

**THE *QHE* PROJECT
YEAR-END REPORT
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Contents

EXECUTIVE SUMMARY	iii
THE <i>QHE</i> PROJECT	1
Introduction	1
Project aims and objectives	1
Important features of the project	2
The policy context	2
QUALITY	4
The concept of quality	4
Conceptual model for the first phase of the project	7
METHODOLOGY	8
Introduction	8
Employers	8
Student and staff in higher education institutions	9
Government, funding agencies, quality assessors and assurers	10
EMPLOYERS	11
Introduction	11
Concepts of quality	11
An appropriately educated work force	11
Industry and higher education collaboration: research, training and sponsorship	14
Conclusion	15
STAFF AND STUDENTS	17
Introduction	17
The questionnaire	17
The sample	17
The preferred criteria of staff and students	18
The least important criteria	20
Conclusion	23
THE QUALITY ASSURERS	24
Introduction	24
Council for National Academic Awards (CNAA)	24
Vice-Chancellors', Principals' and Directors' Representative Organisations and the Academic Audit Unit	25
The Scottish Vocational Education Council (SCOTVEC)	27
Business and Technology Education Council (BTEC)	28
Conclusion	29
THE GOVERNMENT AND THE QUALITY ASSESSORS	31
Introduction	31
The Department for Education (DFE)	31
The Employment Department and the Training Enterprise and Education Directorate (TEED)	34
Polytechnics and Colleges Funding Council (PCFC)	34
Her Majesty's Inspectorate (HMI)	35
The Higher Education Funding Council (England) (HEFCE)	36
Scottish Higher Education Funding Council (SHEFC)	37

Conclusion	38
SUMMARY OF THE CRITERIA	40
Introduction	40
Core Criteria	40
ASSESSMENT AND ASSURANCE	43
Introduction	43
Quality Assessment	43
Quality Assurance Models	46
THE WAY FORWARD	48
Introduction	48
Quality as total student experience	48
Quality criteria change over time	48
Inputs, processes and outputs	48
Multi-method approach to quality assessment	48
Quality assessment and institutional mission	49
Evaluation of methods of assessment against quality criteria	49
Conclusion	52
REFERENCES	53
QHE PAPERS	57

EXECUTIVE SUMMARY

The *QHE* Project

The three year *QHE* Project was launched in January 1991 following a conference on quality at The University of Central England in Birmingham. The *QHE* project is funded by a consortium of education, government and industry. Each sponsor is represented on the Project Steering Committee.

The project aims to develop a methodology for assessing quality in higher education. As a first stage, it set out to establish what is meant by quality in higher education and how it might be assessed. The primary focus of interest is the quality of teaching and learning. The first stage of the research focused on the identification of the criteria that different stakeholder groups regard as important in assessing quality in higher education.

An underlying aim of the project is to inform policy. Four aspects were identified as critical in this respect. First, any assessment methodology will need to provide information that will satisfy demands for public accountability. Second, it will need to be credible in the eyes of the academic community. Third, it will need to be practically feasible. Fourth, it will need to take into account other developments in higher education, such as quality audit.

Quality

The *QHE* project has constantly sought to balance theoretical enquiry into the nature of quality with a pragmatic, empirical exploration of how quality judgements are made in practice in the higher education context.

There are a number of ways of viewing quality. Traditionally, quality has been linked to the idea of exceptionally high standards. A second approach to quality sees it in terms of consistency. It focuses on process and sets specifications that it aims to meet. Quality in this sense is summed up by the interrelated ideas of *zero defects and getting things right first time*. A third approach to quality relates it to fitness for purpose. In this approach, quality is judged in terms of the extent to which a product or service meets its stated purpose. A fourth approach to quality equates it with value for money. At the heart of the value for money approach is the notion of accountability. Public services, including education, are expected to be accountable to the funders. A fifth view of quality sees quality as transformative. Education is not a service *for* a customer but an ongoing process of transformation *of* the participant. This leads to two notions of transformative quality in education, enhancing the consumer and empowering the consumer.

