic noted that if the Distance Education Centre had within its powers the means to provide 'release-time' for writing course materials then it would have an impact upon quality.

Second, judgements about practices which had an effect upon quality of education were seen to be 'holistic'. Further, there were few opportunities for the group to formally focus upon such judgements. Quality in distance education within the area was likely to be formally considered only at times of discipline or program review - and then, frequently, this would mean an institution, rather than staff, initiated process taking place where evaluative activity would be directed towards

accreditation or reaccreditation. Given the pressures surrounding these formal processes and the involvement of other interests in course evaluation groups, this form of evaluation is often complex and does not provide the best opportunities for staff to debate issues which impact upon quality. However, for many programs in the institution, this form of review is the only forum where such issues are covered. Interestingly, while staff agreed that there was indeed a lack of formal focussed opportunity to reflect upon issues impacting upon quality, they nevertheless held the view that their practices were continually appraising 'quality' in some form. As one staff member put it there was a 'sort of hidden model in my head, a reference model that I would be comparing things with, even though we wouldn't have articulated it and put it on paper'.

Quality considerations, in these terms, are pervasive and continually infuse into judgements surrounding practical action.

Third, the matter of quality in teaching-at-a-distance was seen largely as a matter of communicative competence. The key vehicles were assignments and journals and, to a lesser extent, teleconferences. Frequency of communication was not so much an issue as the timing and the type of response. The aim was to encourage interactions between the individual students and staff. Interestingly, there was tension and uncertainty surrounding the matter of fostering quality interactions with students; tensions, because there seemed to be insufficient time available to effect an ideal form of individualised response, - uncertainty, caused by the often limited information available about the learning situation - an absence of any agreed 'standard' which might be applied to judge whether a particular response was indeed adequate. Many staff judged this area to be the most difficult and time consuming.

Fourth, staff analysed the characteristics of distance education as ones which flowed from the special 'inputs' to the system. Distance education was largely a response, in teaching and learning terms, to these inputs. Outcomes were, by definition, those of the course and were absolute in the sense that they were ideally the same for both the internal and external students studying the course.

The inputs that academic staff mentioned in the discussions ranged from their knowledge of the learning environments of students to their own workloads. For example, it was argued that because external students do not have access to libraries a compensatory emphasis should be placed on the provision of sufficient resources to enable the student to cope with the course; because external study involves negotiating formal structures within course materials, staff should be sensitive to any intimidation and stress generated by such structures and establish processes which lessen such effects; because staff do not receive formal workload recognition for preparing external course materials the products are of a lesser quality than might be achieved were workload recognition given.

Improving quality in distance education was therefore a function of the institution and staff recognising the situation and providing resources to standards which would achieve satisfactory processes and outcomes. For example, to overcome the difficulties of establishing 'dialogue' between students and staff more teaching time would be needed so that responses to student assignments could be a vehicle for individualised teaching. (p18)

This final section from the report again illustrates the complexities of case study approaches when analysing something as problematic as quality. The group raised conceptual questions such as:

Is it possible to evaluate the rich variety of decisions about teaching and learning through indicators and if indicators of some kind could be used, how would the way in which they were organised or grouped reflect philosophical positions about pedagogy in education at a distance? The group was not happy with the term indicator as it represented for them a causal connection between behaviours. They believed that, at a management level when dealing with groups of students, there may be some justification in describing and using indicators to account for practice, but, at an individual student to teacher level, indicators could not describe or be the basis of evaluating teaching or learning. This dissatisfaction with the term resulted in the use of the word 'elaboration' when dealing with aspects within particular areas. The second matter of grouping 'aspects' to reflect philosophical positions was an important issue with some staff, however, for others it was perhaps more important to consider aspects and their elaboration rather than the structure of areas.

It had been expected that a classification similar to that used in evaluation studies might have been favoured (ie context, input, process, and output) as a way of organising teaching and learning activities. However, an initial draft of possible indicators organised in this way was rejected. (p19)

In summing up, the report noted that:

staff involved in the study saw the quality of the interaction between individual students and the teacher as the key factor in a quality program. There was a learner centred view of the educational process. They could always illustrate their views by reference to a particular student in a particular circumstance discussing the dilemmas arising from the teaching and learning decisions which represented their dealings with that student. This is indeed interesting as one could speculate that this 'mind-set' may have developed by having to deal primarily with external students over a considerable period. Much of the discussion started from a framework about individual learning rather than group based teaching, a situation which often requires considerable re-orientation of values and attitudes by lecturing staff in a University setting.

A further point of interest was that the group placed little emphasis upon the matter of designing course materials. Instead there was an acceptance that it was preferable to review whatever might be produced by staff. That is, approaches to preparing course materials were largely intuitive. Deciding the form of the teaching dialogue within the materials could not be divorced from the substantive content of the course.

While the group was familiar with many curriculum design issues there was little interest in materials design - this was not surprising as the group placed more emphasis upon an 'internalisation' process to ensure that materials 'came to life' and assumed meaning for their students. Design for such unique responses by students during this internalisation represented, in part, a contradiction in terms. (p20)

We have included considerable detail of this one case study in order to illustrate the complex issues arising from judgements about quality in distance education.

ASPECTS AFFECTING JUDGEMENTS OF QUALITY IN DISTANCE EDUCATION

Area 1: General institutional support mechanisms for teachers and students

<u>Aspect</u>	<u>Elaboration</u>	<u>Comments</u>
1.1 Access to staff development concerning teaching at a distance	<p>The institution provides specific support in relation to the perceived needs of those engaged in teaching. Self-help may be initiated with the assistance of publications which address issues of teaching and learning issues. The assistance is not connected with appraisal of performance.</p>	
1.2 Workload and other acknowledgement for materials preparation	<p>Those responsible for determining the distribution of workload in departments/schools/faculties participate in a formal consideration to the workload of individuals which recognise materials preparation as a fraction of a workload. The academic value of teaching materials is recognised by their acceptance as publications in the context of promotions/appointments within the institution. (Especially where review processes have been undertaken either prior to or after publication.)</p>	<p>Workload recognition might involve a number of weeks of release prior to teaching a particular unit.</p>
1.3 Access to technology used for distance teaching	<p>Institutional acknowledgement of the relationship between technology and the capacity of teachers at a distance to interact with students should be demonstrated through easy access to fax, unbarred telephone, teleconference equipment and E mail. The institution should have established procedures which encourage the use of the above technologies within its teaching at a distance.</p>	



Comments

Elaboration

Aspect

1.4 Support for students provided by the DEC

The DEC can facilitate administrative arrangements which have a direct relationship with teaching external students. Established procedures exist for

- . providing support regarding general counselling related to courses and studying at a distance
- . acting as a intermediary for academic staff in relation to facilitating contact, implementing academic administrative policy (eg extensions to assignments)
- . acting as an intermediary for facilitating contact with other institutional support services (eg library, study skills).

1.5 Institutional support - library services

1.6 Acknowledgement of ability/familiarity with studying externally

There is a conscious attempt by teachers or other staff of the institution to sensitise students to the type of learning environment that they will need to construct in order to respond to forms of teaching at a distance which are employed within the course/s. Teachers should provide this at the beginning of the studies.

Area 2: Preliminaries to course delivery - course specific support

Aspect	Elaboration	Comments
2.1 Participation in peer review of teaching materials.	Peer review of draft course materials involving representation from professional staff of DEC's (eg course developers, academic staff etc) should be part of the evaluative/review activity undertaken by the relevant academic school/department and be on a regular, planned basis.	

Area 3: The teaching and learning process

Comments

Elaboration

Aspect: Instructional component

3.1 Ensuring student access to resources

Information is provided within the course materials on the range of resources which are likely to be needed in addition to those provided in the package. Further, there are a number of suggestions provided which outline the ways in which the resources can be obtained through libraries.

3.2 Skills in teaching at a distance

The teacher displays skilled performance in

- . conveying a friendly approach which is sensitive to the needs of external students
- . attending to the learning circumstances of individual students
- . written expression in all communications to students
- . listening, analysing and responding to individuals and groups via telephone
- . presenting information/teaching via video (either pre-recorded or live performance)

Aspect: Internalisation component

3.3 Teacher planning for student internalisation

The existence of pre-planned mechanisms to foster interactions between teacher and student is an aspect of teaching at a distance. Some or all of the following should be planned in course materials and teaching approaches.

- . individual phone contact between teacher and students
- . audio teleconferencing as a planned approach to counselling or audio tutorial functions
- . the development of extended written dialogue through journals

3.4 Variety of student/teacher interactions

The appropriate use of a variety of interactions can enrich teaching and learning. During the period of student study there will be some or all of

- . phone contact with individual students
- . audio/video teleconferencing of groups of students
- . fax, E mail messaging
- . person-computer interactions
- . extended correspondence
- . on-campus schools/workshops

3.5 Encouragement for students to engage other students or interested parties as part of their learning environment

Students undertaking external studies should be encouraged to create a learning environment which involves others. The creation of a learning environment can also be structured by institutional requirements for attendance at study centres or on-campus schools/workshops. The course should provide a defensible rationale for its approach towards issues of independence and control over the learning environment which accompanies the staff's view of teaching at a distance.