Given the difficulties in defining quality in higher education, some commentators have adopted a pragmatic approach. Quality is thus defined in terms of a range of qualities, with recognition that an institution may be of high quality in relation to one factor but low quality in relation to another. The best that can be achieved is to define as clearly as possible the criteria used by each interest group when judging quality and for these competing views to be taken into account when assessments of quality are undertaken.

The project has adopted a 'stakeholder' approach to quality. Various stakeholder groups have been identified ranging from students and staff through accreditors and assessors to employers and the government. The aim is to find out the views on quality of each of these groups.

Methodology

The empirical research used several methods. Employers' views were sought via a short quantitative questionnaire on graduate recruitment and through qualitative discussions in employer seminars. Student and staff views were explored using a large scale, extensive questionnaire. The views of government, funding agencies, quality assessors and assurers involved an extensive review of documentary material and in-depth interviews with key personnel.

Employers

For most employers, the extent to which higher education helps to provide an appropriately educated work force is central in judging quality. Most employers agree that too little attention is given to the development of transferable skills in higher education and that too much emphasis is placed on subject specific knowledge.

The presence of a careers counselling service, which empowers students to make effective careers decisions, was regarded as an important institutional criterion.

Flexibility of study patterns, work-based learning and systems of credit accumulation to encourage people to enter higher education and to support 'life-long learning' were also regarded as fairly important.

The current expansion in the numbers of students entering higher education is welcomed but there is anxiety that insufficient funding may lead to an overall drop in standards. Many employers are also concerned that the changes will lead to greater variation in the standards of courses, which will be confusing for those recruiting graduates.

Overall employers appeared to judge higher education on its ability to produce graduates with

a mix of knowledge and skills that would both enable them to work effectively in a modern organisation and equip them for life-long learning.

Staff and Students

The preliminary analysis of the *QHE* survey of staff and students demonstrates that it is possible to identify a *single* group of criteria that are regarded as the most important by all 4000 respondents. The analysis by staff and students, by discipline and by institution showed very high levels of agreement across all sub-groups. The main areas for assessing quality were learning and resources, assessment, course content and the development of transferable skills. It appeared that underlying the assessment of quality for staff and students was a concern with the student learning experience. This was not confined to the experience of the classroom but to the total learning experience. In consequence, aspects which had a direct impact on student experience such as library provision and feedback on assessed work were seen as having a higher priority than aspects seen to have an indirect impact such as staff research and publication, high entry standards and links to the world of work.

The Quality Assurers

The following general criteria for assessing quality emerge from an analysis of organisations primarily concerned with assuring quality. The system should produce sufficient graduates of comparable standards. Institutions should have clear missions, explicit quality assurance systems and be committed to improving quality. They should also have effective policies for improving access and for staff development. Programmes of study should have clear aims and objectives to which subject content relates. Teaching methods should reflect the varied needs of learners. Assessment methods should be valid, fair and criteria should be understood by staff and student. Programmes should be vocationally relevant and equip students with transferable skills.

The Government and the Quality Assessors

The latest position that the government, the funding councils and HMI take about quality assessment in higher education suggests the following concerns. Standards must be comparable and must be maintained. The system must be flexible enough to meet the needs of the economy. It should be able to respond to skills shortages and support life-long learning. Institutions should have a clear mission and effective links to employers. They must be efficient and effective in the use of public money while ensuring adequate resources for learning. Programmes must have clear aims and objectives. Teaching should be flexible and staff should perform well in classrooms. Students should be encouraged to be responsible for learning and leave the programme equipped for life-long learning. Assessment, from which students should receive useful feedback, should be valid and cover the full range of course aims.

The criteria

A chart is used, by way of summary, to map the assessment criteria by stakeholder group. Ten items are endorsed as a priority by more than half the stakeholders.

- There are adequate physical resources (library, workshops, IT) to support teaching and learning.
- There are adequate human resources to support teaching and learning (and staff are

- properly qualified).
- The programme has clear aims and objectives that are understood by staff and students.
 - The subject content relates to the programme's aims and objectives.
 - Students are encouraged to be actively involved in, and given responsibility for, learning.
 - The standard of the programme is appropriate to the award.
 - Assessment is valid, objective and fair.
 - Assessment covers the full range of course aims and objectives.
 - Students receive useful feedback from assessment (and are kept informed of progress).
 - Students leave with transferable knowledge and skills.

Approaches to Quality Assessment and Quality Management

A brief review of research on quality assessment and quality assurance forms the basis for the recommendations outlined in the concluding chapter. Performance indicators, peer review and inspection are examined. The use of BS5750 and TQM in higher education are considered. Models derived mainly from the manufacturing industry may prove inadequate in relation to the service sector. However, there is little evidence that the literature on service quality has had much impact on higher education.

The Way Forward

Quality in higher education is increasingly focusing on the total student experience. Quality assessment must relate to inputs, processes and outputs. Quality criteria change over time and quality assessment must take into account differences in the mission of institutions. A multi-method approach to quality assessment seems most appropriate.

The proposed future work of *QHE* includes the evaluation of quality assessment procedures, the further exploration of the potential of TQM, and the development of qualitative and quantitative performance indicators, including employer satisfaction measures, in the light of these criteria.

Chapter 1

THE *QHE* PROJECT

Introduction

The three year *QHE* Project was launched in January 1991 following a Conference on quality at The University of Central England (formerly Birmingham Polytechnic) organised jointly by the hosts and The University of Birmingham. Work on the project began in September 1991.

The ending of the binary line has resulted in the establishment of funding bodies in England, Scotland and Wales responsible for *all* the higher education in their respective areas. Legislation requires that these funding bodies assess the quality of higher education provision and the Secretary of State for Education has made it clear that these assessments should inform the way that funds are distributed. Assessment of the quality of higher education has thus become an important issue.

The ultimate goal of the *QHE* project is to produce a *methodology* for assessing quality. However, although taking close account of policy changes and the debate around quality in higher education, *QHE* is an independent research project.

The *QHE* project is funded by a consortium of education, government and industry. There are currently 28 sponsors in the United Kingdom including the Department for Education, the funding councils, accrediting bodies, major employers, employers' organisations, higher education institutions, and research and training organisations. Each of the sponsors is represented on the project steering group which meets about once every three months. Sponsors take an active part in determining the scope and development of the project.

The project has its physical base at the University of Central England in Birmingham. The project manager is Dr. Diana Green, Pro-Vice Chancellor of the University. Dr. Lee Harvey is the Senior Research Fellow and Ms. Alison Burrows was a full-time research fellow during the first year of the project.

Project aims and objectives

The project aims to develop a methodology for assessing quality in higher education. It set out to establish what is meant by quality in higher education and how it might be assessed. The primary focus of interest is the quality of teaching and learning.

This report deals with the first stage of the research the objectives of which are as follows:

- to complete a *review* of research currently in progress and a literature review of international and UK work relevant to the area;
- to establish a *glossary* of terms used in relation to quality in higher education in order to clarify current and future usage of terms;
- to identify the different *interests* and perspectives of the various 'stakeholders' in higher education;

- to identify how different interest groups in higher education *define* quality, recognising that definitions and priorities may vary between interest groups;
- to determine a set of agreed *criteria* (and to rank these in order of importance);
- to identify a set of quality assessment and quality management *techniques* (from education and non-education spheres), which might be appropriate in the context of higher education.
- the *publication* of an interim report.

These aims have been largely achieved during the first year of operation of the project and most have been reported in other papers (see page 57). This interim report summarises the results of the research.

The main objectives of the second and third stages of the project are:

- to evaluate the quality assessment procedures established by the funding councils;
- to examine, monitor and evaluate methodologies for assessing quality in use in institutions;
- to evaluate the appropriateness and effectiveness of quality assurance and quality management techniques in the context of higher education, in the light of these criteria;
- to design additional methods and techniques of quality assessment and evaluation, as appropriate;
- to design a flexible methodology that utilises the criteria identified;
- to test the methodology within selected higher education institutions.

Important features of the project

The steering group is an integral part of the project and a key to its success. Virtually all the 'stakeholders' are represented. Not only do they play a role in determining the scope and development of the project but they also provide an important information resource.

The breadth of the project is an interesting feature, although sometimes difficult to manage. The research team holds no preconceptions about which aspects of higher education are relevant to quality. Research quality, however, is not a major feature of the project. This is not because it is considered unimportant but because the area is receiving considerable attention elsewhere.