Comments

Elaboration

**Aspect: Presentational/
assessment
component**

3.6 Responding to student learning through assignments

The form of response and the turn around time in receiving a response impact upon student learning. A part of the response will incorporate the teaching objectives of the course and the learning aspirations of the student. Response to assignments is an interaction between the teacher and student and there is opportunity to provide some variety in the form of response.

3.7 Provision of variety/
choice in the types of
assignment requirements

Students should be able to demonstrate their learning through a variety of different forms of assignments - the presentation mode need not be confined to written material (audiotape/video may be options) or restricted to a single genre of writing. Wherever possible assignments should apply knowledge within contextual situations relevant to learners.

Nomination of Indicators, Study 2: Report and summary of work undertaken

The staff involved in nominating indicators of quality in distance education provide post graduate studies in the area of science and mathematics education. The student group is mature age and all have completed an undergraduate course, have work experience and are currently employed in the field in which they are studying.

The nominated indicators covered quality of intake (indicators of the student likely to succeed), quality of study materials and staff attitudes towards distance teaching and learning. The indicators and elaborative statements are as follows:

Indicator

Elaboration

Indicators of the student likely to succeed

(where necessary)

- . already holding a degree
- . mature aged
- . employed in the field of study being pursued
- . possessing work experience

Indicators in study material

- | | |
|---|---|
| <ul style="list-style-type: none">. flexible in encouraging work related projects. well provided with selected extracted readings. study guides prepared on sound instructional design principles | <p>study inclusion of 'generic tasks' so that experiences can be derived and applied to practical work environment</p> <p>all subjects contain photocopied journal articles and/or chapters from textbooks that are integral to the assignments for each module. There should be enough literature provided to enable students to write a scholarly assignment.</p> |
|---|---|

Indicators in staff attitudes

- | | |
|---|--|
| <ul style="list-style-type: none">. flexible and understanding on deadlines. thorough marking of assignments. short turn around time for assignments. availability to students | <p>assignment marking is an important means of communication and should involve written commentary documenting strengths and weaknesses</p> <p>assignment turn around time within 10 days</p> <p>variety of contact mechanisms and encouragement to contact as the need arises</p> |
|---|--|
-

These indicators represented key elements in determining the quality of education at a distance. Emphasis upon interactivity (thorough marking, short turn around, instructional design), and resources and support for external students, reflect the concerns expressed in the first case study.

Case study 3: Report and summary of work undertaken

The staff taking part in this study are mostly from the School of Social Science and Welfare Studies involved in teaching in the Graduate Diploma in Counselling. One of the participants, however, is from the School of Teacher Education because the Graduate Diploma has two strands; a general strand and a school counselling strand.

The Graduate Diploma has been offered for a number of years. The course is offered by distance education only and the enrolment numbers are divided equally between the general and the school counselling strands. One of the attractions of the course is that it has Australian Psychological Society (APS) accreditation and counts as a fourth year study of psychology. The quality of students enrolled in the course is very high as it is one of the few fourth year accredited courses offered by distance education.

The requirements of the two strands differ as follows. The Education Department in NSW funds the places for the school counselling strand and offers the support of the department in time off work to attend the residential components of the course; and offers placement of students and skilled supervisors for the practical components of the course. The students in the general strand are required to make their own arrangements about the residential components and their placement and have to find a suitably qualified supervisor. These are only superficial differences. The central requirements of the course are in every other respect identical (Linfoot and Todoroski, 1991).

The course is essentially a skills based course and is a challenge to offer by distance education. One of the participants summed up this challenge in relation to maximising the opportunities at residential components of the course.

It is a very skills based course in many ways as opposed to the more traditional theoretically based, I mean there is a mixture of both, and (so) ... the major quality issue in making sure that those residential times are used to the maximum potential; are used for that practical aspect of counselling.

While this challenge remains, the review of accreditation by the APS in 1990 - 1991 has meant that more emphasis has been placed on academic research and less on counselling skills. This has added two strains on the teaching of the course revealed by the comments made. The two difficulties are: the first is the tension engendered by the needs of the students to obtain counselling skills for vocational reasons; the second is the difficulty in teaching research at postgraduate level when the institution is just beginning to review the adequacy of its resources to cope with research courses (for example, the adequacy of library resources) (Relf, 1991).

Staff

The staff who lecture in the Graduate Diploma are all experienced lecturers and all but one of the participants has had extensive experience in teaching by distance education. Most have been teaching in the Graduate Diploma for a number of years and are also teaching in the new Honors course offered by the University by distance education and internally.

The comments made reflect the context of the course and the experience of the participants. While most of the comments are confined to the Graduate Diploma course, comments on the library resources for research for example are applicable to the Honors course as well. Some of the examples apply more directly to the Honors course. Comments about the design of courses for distance education mode as opposed to the lecture mode are mainly applicable to the undergraduate experience of the participants.

The areas of concern that were raised in the interviews can be categorised as:

- . course design
- . thinking skills
- . assessment
- . writing distance education notes, the task per se and time
- . residential schools
- . institutional support, and
- . communication with students.

Methodology

Participants were approached and asked if they would take part in the survey. At that stage the Project and the open ended nature of the interviews were briefly described. Individual interviews were arranged and the idea of a group session was raised at the initial contact - although, because of the pressures of the end of the semester and the course reviews resulting from the amalgamation of Charles Sturt University, the idea was only weakly supported.

The interviews started with a description of the project and the open ended nature of the interview was restated. Participants began the interview elaborating on issues of quality as perceived by them.

Participants were also provided with a list of statements about quality in education which were used as prompts when the interviews faded. In the early stages of the interview the approach was to ask for greater elaboration and clarification. Later in the interview the approach was to refer to the sheet of definitions and descriptions of quality or refer to pertinent comments that had been made in earlier interviews.

The taped interviews were transcribed and then summarised and categorised in this report.

Summary of perceptions

Area 1: Course design

Aspect

Elaboration

Integration of all aspects of DE package

The quality of distance education was not defined simply by the material sent to students but the whole educational experience. Thus aspects of quality essentially entail the links between the written material, the residential school, interaction with lecturer and other students and support services such as the library or computer centre.

Structure of study notes

The instructional technology on the presentation of teaching materials was important. Breaking text up into easily identified components - objectives; self motivational procedures; inclusion of other media - are some of the factors involved. And the basic 3 book format (Information book, Study Guide; and Resource Book) was particularly significant to one participant. It was generally accepted that the course design provide notes that are a compendium to other resources, and that the notes be fairly structured.

DE course equivalent
to face-to-face course

The objectives and outcomes
equivalent for courses offered
internally and by distance education.
Same objectives and outcomes though
a different course design to achieve
the objectives and outcomes by DE.

Content relevant

The courses need to be relevant to the
vocational needs of the students. Part
of this is that the materials should
maintain appropriate to standards
though be aware of the time
constraints that the students are
working within.

Content be up to date

The 'content has to be seen as being up
to date' because the education
students frequently compare the
course to the inservices and with other
institutions at inservice training.

Better prepared than internal
courses and underutilised mode
of study

'I think distance education is almost
superior to the normal lecture
procedures ... probably (because) much
more preparation and much more
thought goes into the material.' Much
more emphasis is placed on working
out the objectives and meeting those
objectives in the notes than happens in
internal teaching.

Course design around the
residential components

Because of the counselling skills
component of the course the
residential periods are important for
that development. Thus the course is
designed so that there is no doubling up
with progress through the course at
home and at residential school: 'I
certainly try to make sure that what
goes on in the residential school are
things that cannot be done at home.'

Area 2: Thinking skills

Aspect

Challenge students
to extend themselves

Elaboration

Lecturers should stimulate students
to greater understanding of the
material than the students realised.
But this has to be done while being
sensitive to the students' other
commitments.

Link new learning to students level and to their experience

In teaching lecturers need to challenge their students to learn more efficiently and effectively.

Develop critical thinking

Part of the linkages that are one aspect of quality of learning, the students actual experience is one link that needs to be made.

All participants considered the development of critical thinking as a major aspect of quality of a DE course. One considered it to be the most important factor.

Area 3: Assessment

Aspect

Elaboration

Progressive assessment

Most participants considered that students were served better by progressive assessment throughout the semester. This was one aspect of quality as students tended to work in spurts. By progressive assessment it helped students attain the goals of the course. Some considered it important to integrate the assignments with the material even to stating the topics that an assignment related to. This relates to the course design raised by some participants.

Feedback

Feedback was very important as it provided a real opportunity for individualised tuition in DE.