The neutrality of the project is also significant. An underlying aim of the project is to inform policy in the area of quality assessment and management in higher education. Most groups with an interest in higher education are represented on the steering group. This has helped to ensure that the project remains impartial and that the views of any single group do not predominate.

The policy context

During the last decade quality in higher education has become an increasingly important issue in the United Kingdom (Burrows, Harvey and Green, 1992c). In particular, the government has expressed concern about the quality of higher education and the best way to ensure that there is accountability for the way that public money is spent (Kogan, 1986).

Evidence of the government's concern can be seen in the 1985 Green Paper, *The Development of Higher Education into the 1990s*.

There is continuing concern that higher education does not respond sufficiently to changing needs.... The Government believes that it is vital for our higher education to contribute more effectively to the improvement of the performance of the economy. (DES, 1985)

The government's commitment to ensuring greater public accountability for expenditure on higher education has continued throughout the 1980s. Its stance is demonstrated by the following extract from a letter from the Secretary of State to the Head of the PCFC.

I shall however expect to see two key features. The first is a means of specifying clearly what polytechnics and colleges are expected to provide in return for public funds. The second is a systematic method of monitoring institutional performance. (Baker, 1988)

This drive for greater accountability has not been restricted to the United Kingdom but should be viewed as part of an international trend (European Commission, 1991; Burrows, Harvey and Green, 1992b). Increased emphasis on the evaluation of higher education, changes in legislation and changes in the funding methodology for higher education in the Netherlands, United States of America, France and Australia bear testament to government interest in improving quality and public accountability.

A variety of explanations of this increasing interest has been identified. Neave (1986) suggests that it results from three developments; the need to limit social expenditure, the need to guide student demand away from fields where there is high risk of unemployment and the need to encourage the development of courses which meet the requirements of modern industrial society.

In Western Europe and in Australia, the need to limit social expenditure is, in part, linked to the shift from an élite to a mass higher education system (Moodie 1986; Teather, 1990). Increasing government expenditure on higher education has resulted in demands for public accountability for the way that the money is spent and a growing concern with efficiency and effectiveness in the use of resources. In the United Kingdom, there are further concerns raised by the reduction in the unit of resource and the increase in the numbers of students entering higher education without the traditional entry qualifications. This has led some to argue that quality may suffer (CVCP, 1991): that 'more means worse'.

The United Kingdom Government's concern about quality has led to a closer and more direct link between quality and the way higher education is funded (*Further and Higher Education Act*, 1992). A single funding council has been established for all higher education in England (similar councils have been established for Scotland and Wales). Legislation requires each of these councils to establish a quality assessment committee to inform it about the quality of those institutions it funds. However, no indication has been given as to how quality should be defined in relation to teaching or what criteria should be used to assess it. These are not clear-cut issues where there is necessarily a consensus view.

Pilot quality assessments have been conducted jointly by the former Polytechnics and Colleges Funding Council and the Universities Funding Council. These pilots have been strongly criticised by the academic community, primarily on the grounds that the methodology is not credible (Griffiths, 1992). The funding councils are undertaking further pilot assessments.

Other changes in the structure of higher education have also resulted from the 1992 Act. All polytechnics, central institutions in Scotland and some colleges of higher education have been granted degree awarding powers and provision has been made for them to change their title to university. The Council for National Academic Awards, a major quality assurance body for the polytechnics and colleges sector, is to be wound up. Higher education institutions, with encouragement by the government, have established their own Higher Education Quality Council, which will, amongst other things, focus on the audit of quality assurance systems in higher education.

Changes in the funding of teaching are paralleled by developments in the funding of research. In the past, universities received a single grant from the Universities Funding Council which covered both research and teaching. However, since the early 1980s the government has been supporting developments which have led to increased selectivity in the funding of research on the basis of an assessment of research quality (DES, 1985, 1987, 1991). This made it necessary to find a methodology for identifying separately costs relating to research and costs relating to teaching. In October 1991, the Universities Funding Council indicated that, from 1992, that element of research funding calculated purely by reference to student numbers would be phased out (UFC, 1991).