Area 4: Writing

Aspect

Elaboration

Time available for writing

Most were sensitive to this and were concerned that there was not enough time allocation for writing. This was seen as an institutional problem as the institution did not allocate time for writing.

Some saw this problem from a broader perspective looking at staffing levels. That because there was not adequate staffing levels, there was not enough time for the myriad of jobs within the school to be done and a time allocation in itself would not be sufficient.

Commitment to the course

One considered that the increasing use of contract staff potentially led to a decrease in the quality of the course.

Skills of writing for DE

Good skills of writing instructional materials were a contributing factor for quality. The ability to link ideas and paragraphs is an important skill that needs to be addressed by institutional support for writers. The conversational writing style was adopted by some while some considered the need to provide motivation in the written material the significant skill.

Area 5: Residential school

Aspect

Elaboration

Integration

All considered the integration of the residential components into the whole teaching package as an essential component of quality.

Interaction

The interactions of students and staff as well as with other students were also essential components of quality.

Area 6: Institutional support

Aspect

Elaboration

Library services

Library services are important for staff in keeping up to date with their specialisation and for students in the usual way and for developing research skills. These two factors were mentioned by most of the participants.

Different medium

Residential schools, teleconferencing, audio tapes and the written materials were all important in development of high quality courses. Most would like assistance and the encouragement for using video tapes particularly for demonstrations of counselling techniques.

Area 7: Communication

Aspect

Elaboration

Communication as student support

All communication with students was important. Starting with the design and language of the notes, assignment feedback, return of telephone calls and contact during residential school were all part of the integrated theme that most participants emphasised.

Discussion

The project investigators had hoped for a number of studies which would cover a range of discipline areas, a range of level of awards, and, a range of delivery techniques. While the studies presented by the project are useful and provide 'indicators' of quality in distance teaching and learning it is clear that there is need for further extensive work in recording practitioner theories and practices in the area of quality improvement of distance teaching and learning.

The studies point to the importance of the following factors:

- . the involvement of expertise/staff development at the planning or review stage of course development or redevelopment
- . the need to ensure adequate resources are available prior to the teaching of an external course to enable course preparation, writing, editorial consultation, media support etc.
- . the need to place the means of interactivity with the student at the centre of distance teaching and learning. This includes the use of residential schools as well as mediated conferencing
- . the need to ensure that external students receive adequate and equitable levels of academic and administrative support during their studies.

The project investigators feel that it is useful to note the fact that these exercises with this stakeholder were viewed as a useful form of staff development activity by all participants as they formed a type of 'discipline review'. Also, the carrying out of this part of the project was a complex activity involving a range of evaluation and ethical issues regarding the purposes of the study and possible uses of the results of the study. Not unexpectedly, the timing of the activity, the availability of on-site investigators, the establishing of support with staff in the discipline area, and the support for such activity by the Schools/Faculty of the participating institution were all factors which had an impact upon both the practicability of conducting a review and the extensiveness of the review itself.

Appendix 3

INSTITUTIONAL CLIENTS OF DISTANCE EDUCATION CENTRES THEIR CONCERNS FOR THE QUALITY OF DISTANCE EDUCATION

Introduction

This appendix is concerned with the term of reference of the Project which considers the needs of potential client institutions by seeking input on their views about how Distance Education Centres might assist them in achieving excellence in distance education. The investigators sought advice on the methodology of obtaining 'inputs from different clients' as it was felt that 'client satisfaction' in relation to the quality of services and products of Distance Education Centres may be uniquely determined by the needs and nature of specific contractual relationships developed between a client and a particular Distance Education Centre. Institutional clients are not a homogeneous group - the needs, expectations, and educational background of corporate or private clients were different from clients within the higher education system - also, it was clear that there were wide variations between higher education clients of expertise, experience, and infrastructure to support distance education.

After advice from various sources the investigators decided to seek:

- . initial views about the involvement of higher education institutions not designated as DEC's through the meetings of their operational 'heads'. A letter seeking advice on the most useful form of input was circulated to this group through Associate Professor Bruce Scriven of Queensland University of Technology and members of the group were invited to respond during a teleconference session. A summary of responses was made available to the Project.
- . expert advice from Professor Faith Trent, a member of NDEC. The Flinders University of South Australia provides nursing and education awards externally and Professor Trent has responsibilities for matters related to Flinders University as a 'client' of the Distance Education Centre of the University of South Australia. The interview with Professor Trent focused upon policy issues related to quality improvement of distance teaching and learning through the services provided by Distance Education Centres.
- . input from three private 'clients' - Engineering Education Australia, Telecom and the Australian Taxation office. An initial response from Engineering Education Australia suggested a way in which the responses from Telecom and the Australian Taxation Office might be organised. Consequently these institutions were invited to comment upon:

- . materials presentation - content, structure and design, physical presentation
- . teaching/delivery - assignments and examinations (appropriateness, weighting, relationship with course objectives), interactive elements/communication technologies, tutor and support mechanisms (availability of counselling, availability of resources for learning etc)
- . administrative support (dispatch pre-enrolment and post enrolment information, interstudent liaison processes).

Higher education institutions as clients

The advice from representatives of non-DEC higher education institutions was ambivalent with regard to the need to consider the DEC/non-DEC relationship as a part of the study of quality of distance education. There was some support for the notion that each client would inevitably 'measure' the quality of services provided in terms of expectations established within a contractual relationship. Indeed, it would be up to the client to spell out sufficient detail within the contract in relation to its expectations so that it was clear that at least a minimum acceptable standard was met by both parties. In clarifying such matters of detail it was thought that the indicators nominated in Chapter 5 would provide a useful checklist of factors which might be applied to their particular circumstances.

The interview with Professor Trent focused upon wider quality management/improvement issues and the possible future roles of Distance Education Centres. In the medium term (5 years) it was thought that non-DEC higher education institutions would be likely to need:

- . advice/assistance with curriculum and materials design for external teaching and learning materials
- . editorial/graphic design services
- . specialist design advice and some production support for non-print components of learning packages
- . advice and services which would enable a student support dimension for external students to complement existing administrative systems.
- . the use of specialist communication technologies/software etc available through the Distance Education Centre for students of the non-DEC institution. The use of these facilities is especially important in raising the quality of distance education and implementing a 'culture' which acknowledges and accommodates the needs of external students.

Institutions designated Distance Education Centres should act as key centres in at least two ways. First they should trial and introduce new technologies which facilitate teaching and learning at a distance and disseminate these developments through consultancies and staff development within other higher education institutions. Second, Distance Education Centres should provide a expertise to other higher education institutions which would enable them to initiate staff development programs for the improvement of distance teaching and learning. Non-DEC institutions should be aware of the range and level of expertise available and institutions should contract DEC's to deliver such consultancy and staff development services which should be available as a normal part of non-DEC institutional expenditures on the improvement of teaching and learning.

Other clients: Engineering Education Australia Pty Ltd

In the response provided, Engineering Education Australia indicated that, as a consumer, it was reflecting the interests of over 100,000 professional engineers - however, they believed that these needs were not so different from the needs of other distance learners thereby noting that their response would have a broad application.

Quality, in the view of this client, needs to be defined 'not only in terms of high standards of design of learning materials, dynamic interactive teaching methods and efficient/sensitive student support services, but in terms of Access, Flexibility and Relevance'. The response continues noting that 'the key word is flexibility, since this quality or characteristic is essential if access and relevance are to figure significantly in the kind of programs that are offered to and accepted by the engineering profession or other similar professional group'.

'Flexibility' as a prime characteristic of a quality program would entail, in their view:

- . providing more opportunities for professionals to relate the material to their respective workplace contexts, for example through the provision of relevant case studies and setting project-oriented assignments
- . developing units in a modular form so that professionals have choices in the size of their learning 'bites' ...
- . improving and expanding the use of communication technologies in distance education, especially to provide for more effective peer group interaction providing teaching/learning experiences in a variety of settings and delivery modes, eg on-site tutorials or workshops, field studies, teleconferencing, computer conferencing etc.

providing effective pre-enrolment information about objectives, content, structure and delivery of distance education courses, essential course requirements and special features with implications for student decisions, and most importantly, the target group or individual for whom the course is intended.

In providing guidelines to quality the response provided information in the areas of learning materials (content, structure and design, physical presentation), teaching/interactive elements, and administrative support (dispatch arrangements, student support). As a part of the pre-enrolment information available to students the response indicated that the following information should be routinely available in standardised format to enquirers - number and name of subject, adviser/coordinator, semester offered, prerequisites, subject outline or description, learning materials provided, prescribed texts, essential equipment required, attendance requirements, special teaching methods (interactive elements), assessment.

It is significant that Engineering Education Australia commissioned a report, *Delivery and communications technologies in the provision of professional continuing education for engineers* (Guiton and Atkinson, 1991) to advise upon possible uses of technologies. A recommendation from this report notes that:

EEA inform universities that the extent of use of interactive communications technologies is a significant component in the course quality assessment criteria to be used on the proposals to EEA.

The report notes that 'firstly, in general a course with good use of interactive communications is very likely to be a better quality course. This may be at a simple level, such as high standards in individualised telephone tuition or at more complex levels such as audio teleconferencing or video teleconferencing'. In line with these sentiments a further recommendation states that 'EEA encourage in its requests for proposals the systematic provision of access to interactive communication technologies, including computer conferencing, electronic mail and teleconferencing. Ways of facilitating both student and EEA access to these technologies should be carefully assessed for inclusion in courses proposed for EEA approval'.

Thus it is clear that, from this client perspective, technologies which allow conferencing (ie where receivers and originators have similar media capabilities) either in real time or 'asynchronously' are seen to provide an added dimension to the quality of the course and its delivery. Recommendation 18 (see Chapter 6) is directed towards starting the process enabling institutions to strengthen the use of computer mediated communications within distance teaching and learning.

Other clients: Australian Taxation Office

The Australian Taxation Office is involved with the delivery of education at a distance through the University of New South Wales and the University College of Central Queensland.

The following listing provides this client's perspective upon factors influencing the quality of distance education.

Materials Presentation

Content

- . The material content must be academically sound;
- . The content must be validated by independent experts, preferably from outside the DEC system and with relevant current exposure to industry;
- . The content must be kept up to date.

Structure and design

- . The materials must be educationally sound, with predetermined objectives set out for students to read and understand;
- . The material must be easily referenced;
- . Uniform minimum standards in terms of quality of print and presentation should be developed. These standards should cover such things as:
 - . the resolution of the printing,
 - . ease of incorporation of amendments,
 - . regular review and updating of materials.
- . The structure and design of the materials should be consistent from subject to subject throughout the program.

Physical presentation

- . The materials must have a professional appearance, e.g. they should be properly bound, not just stapled;
- . There needs to be an appropriate balance between professional appearance and cost, with neither one dominating;

- . Presentation has to be such that it is not off-putting to the student, e.g.
 - . pages overcrowded with type that is difficult to read;
 - . the size of the material package is so big as to be daunting for the student;
 - . The material must not look out of date.

Teaching/delivery

Assignments and examinations

- . Assessment weightings should not be dissimilar from on-campus courses;
- . Assignments and examinations should assess whether the course objectives in terms of skills and knowledge have been met.

Interactive elements/communication technologies

- . There should be minimum standards for the time period for answering student inquiries and providing assignment feedback;
- . There should be appropriate use of available technology. Its use should be judged in terms of the value added to the student learning experience and cost saving, if relevant;
- . Communication technologies should only be used where they are easy for students to learn.

Tutor support mechanisms

- . Use of videos to introduce the lecturer and the subject to the students;
- . Students should be encouraged to be self-supportive, for example, the use of learning groups amongst the students should be promoted and actively encouraged. The University should take an active role in the establishment of the groups;
- . There should be easy access to student counselling services. The university should take a pro-active role in monitoring the progress of students, for example, they should follow up on late assignments to forestall student dropout;
- . The university should initiate telephone communication with all students early in the course. Ideally this should be done by both the lecturer and the student counsellor.

Administrative support

- Materials should be dispatched early to students;
- The university should make use of Newsletters and bulletins both before and during semester to keep students informed;
- There should be easy access to critical information via a student hot-line or similar service.

Other clients: TELECOM

The response from TELECOM was based on initial experience derived from Telecom Training Services role in introducing studies in an Associate Diploma of Adult Education (Training). Maximising retention rates was linked to the quality of a program and importance would be attached to:

- enhancing student motivation particularly through mechanisms to recognise prior learning within the assessment of the course by providing credit for prior learning.
- the links between competency profiles and career development.
- a participant support framework through 'in-house' tutors.
- flexibility in meeting student needs through 'extended completion periods' and individually negotiated contracts.
- modelling good delivery through appropriate use of technology - e.g. bulletin boards for E mail etc. Interactivity is essential and the delivery should exhibit a clear break from 'correspondence models' of distance education.

Discussion

Views about the quality of distance education from various clients depend upon their needs in relation to course design, delivery, requirements of professional associations etc. Interestingly, corporate clients are using the mechanism of a contract or proposal to make specifications on factors that they believe will influence the quality of the distance education for which they are contracting services. In addition some clients ask that a 'quality manual' accompany each subject or unit for which materials and distance teaching/open learning arrangements apply.

**APPENDIX 4
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APPENDIX 5 ANNOTATIONS OF SELECTED WORKS

The following annotations are the author synopsis or have been constructed from key sections of the authors text. The annotations are intended to provide a guide for those who wish to follow up on matters of detail in areas related to the quality of education. The annotations provided are from a selection of works within the bibliography.

Acherman, Hans A. (1990) Quality Assessment by Peer Review; A New area for University Cooperation, Higher Education Management, 2, 2, 179-192.

This article reports on the progress of quality assessment and the new relationship it is forging between the national government and the universities in the Netherlands. It also describes a project on quality assessment started by the Association of Cooperating Universities in the Netherlands in which the quality of twenty six university programs was assessed on a nation wide scale. This assessment was undertaken by four visiting committees of independent experts. The author concludes that '... although aiming in the first place at the improvement of educational quality, this project is also a major step in the direction of more self regulation on a departmental and institutional level and of less interference by the government. As far as circumstances in European countries are comparable, universities could learn from each other. This article suggests joining forces on the practice of quality assessment, the European year 1992 approaching rapidly'.

Alkin, M. (1988) National Quality Indicators: A World View, Studies in Educational Evaluation 14, 1, 11-24.

'This paper presents an overview of the issue of national quality indicators based partially on a synthesis of the informed judgements of a number of respondents from throughout the world.' It presents an analysis of the quality indicator movement and its focus on 'the development of new measures, procedures for standard setting, better procedures for data collection, storage and analysis'. The author categorises indicators as inputs and outcomes. Inputs are defined as schooling resources and processes. Outcomes are defined as the acquisition of knowledge. He then goes on to survey the means by which these indicators are measured and in particular points out the 'apparent conflict surrounding the use of the test performance of individual students as the basis for judging quality of schools'. His discussion of the role of quality indicators also points out the tenuous relationship between evaluation information and direct administrative action.

Ashenden, Dean. (1988) Indicators, Information and Education: A discussion of possibilities and problems, CDC, Canberra.

'This paper considers both possibilities and desirabilities in the use of indicators and, more broadly, in the use of information about education ... Its general conclusions are that it is ... possible to collect and use valid and reliable information about almost any aspect of the educational process.' It discusses the benefits and dangers of this process and points out the important role to be played by schools and systems.

Baldwin, Hon P. (1991) Higher Education: Quality and Diversity in the 1990s AGPS, Canberra.

The purpose of this paper is to 'take stock of the general impact of the White Paper policies, to respond to new issues that have emerged, and to chart new directions for the future'. It draws from the views of higher education interest groups and also from a number of recent reports in the area.

'The statement sets directions for the development of Australia's higher education system through the 1990s as a foundation for our social, economic and cultural development in the twenty first century. These directions build upon the achievements of growth with equity in participation that have been realised through the White Paper initiatives. They give priority to quality in diversity as the system responds to emerging challenges ... The focus of the new policy directions is the development of a comprehensive set of measures to further enhance the quality of higher education teaching and research.'

Ball, R. and Halwachi, J. (1987) Performance Indicators in Higher Education, Higher Education, 16, 4, 393-405. (author synopsis)

'Interest has been increasing in many countries in assessing performance of higher education institutions (and also departments within institutions). Two important reports in the U K in recent years have strongly advocated the use of performance indicators for this purpose. This paper argues that such indicators cannot be used in a meaningful way without a clear view of institutional goals. Problems of deriving such goal systems are discussed and a critical review of work done in this field is presented. Methodological problems associated with devising and using effective and useful performance indicators are described and research undertaken in this field outlined. Finally the authors outline the conditions under which they believe performance indicators may be used to give valid insights into performance of institutions (or departments)'

Barache, J. (1988) Total Quality Policy in Distance Education as a General Process of Innovation, Epistolo Didaktika, 1, 11-30:

This paper discusses the definition of quality and how it might be applied to distance education. The paper defines the concept 'total quality' as applied to distance education and identifies the seven service components that contribute to total quality as accurate information, ethical guidance, enrolment formalities, the self-learning process, continuous relationship between the institution and the student, psychological stimulation from the institution and administrative system to help the student to carry on and not drop out, and assistance at the end of the course in practical decisions connected with the conclusion of the learning period, most often in finding a job.

Beswick, D.G. (1988) Prospects for the 1990s: a new phase of development in Australian Higher Education: Higher Education Quarterly, 42, 2, 162-178. (author synopsis)

'Higher education in Australia is seen as having reached the conclusion of one phase of development characterised by a high degree of central planning and to be entering a new phase in which it is argued that a radically different orientation is required. Recovery of at least shared responsibility by the states and the development of private initiatives should help to promote more creative management through diversification of funding sources and lines of accountability. Pressures for change follow demographic and social changes in the Australian population which are likely to favour increased participation in higher education for both personal and national economic purposes'.