It is this changing and uncertain policy context in which the *QHE* project is operating. An underlying aim of the project is to inform policy. It is clear that a number of issues need to be taken into account in seeking to develop a methodology for assessing quality in higher education. First, the methodology will need to provide information that will satisfy demands for public accountability. Second, it will need to be credible in the eyes of the academic community. Third, it will need to be practically feasible. Fourth, it will need to take into account other developments in higher education, such as quality audit.

Chapter 2

QUALITY

The concept of quality

Before it is possible to develop a methodology for assessing quality, it is necessary to identify what quality is and what criteria might be used for assessment.

The *QHE* project has constantly sought to balance theoretical enquiry into the nature of quality with a pragmatic, empirical exploration of how quality judgements are made in practice in relation to higher education.

Quality, like 'freedom' or 'justice' is an elusive concept (Gibson, 1986; van Vught, 1991). We may have an intuitive understanding of what it means but it is often hard to articulate. It is also a value-laden term; it is subjectively associated with that which is good and worthwhile (Dochy *et al.*, 1990). For this reason it is claimed by many to validate or justify an activity, sometimes with scant attention to what the word might mean. This makes it difficult to identify how the word is being used in a particular circumstance. Nevertheless, some different approaches can be identified.

The *QHE* theoretical and philosophical enquiry has been very wide ranging. We have attempted to pin down the elusive concept of quality in terms of a number of 'ways of thinking about quality'. Although much of our work is empirical it is not possible to undertake an empiricist approach to exploring quality in higher education devoid of any prior conceptualisation of the nature of quality. Throughout the first year of the research we have constantly sought to engage the notion of quality, to refine it and to suggest some 'definitions'.

This process has required frequent reconceptualisation of the concept of quality. Most of the literature avoids going too deeply into the concept and tends to deal with surface phenomena. We have attempted to grasp the political and philosophical aspects that underlie different definitions of quality. From our initial documentary research we identified thirteen ways in which the notion of quality was used (Burrows and Harvey, 1992). In retrospect, this first analysis failed to differentiate levels of quality definition (Burrows, Harvey and Green, 1992d).

Subsequent analysis suggests the following framework (Harvey and Green, 1992). Quality can be viewed as *exceptional*, as *perfection* (or consistency), as *fitness for purpose*, as *value for money* or as *transformative*.

Quality as exceptional

The exceptional notion of quality takes as axiomatic that quality is something special. There are three variations on this. First, the traditional notion of quality as distinctive; second, a view of quality as embodied in excellence (that is, exceeding very high standards); and third, a weaker notion of exceptional quality, as passing a set of required (minimum) standards.

Quality as perfection or consistency

A second approach to quality sees it in terms of consistency. It focuses on process and sets specifications that it aims to meet perfectly (Ingle, 1985). This is encapsulated in two interrelated dictums: *zero defects* and *getting things right first time*.

Quality as fitness for purpose

A third approach relates quality to the purpose of a product or service. The 'definition' of quality adopted by most analysts and policy makers in higher education is that of fitness for purpose (Ball, 1985; Reynolds, 1986; HMI, 1989; Crawford, 1991). Exponents of this approach argue that quality has no meaning except in relation to the purpose of the product or service. Quality is judged in terms of the extent to which a product or service meets its stated purpose(s). This definition, therefore, provides a model for determining what the specification for a quality product or service should be. It is also developmental as it recognises that purposes may change over time thus requiring constant re-evaluation of the appropriateness of the specification. It may be used to analyse quality in higher education at a number of levels.

This model has significant implications for higher education as it broadens the spectrum of issues deemed relevant to the debate about quality to include performance in areas such as efficiency in use of resources or effective management.

Although widespread as an operational approach to quality (see Chapters 6 and 7), it is not applied to higher education in a uniform or consistent way. The problem with this definition is that it is difficult to be clear what the purposes of higher education should be. It does not explain who should determine the purposes of higher education or how to accommodate the possibility of conflicting purposes (Billing, 1986; Taylor *et al.*, 1981).