Blake, Cliff and Wilson, Geoff (1991) Distance Education in Australia, Paper prepared for the AV CC, roneo, 1-9.

The paper provides an overview of the characteristics of distance education and its role within the higher education system. The policy background to the current system is outlined and future issues for the AV CC are identified in relation to the establishment of a single Open Learning Institute and the proposed National Open Learning Agency.

Bourke, Paul. (1986) Quality Measures in Universities. CTEC, Canberra.

This study investigated 'the possibility of defining criteria for distinguishing between Australian university departments in terms of the quality of their performance.' It also investigates the policy uses to which this criteria may be put. An example of the application of such criteria is provided through the University Grants Committee's recent practice in the United Kingdom. The

experience of the United States in applying performance measures is also discussed. Further discussion is made on the issue of quality research relating to Australia. The report concludes with the assertion that Australian universities need to develop a more '... energetic culture of evaluation' if they are to engage in negotiations with external authorities on terms which the 'universities have themselves identified'.

Church, C.H. (1988) The Qualities of Validation. Studies in Higher Education, 13, 1, 27-49. (author synopsis)

Demands for enhanced quality and quality control in higher education, such as those contained in the 1987 White Paper, often involve increased stress on validation. This emphasis on a peculiarly British system of peer review of courses suggests that an examination of some of the qualities of validation may be helpful in ensuring that it continues to achieve the ends expected of it.

The structure of validation generally requires action at course (or department), faculty and institutional levels. Validation can operate in at least three modes: initial approval of new courses, regular monitoring of performance and intermittent but more intensive inspections of course organisation, and achievement. In all three modes the basic structures function in a way that uses specific inputs processes and outputs. Among the inputs, are admissions, resources, staffing and curricula. The processes involve such feedback mechanisms as continuous assessment together with staff development.' Training in validation skills is but rarely provided. Outputs are reviewed through final examinations, the external examiner system and outside visitations.

The question which arises is whether this system is an adequate form of quality control. The conclusion is that, while it has certain methodological weaknesses, validation is a legitimate and defensible tool. But, if it is to succeed in new circumstances, more thought about its qualities and the means of developing them is necessary.

Commonwealth of Learning. (1990) Quality through distance. Comlearn, 1, 2, 1-4.

This paper discusses the possible contribution that distance education can make to the general improvement of education. It compares the level of quality provided by internal and external courses and concludes that it is the quality of the teaching materials that determines the quality of distance education courses. It also discusses the contribution that distance education can make to management techniques through the integration of work and study. Use of distance teaching materials is also seen to increase access and equity.

Cowan, J. (1990) Report of the Quality Tuition Working Group; Optimum Academic Support for All Students, Paper for The British Open University, roneo, 1-26.

The report uses two conceptions of quality to conceptualise quality tuition in the context of the Open University (UK) and covers quality tuition as an intrinsic part of course production and maintenance and within the broad context of academic support. The latter section of the report focusses upon the supports which underpin the delivery of quality tuition and includes a student and tutor charter and recommendations for staff development.

Cuthbert, R. (1988) Quality and Management in Higher Education, Studies in Higher Education, 13 1, 59-68. (author synopsis)

'This paper examines the relationship between quality and management in higher education. It considers the nature of management, the meanings ascribed to management and related concepts such as leadership, and the appropriateness of these concepts in the context of higher education. These preliminary considerations provide a basis for considering the connections that may exist between management performance and institutional performance. In addressing these issues, the paper aims to confront such questions as: what part does management play in ensuring high quality institutional performance? to what extent can judgements about management performance be separated from judgements about institutional performance? and so on. This necessitates consideration of how these kinds of performance can be judged, and the paper offers frameworks for analysing judgements of institutional and managerial performance'.

Cuttance, Peter. (1990) Performance Indicators and the Management of Quality in Education, Keynote Address prepared for the Third National Conference on Indicators in Education, Canberra, December. Performance indicator Task Group, Scottish Education Dept. (author synopsis)

'This paper deals with a range of issues which impact upon the use of performance indicators in managing the quality of education. It commences by discussing measurement issues and the purposes for having performance indicators. These purposes are then linked to recent change in the management of public sector organizations ... Issues of review and evaluation in public sector education systems are discussed in the light of a convergence of theoretical frameworks from two quite different perspectives: the assurance of quality, and organisational perspectives of education systems as multi level systems. The role of monitoring is linked directly to the emergence of an emphasis on auditing. Audit, review, and evaluation at system level are discussed in the context of the assessment of effectiveness, efficiency, and quality assurance. Organisational development and accountability are

discussed in the light of the management of quality within organisational units and across the system ... The issues raised in the paper are discussed in the context of the emerging system of quality management and review in the South Australian Education Department.'

Cuttance, P. (undated) Performance Indicators for Schooling: A Report to the Scottish Education Department. (author synopsis)

'This report reviews and analyses recent developments in the use of performance indicators in school systems. Its purpose is to provide an overview of these developments and to provide a context for work currently being undertaken HM Inspectorate to assess the suitability and prospects for the introduction of performance indicators for schooling in Scotland.

Section 1 of the report provides a discussion of the issues that have prompted the introduction of performance indicators in various national education systems. Section 2 consists of a series of chapters which address particular issues that provide the necessary framework for performance indicators ... Section 3 consists of a single chapter which reports on the development and use of performance indicators for education in three nations: the USA, Australia and Britain ... Section 4 considers performance indicators in the context of the improvement of schooling ... Section 5 discusses a set of issues related to specific considerations of the Performance Indicator Task Group'.

Cuttance, P. (1991) Monitoring Educational Quality Through Performance Indicators for School Practice, Paper for the American Educational Research Association Annual Meeting, Chicago, 1991. (author synopsis)

The first section of this paper "discusses the management of quality in education systems. Indicator systems are discussed in the section that follows and the relationship between indicators, development and accountability is addressed in the context of a system of education review that has recently been established in South Australia. The final sections of the paper discuss the development of performance indicators to serve both development and quality management purposes. These indicators have been developed as part of a broad framework for continuously monitoring and reviewing the quality of the education provided for students. Information from the indicators of effective school practices and functioning" is also discussed.

Cutting, B.A. (1991) Total Quality Management (TQM) - Everyone is an Evaluator, 1991 National Evaluation Conference, Adelaide, South Australia.

This paper discusses the use of Total Quality Management and its relationship to evaluation as a part of Project Management and Budgetting (PMB). 'This paper suggests that there is a significant degree of compatibility and commonality between TQM and PMB, and that in the respect of evaluation, the link is quite strong'. A definition of TQM is provided and the ties between TQM and evaluation are identified. The author then goes on to point out benefits of TQM in terms of staff involvement. The paper concludes that 'in a practical sense, if not in a pure theoretical sense, there are strong similarities between evaluation and TQM. Moreover the application of TQM like principles to an organisation has the potential to involve virtually all staff in what are essentially evaluative practices - thereby enabling them to contribute constantly to effective and efficient resource management - and to make evaluation of performance an ongoing concern rather than a one-off consideration'.

Dawkins, J. (1988) Higher education : A policy statement, AGPS, Canberra.
(author synopsis)

'This policy statement sets out the Commonwealth Government's strategy for the long term development of Australia's higher education system. It marks a new era of growth and opportunity for our higher education institutions, with potentially significant benefits for all Australians.

The release of *Higher Education: A Policy Discussion Paper* in December 1987 led to a process of intensive community discussion and debate on the roles and objectives of the higher education system. Over 600 written responses were received from major educational bodies, institutions, professional organisations, government authorities, employer groups, unions, academics and other interested individuals. In addition, the Commonwealth undertook an extensive round of campus visits and consultations with key organisations. The views expressed in written responses and by other means, both formal and informal, have been carefully considered in the development of this statement. The level of debate and interest generated by the Policy Discussion Paper reflects the strong wish of many Australians to share in decisions taken on the future development of our higher education system.

The Government's strategy for the development of the higher education system is part of a wider agenda of reform spanning all elements of the employment, education and training portfolio. The Government is committed to growth and quality enhancement across the whole of the education and training system – in schools, technical and further education and industry training, as well as higher education. Details of the Government's objectives in these other areas have been announced in previous policy statements, notably Skills for Australia (September 1987, A Changing Workforce (May 1988) and Strengthening Australia's Schools (May 1988)'.

Farren, R. and Guiton, P. (1987) Standards of Quality in External Studies, TAFE External Studies College, Western Australia/Murdoch University, roneo, 1-12.

Standards of quality must be viewed within a context. This paper seeks to initiate a dialogue on statements of criteria by which quality in external studies may be judged. 'The establishment of standards of performance assumes a process or product for which there can be a common yardstick. In any educational enterprise this must be the learning achieved by students in the system. But if we confine ourselves to measuring learning outcomes we will not arrive at guides to operational effectiveness.

'A further problem is that of establishing a common frame of reference for the contexts in which the learning takes place'. External studies and distance education should not be treated as synonymous terms. 'Australian universities grant the same awards to all graduates regardless of study mode ...' Standards in external mode should therefore not be treated in isolation. '... any attempt to establish standards of quality for external studies, in isolation, could lead to decisions being taken which though appearing to benefit external students, could seriously disadvantage both on campus and off campus students'.

Fenwick, John. (1991) A question of quality: aspects of quality in distance learning. Paper presented to the 1991 Biennial Forum of The Australian and South Pacific External Studies Association. (author synopsis)

'In 1988 the Australian Government White Paper – *Higher Education: a policy statement* was released by the Department of Employment, Education and Training. It set down the need for an improvement in the quality of external studies.

This paper examines the definitions of quality, efficiency and effectiveness. The paper puts forward the view that quality distance learning must emphasise the needs of the learner. The emphasis currently is on content. That emphasis needs to be balanced by attention being paid to the process of learning. Quality in distance learning needs to develop enhanced metacognition by distance students.

The paper seeks to apply some of the commercial principles concerning total quality management. It examines the emphasis on the needs of the customer rather than on the institution.

A change of focus is needed. Quality distance learning requires quality distance teaching'.

Franklin, J. Performance Indicators in Education: The Participatory Approach in Wyatt, T. and Ruby, A. (1988) Indicators in Education: Papers from the First National Conference, Australian Conference of Directors-General of Education, Sydney, 45-53.

This paper discusses the subject of performance indicators in education with reference to their use in the national science funding policy. 'Science policy, like education policy, has made increasing use of quantitative "tools" in recent years ... The concerns of science policy ... overlap with those of education policy, particularly around the question of funding for higher education institution (HEI) research ... The challenge for those receiving funding is to improve performance and to demonstrate accountability in exchange for public support and in order to compete for fewer resources.' The author points out the lack of decision making tools available for making decisions about funding because '... no single group of academics can provide an overview of research activities in all Australian HEIs. Further ... there are no disinterested peers'. The British experience in dealing with these issues is referred to as an example and the lessons learnt are discussed. 'These lessons from the UGC experience raise a question about the difference between top-down and bottom-up approaches to evaluation and performance indicator development.' The author concludes that while indicators can only be agreed upon in a context specific way '... the bottom line is that governments do not have time to do everything in a bottom up fashion'. His solution is to develop a participatory approach and this is described in the remainder of his paper.

Frazer, M. Quality assurance in Higher Education, Council for National Academic Awards, UK, (roneo), 1-24.

'This paper is structured around three questions. Why is there concern for quality? What is meant by quality? How can quality be assured? Approaches to answering these questions are described by reference to higher education in some countries. However, no attempt is made to provide a comprehensive review of the arrangements for dealing with quality in higher education in every country. Reference will be made to key publications by authors from various countries. Terminology used in the literature on quality in higher education can be confusing because there is no agreement on the meanings attached to various terms. It is necessary, therefore, to start with definitions and explanations so that the reader will know how to interpret the author's use of some much used terms in this field.

The final section contains a review of the various types of national agency concerned with quality in higher education. The case is made for an international network of such agencies'.

Gale, F. (1991) True Quality entails 'vive la difference'. The Australian, Higher Education Section, September 4, 14.

This paper discusses the possible negative effects of the push for quality and equality in higher education institutions. The author believes that relative freedom is required in universities if worthwhile research activities are to be undertaken. The application of centralised performance indicators, particularly those associated with economic control, will not achieve this. Greater equity will also lead to an inefficient uniformity between institutions which will, in the end, not meet students' needs. 'Universities are not businesses. We cannot measure productivity in terms of unit costs or time taken to obtain degrees. Students are not products. Research is not about improving our economic performance'.

Guri, S. (1987) Quality Control in Distance Learning, Open Learning. 2, 2, 16-21.

'Distance teaching universities vary considerably in their characteristics but share a common concern in the need to ensure the quality of their products'. In this paper the merits and problems of the approach used at Everyman's University (EU) in Israel are discussed. The major feature of EU's course production is that its academic work is based within a '... nucleus of internal faculty members working together with outside contributors from other major Israeli universities'. The remainder of the article describes the effect that this has upon the 'control mechanisms' for course approval and design. In brief

these include the evaluation of course proposals by outside experts and subject area committees. The course is then developed by a course team. The benefits of this approach, the author points out, are that 'a small staff can manage efficiently a relatively large scale distance teaching operation by tapping the intellectual resources of other universities and using special quality control procedures'.

Hattie, John. (1990) Performance Indicators in Education. Australian Journal of Education, 34, 3, 249-276. (author synopsis)

'Educationalists need to participate in deciding how performance indicators will be used, if at all and how they will be combined to optimise the quality aspects of teaching, research and service in departments of education. The use of performance indicators in the United Kingdom, United States, and Australia is noted and a model of performance indicators is developed. The model is assessed by applying it to departments of education in universities throughout Australia. The departments are ranked on inputs, processes and outputs and the implications of various weighting schemes are discussed'.

Hunter, D. (1988) Review of Ensuring Quality in Open Learning: A Handbook for Action, Open Learning Branch, Manpower Services Commission, in Open Learning, 3, 3, 61-62.

The goal of this book is to enable readers to 'identify the professional skills which producers and deliverers of open learning need to provide quality open learning'. The handbook contains five chapters that cover the 'process of open learning and the need for quality, a suggested code of practice, and a series of action guides'.

Johnes, Jill and Taylor, Jim. (1990) Performance Indicators in Higher Education (UK Universities), The Society for Research into Higher Education and the Open University Press, Buckingham. (author synopsis)

'It is ... the purpose of this book to explore the possibility of constructing performance indicators for the university sector. Given the inevitable resource constraints, we have focussed attention on a limited range of variables which purport to measure the teaching and research outputs of universities. Furthermore, we made an early decision to concentrate our attention on the university sector as a whole rather than focus on any one part of it. We therefore set our sights on comparing the performance of institutions, using a range of variables which have been frequently mentioned as potentially useful performance indicators by policy makers and university

administrators. Initially we concentrated on what may be termed 'teaching indicators' namely the undergraduate non completion rate, degree results and the first destination of newly qualified graduates. This list was subsequently extended to cover unit costs and research performance."

Johnson, R. (1990) Open Learning: Policy and Practice, A discussion paper commissioned by the National Board of Employment, Education and Training and the Department of Employment, Education and Training. AGPS: Canberra.(author synopsis)

'Australian Society is changing. Open learning is an educational approach required to cope with those changes in the provision of education.

Open learning is a term increasingly used in educational writing. It embraces such practices as open admission or more flexible admission requirements to educational courses; student choice of topics and modes of study ...; student choice of timing and manner of assessment; use of communication technology; to facilitate choice and learning. It is more of an approach to education than a particular technique.

Elements of open learning have existed in Australia for decades and the practices appear to be increasing. Some institutions overseas are established entirely on an open philosophy. This paper gives some examples. As Australia tries to recruit more and more students into tertiary education, and as it seeks increases for its entire workforce, the open approach will be needed because of the wide diversity of background and needs amongst those being trained and educated. This has implications for:

- * policies on admission to courses and training programs;
- * structure of syllabuses and whole courses;
- * the teaching process, less professorial and more tutorial;
- * use of technology, and cooperation in that use;
- * cooperation between institutions and sectors including the private sector;
- * assessment, accreditation and awards;
- * credit transfer and the concept of a credit bank;
- * attitudes of teaching staff, and their conditions of work; and
- * funding and administrative structures in education.

This paper explores these issues briefly and canvasses the potential advantages and risks of the open approach. It concludes that it is probably in the long run irresistible in a democratic society; its introduction can be facilitated by proper understanding and intelligent preparation'.

King, B. (1989) Educational Development and the DECs, Paper presented at Distance Education for Training in Business and Industry, Australia and South Pacific External Studies Association 9th Biennial Forum, 10-14 July, Gippsland IAE. (author synopsis)

'The establishment of Distance Education Centres by the Commonwealth Government poses significant problems for the processes of course development in a number of tertiary institutions. In particular, the relationship between educational author and those with production expertise will be altered in the development of external courses. This paper attempts to clarify likely areas of difficulty, to suggest a conceptualisation of the process of educational development in DEC-specialist provider relationships, and to reflect on the practical application of such process for Australian higher education institutions'.

Kwong, Lee Dow. (1991) Academic Standards Panels in Australia, paper presented at the Hong Kong Council for Academic Accreditation International Conference, 15-17 July 1991.

In this paper the author discusses the contribution made to Australian Universities by Academic Standards Panels but points out that other forms of evaluation must and do make an important contribution. Such forms of evaluation in particular include performance indicators.

The author concludes that 'provided the panels and academic standards program is seen as a major means, but not the only means of maintaining consistency, comparability and some interactive dialogue about standards, it is likely to serve the Australian system of institutions well in the coming years'.

Lewis, R. (1989) What is 'quality' in corporate open learning and how do we measure it?, Open Learning, 4, 3, 9-1

This article 'examines notions of quality in open learning for corporate users and how this can be evaluated'. The article discusses the need to ensure quality in open learning and points out the importance of assessing resultant change and benefits and their general relevance to training and evaluation.

Linfoot, K. and Todoroski, Naum. (1991) 'Recruitment and training of school psychologists for remote or isolated areas', Distance Education, 12, 2, 286-296.

Marginson, S. (1990) Pitfalls of Output Measurement, Australian Journal of Education 34, 2, 137-144.

This paper discusses the pitfalls of output measurement. Educational output is being judged in economic terms reflecting demands for 'greater accountability, tighter administration and identifiable results'. This approach is generally associated with budget cut backs and industrial conflict. However, as the author points out '... it does not have to be so'. Marginson states that much of the problem with the measurement of educational output stems from the fact that teaching productivity has been viewed in terms of student teacher ratios rather than in terms of quality of learning. This results in the muddled type of thinking whereby' - the higher the student: teacher ratio, the higher the productivity'. Outputs must be viewed in terms of objectives. Marginson goes on to discuss the limits of measurement within the education system because of the complexity and collectiveness of the process. 'It is hard to separate out the effects of particular inputs or to measure the relationship between part of input and part of outputs. In education, as with most production in service industries, production and consumption are simultaneous; teaching and learning are the same process'. The author concludes the article with a listing of factors which need to be addressed if output measurement in education is to be more effective.

Mills, R. and Paul, R. (1991) Putting the Student First: Management for Quality in Distance Education, Draft Paper for Cultural Reflections in Distance Education 2, (forthcoming).

This paper discusses the application of Total Quality Management (TQM) to Distance Education and in particular points out that 'a total quality programme must start at the top. It must be more than the latest device to motivate staff to provide a better service, but a fundamental value which is both espoused and exemplified by the senior management of the institution'. It identifies the measures being taken in higher education institutions in the United Kingdom and also Canada regarding quality issues. It also describes the application of TQM to two distance education institutions; The Open University in the United Kingdom and Athabasca University.

The authors conclude that the issues surrounding the application of TQM must focus on the quality of the learning process rather than more identifiable products because '... process is the product in education'. This makes the whole process very complex and demanding. 'Ultimately, it takes value driven leadership, leadership which is prepared to plan and build for the long run and about which there is no question of other priorities when it comes to resource allocation and policy decisions'.

Moses, I. (1989) Is Performance Management Appropriate in a Learning Institution? Journal of Tertiary Educational Administration, 11, 2, 127-141.

In this article Ingrid Moses provides a definition of Performance Management. She then discusses the nature of universities and colleges as learning institutions and how this impacts upon Performance Management. In particular she points out the need to recognise and assess the contributions of not only academic staff but also professional and support staff within the institution. Finally she concludes that 'if we accept quality maintenance as something positive or something which is contributing to the very goals of the institution, then we have to introduce performance appraisals as loosely structured systems so that they can respond to the individual in their various roles within one departmental context, one institution'.

Partington, G. (1990) Quality and Schools Education Research and Perspectives, 17, 2, 83-97. (author synopsis)

'Although education and *a fortiori* quality in education are contestable concepts, every coherent educational theory or practice requires publicly available criteria and standards of what it predicates as quality. Concepts of quality in four different clusters of educational theories are discussed. It is shown that absence of explicit and understood standards of quality is especially destructive in the education of groups perceived to be disadvantaged and that Australian education is sorely deficient in the conceptualization and provision of standards of educational quality'.

Paul, R. (1990) Towards a new measure of success: developing independent learners, Open Learning, 5, 1, 31-38.

This article is extracted from Ross Paul's book *Towards open management: leadership and integrity in open learning and distance education*. 'This article is derived from a chapter on 'Managing for success: learner interaction and independence'. It follows an analysis of such standard measures of success as completion and persistence rates and advocates a higher order objective - the development of independent learners'.

Pollitt, C. (1990) Measuring University Performance: Never Mind the Quality, Never Mind the Width, Higher Education Quarterly, 44, 1, 60-81. (author synopsis)

'After setting performance measurement in the context of the broader changes affecting universities the paper enquires how far the actual measures used to date by British universities reflect that wider environment. Detailed analysis of the indicators concerned indicates that most - particularly those developed by the CVCP/UGC - are narrowly conceived. The research selectivity measures of the UGC/UFC are more ambitious, but even these take little account of "value added" issues - and entirely fail to address teaching. Comparison with the best of US practice indicates that greater sophistication is technically achievable. The failure, as yet, of the British system fully to explore issues of quality and relevance may be connected to the different structure of the higher education sector in Britain, and in particular to the combination of a powerful, economy minded central government with weak consumer power'.

Power, C. Participation as an Education Performance Indicator in Wyatt T and Ruby A (1988) Indicators in Education: Papers From the First National Conference, Australian Conference of Directors-General of Education, Sydney, 147-162.

'This paper focusses on participation as a performance indicator. It begins by examining the concept of participation as a performance indicator, then looks at some of the methodological issues involved, and finally at some of the political issues which need to be addressed'. The author believes 'that carefully developed and responsibly used sets of indicators and indicator systems have a role to play in helping us understand how education systems operate, to identify issues and to pinpoint problems, to enrich the decision making process at systems level to provide a more adequate basis for reporting on progress towards key systems outcomes'.

He concludes that society must clarify its expectations of schools and while actively developing performance indicators recognise both their strengths and limitations.

Ramsden, Paul. (1991) A Performance Indicator of Teaching Quality in Higher Education: The Course Experience Questionnaire, Studies in Higher Education, 16, 2, 129-150. (author synopsis)

'Performance indicators in higher education have focused chiefly on research outputs. They have largely ignored the teaching function of universities and

colleges. This article outlines the development of a student evaluation instrument designed to measure the teaching performance of academic organisational units. The theory of teaching and learning that underlies the Course Experience Questionnaire (CEQ) is described. The instrument's statistical qualities and its ability to discriminate intelligibly between different courses are discussed in the context of results from national trials in Australia higher education. The principal conclusion reached is that CEQ offers a reliable, verifiable and useful means of determining the perceived teaching quality of academic units in systems of higher education that are based on British models. Several technical and political issues remain unresolved in its application as a performance indicator'.

Ross, B. (1990) Quality and Standards in Distance Education, ASPESA News, 3, 17, 4-5.

This article discusses the possible outcomes of the Project to Investigate Quality and Standards commissioned by the NDEC. In particular, it points out a concern with the production of 'an inventory of procedures and standards employing, where appropriate, performance indicators'. The author suggests that this may result in a belief and approach to these procedures as if there is one correct model of distance education. This may be to the detriment of students with varying needs. Finally the author concludes with the hopeful comment that the project will focus on the quality of student learning and ... produce ... standards relating to procedures for reviewing activities in the light of learning outcomes'.

Scriven, B (1990) Australia Restructures Distance Higher Education, ICDE,2, 21-23.

This article presents an overview of the response in distance education since the Government's 1988 release of the policy statement on higher education. It describes the process by which the eight distance education centres were chosen. It then asks what the future of distance education will be in light of the governments funding policies and its intention to reduce the number of distance education centres.

Scriven, Bruce R. Quality in Distance Education, Keynote Address ASPESA Forum, Bathurst. (author synopsis)

'In this paper I have provided a brief summary of some recent statements made about quality in higher education and in distance education in particular. Quality distance education is seen as being influenced by a complex combination of factors which can be broadly categorised under the three headings of course materials, course teaching and administration. The

determination of what comprises quality distance education is a legitimate concern of learners, course writers and presenters, other academics and those who place trust in the results. Particular aspects of teaching and administration which I believe influence quality of distance education provision are discussed'.

Sherman, R. (1990) The Relationship between Quality Circles and Teacher Satisfaction, Educational Research Quarterly, 14, 2, 53-56. (synopsis)

'This study examined the relationship of teacher participation in Quality circles to teacher satisfaction. Sixty four volunteers from seven elementary schools in a large suburban school district in Texas were randomly assigned to either a control or experimental group. The experimental participants formed nine Quality circles of between four and eight members with one member per circle being trained as a circle leader. The Job Diagnostic Survey was administered twice to the participants, a series of participant observations were conducted and structured interviews were held with participants after the experiment was concluded. Analysis of covariance was used to test relationships among the study variables; the structured interviews yielded percentages of responses and a record of verbatim responses. No relationship was found between participation in Quality Circles and meeting an individual's self esteem needs for achievement, recognition or growth'.

Sizer, J. (1988) In search of excellence - performance assessment in the United Kingdom. Higher Education Quarterly, 42, 2, 152-161. (author synopsis)

'It is argued that developments in institutional, departmental and individual performance assessment in the United Kingdom cannot be considered in isolation from pressures to change from free, oligarchic, consensus models and administrative styles of management towards a shared commitment to a dominant and coherent entrepreneurial and market economy model culture with executive styles of management, which implied institutional and managerial performance being assessed in terms of economy, efficiency and effectiveness with increased emphasis on effectiveness'.

Smith, M. (1988) Educational Indicators, Phi Delta Kappan, March, 487-491.

This article provides a definition of educational indicators, an overview of their use and a discussion of possible future trends. The author identifies technical and political problems with the use of indicators and points out the difficulties with national comparisons of state institutions. His prediction of

the future use of educational indicators include an improvement in data gathering techniques and an integration of federal and state efforts to collect this data.

Tate, O. (1986) Monitoring and Evaluating the performance of a distance education institution. Epistolo Didaktika, 2, 77-103.

'This paper discusses some issues involved in monitoring and evaluating the performance of a distance education institution, with particular reference to the aims of the institution, course materials and teaching and throughput of student work. ... Although distance education institutions differ from each other ... they exhibit many similarities and common elements'. This paper identifies and discusses these similarities.

The paper concludes that 'a distance education institution is considered as a system with identifiable, interacting subsystems. A data model can be developed and used to monitor and evaluate processes and outcomes. This involves identifying significant, representative, analysable, accessible and objective data and indicators of performance; thus the effectiveness and efficiency of sub-systems and the institution can be assessed. Evaluative judgements consider performance in terms of educational aims and achievement, statutory requirements, societal expectations, the national educational context, ability to respond to individual needs, student, parent and staff expectations, and the cost of the operation. Monitoring and evaluative procedures must be non threatening and seen as necessary. Reforms and innovations arising from evaluation are most likely to be successfully implemented if staff are involved in evaluation, problem identification, formulating solutions and developing procedures'.

Viljoen, J., Holt, D. and Petzall, S. (1990) Quality Management in an MBA Program by Distance Education, paper presented at the ANZAME Conference, Launceston, Dec 1990.(author synopsis)

'This paper uses a qualitative, longitudinal methodology to focus on the creation of a consumer (student) oriented framework for quality in the Deakin University MBA by distance education. Quality is viewed as the outcome of a complex set of interactions between staff, students, learning materials and supportive educational method. The notion of students acting as passive recipients of "quality" teaching is rejected. The convention is made that quality is a primary means of gaining competitive differential advantage in a specified segment of the MBA market, only if quality is defined by student perceptions. The research findings enable the development of a student

learning Framework of Quality which demonstrates the need for efficient learning, opportunities for student interaction with learning materials, with the workplace, with teaching staff, and with study groups and residential schools. The framework is analysed in terms of the value chain concept and implications are drawn for the successful future management of the Deakin MBA program'.

Villarroel, Armando. (1988) Planning of distance-learning projects, Prospects 18, 1, 54-61.

In establishing open universities it has been necessary to put forward 'a good social case' to justify their development. 'The argument most frequently advanced has always been that because they are flexible and potentially inexpensive to operate, they can reach groups of people who because of their geographical location and position in society would otherwise have virtually no access to education'. Initiators of these institutions are also preoccupied as to how best to put into operation a new teaching concept.

Bearing in mind the key importance for distance-teaching programmes of (these) considerations, we shall in this article conduct a global analysis of their influence and of the way in which they plan their activities. We shall begin with a summary description of the characteristics which ... should be taken particularly into account for planning purposes. We shall then refer to the use of systems analysis as a key theory and instrument for the planning of distance education programmes and, finally in the light of what has been said, we shall identify the subsystems that are most characteristic of these programmes and their effect on planning'.

Vroeijenstijn, A.I. (1991) External Quality Assessment: Servant of Two Masters? paper presented at the HKCAA International Conference on Quality Assurance in Higher Education, Hong Kong, 15-17 July, 1991. (author synopsis) 'Opinions about the way External Quality Assessment (EQA) in the Netherlands is developing, differ. In this paper a description is given as to why people are looking at EQA from different angles. After handling this question a description is given of the system of EQA at Dutch universities.

The comments from the side of the Government and the Inspectorate are analyzed. The conclusion is that the Government and the Inspectorate are expecting too much from the work of external experts and the reports they publish. Visiting committees cannot serve two masters. Assurance of quality is more important than the exact measurement of it'.

West, L.H.T. (1988) Strategic Planning, Performance Indicators, Research Policy: the new issues facing university management. Higher Education Research and Development, 7, 1, 5-17. (author synopsis)

'Higher education systems throughout the world are coming under the joint influences of continuing reduced resources, demand for research to solve short term economic problems, and the perceived value in the application of business models of management. These influences have given rise to several related movements: strategic planning, performance indicators, research policy. The paper provides a discussion of each of these movements'.

West, L.H.T. and Hore, T. (1989) The impact of higher education on adult students in Australia: Part 1. Employment. Higher Education, 18, 3, 341-352.

'In part 1 of this study, we described the impact of higher education on aspects of the employment of a national sample of adult students (aged 25 plus), who enrolled in higher education in 1978. The sample and the research design is described in part 1.

In this paper we describe changes in a range of measures relating to the person, and make the claim that some part, at least, of these changes can be attributed to the impact of higher education.

Three broad aspects of the potential impact of higher education on adult students as persons were investigated. The first aspect concerned their personal development, including changes in attitudes and values; the second was to do with changes in their abilities, and the third with possible social impacts'. Although a longitudinal design would have been preferred for this study self report data was collected by asking 'respondents to reflect about their response and try to answer as they would have before they began and now'.

Williams, Peter R. (1991) The CVCP Academic Audit Unit, University of Birmingham, roneo, 1-17. (author synopsis)

'The first part of this paper provides a description of the origins, scope and method of the Academic Audit Unit (AAU) established the Committee of Vice-Chancellors and Principals of the United Kingdom (CVCP) in 1990. It

continues with an account of the Unit's first eight months' work, to the completion, in May 1991, of a series of five pilot audits, and ends with some comments on two different sets of proposals for future quality assurance arrangements in British higher education recently published by the Government and by the Labour Party'.

Wright, P.W.G. (1989) Who defines quality in higher education? Reflections on the role of professional power in determining conceptions of quality in English higher education. Higher Education, 18, 2, 149-165. (author synopsis)

'In recent years British higher education has come under considerable financial and political pressure which has led increasingly to the use of various indicators for the measurement of quality. Although the use of such measures has often been seen as leading to encroachments on academic autonomy, the paper argues - drawing in concepts from the sociology of power and the professions - that such measures still, essentially, derive from, and reproduce unquestioningly, the tacit assumptions and professional self interest of academics. This point is illustrated through a brief consideration of the most commonly recommended performance indicators and by reference to the work of the Council for National Academic Awards in the review and validation of courses. Attention is also given to the stimulation of market forces as a means of quality control. The paper concludes with a plea for greater pluralism within British higher education and argues that several factors make this more likely. These include demographic change, the increasing involvement of industry and the emergence of diverse sources of funding for British HE including the Manpower Services Commission (now the Training Commission)'.

de Weert, E. (1990) A macro analysis of quality assessment in higher education. Higher Education. 19, 1, 57-72. (author synopsis)

'In most West European countries a quality control system for higher education is in a process of development. This article examines some general characteristics of the emerging structures, how quality is defined and what impact this definition has on internal evaluation.

'On the basis of a more substantive conceptualization of the term quality, the current trend of a quality control system in which quality is predominantly defined from one central power centre is questioned. Important methodological and substantive weaknesses inherent in this centralist model will be discussed.

In the final section a shift towards a quality control system is advocated in which other interests and perspectives are taken into account'.

Wyatt, T. and Ruby, A. (1989) Education Indicators for Quality, Accountability and Better Practice, Papers from the Second National Conference, Australian Conference of Directors-General of Education, Sydney. (author synopsis)

'This book is based on selected papers given at the National Conference on Indicators and Quality in Education... The conference aimed at generating further discussion within the educational and wider community about the quality of education and ways to monitor, measure and improve this quality.

The papers selected for publication in this volume are those considered to give broad conceptual coverage to these themes, or which have direct relevance to the specific issues of educational accountability and quality and the role of indicators'.

Yorke, Mantz. (1991) Performance indicators: towards a synoptic framework, Higher Education, 21, 235-248. (author synopsis)

'This paper sets out to sketch a synoptic framework within which performance indicators may be used within higher education.

The evidence to date suggests that the use of performance indicators has not adequately taken into account a number of factors - the level within the higher education system at which they are being used, their practicability, and the inter-relationship between both quantitative and qualitative data. The effective use of performance indicators is discussed in terms of exercises in which judgements have to be made upon complex sets of data rather than upon a narrow range of parameters, with significant implications for what is managerially feasible'.

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