Goal achievement

De Weert's version of the fitness for purpose concept of quality tries to deal with these issues. He defines quality in terms of goal achievement but notes that the goals for higher education will vary depending on the level of the system at which the goals are set (societal, institutional, individual) and whether they are of internal or external relevance. Thus quality is seen as multi-dimensional and incorporating possibly conflicting goals at different levels. Any attempt at defining quality is seen as a balancing act between different goals at different levels in the system (De Weert, 1990).

Quality as effectiveness in achieving institutional goals

One version of the 'fitness for purpose' model concentrates on evaluating quality in higher education at the institutional level. A high quality institution is one which clearly states its mission (or purpose) and is efficient and effective in meeting the goals which it has set itself.

This view of quality is implied in the White Paper *Higher Education: A New Framework* (DES, 1991) in terms of the government's desire to ensure that new funding arrangements for teaching should be 'related to and safeguard the best of the distinctive missions of individual institutions'. It is also implied in the approach of the CVCP Academic Audit Unit (1991, 1992). The universities individually determine their own definitions of quality and standards and the Academic Audit Unit seeks to evaluate whether the quality assurance system that the university has established is successfully achieving its aims and objectives.

Quality as value for money

A populist notion of quality equates it with value (Ball, 1985a) and, in particular, value for money (Pfeffer and Coote, 1990). Since the mid-1980s the government have forged a close link between quality of education and value for money (Jarratt, 1985; Church, 1988; Moodie, 1988) through its demand in the public sector for efficiency and effectiveness (Joseph, 1986; DES, 1987; Secretary of State for Education, 1988; Cave, Kogan and Smith, 1990). The White Paper clearly proposes a 'continuing drive for greater efficiency' in education (DES, 1991, para. 15).

At the heart of the value-for-money approach is the notion of accountability (Kogan, 1986;

European Commission, 1991). Public services are expected to be accountable to the funders (the taxpayer or, *de facto*, the Treasury) and to the 'customers' (the users of the service) (Pollitt, 1990). Paralleling the American model (National Governors' Association Report, 1986) British higher education has been faced with ever-more explicit accountability requirements (PCFC, 1990c; Mazelan *et al.*, 1991).

Increased accountability puts pressure on more efficient, economic and effective management. In education, effectiveness is seen in terms of control mechanisms (quality audit), quantifiable outcomes (performance indicators), observational ratings of teaching and research assessment exercises (Rudd, 1988). There is an implicit assumption that the market will take care of quality in the long run and that institutions can be left to ensure the quality of what they provide. Sceptical commentators want safeguards and argue that the proper application of validation techniques are crucial for quality and value for money (Church, 1988).

Performance indicators have been developed, in part, to monitor efficiency. Staff student ratios, indexes of revenue and capital resources, ratios of public to private funds, market share and examination results are principally used as crude measures of institutional (and programme) efficiency (HMI, 1990).

Customer charters specify what customers can expect for the money they pay. They have been developed in the public and privatised monopoly utility sector to compensate for the inadequacies of operation of the market. Eighteen charters have been produced to date, including the Parents' Charter in relation to education and the Patients' Charter in relation to the health service. Each contains a series of service standards which, if met, produce a quality service for the 'customer'. The Department for Education is currently working on a Students' Charter.

Quality as transformation

The transformative view of quality is rooted in the notion of 'qualitative change', a fundamental change of *form*. Ice is transformed into water and eventually steam if it experiences an increase in temperature. While the increase in temperature can be measured, the transformation involves a qualitative change. Ice has different qualities to that of steam or water. Transformation is not restricted to apparent or physical transformation but also includes cognitive transcendence. This transformative notion of quality is well established in Western philosophy and can be found in the discussion of dialectical transformation in the works of Aristotle, Kant, Hegel and Marx. It is also at the heart of transcendental philosophies around the world, such as Buddhism and Janism.

This notion of quality as transformative raises issues about the relevance of a product-centred notion of quality such as fitness-for-purpose. There are problems, as we have seen, in translating product-based notions of quality to the service sector. This becomes particularly acute when applied to education (Elton, 1992). Unlike many other services where the provider is doing something *for* the consumer, in the education of students the provider is doing something *to* the consumer. It is an ongoing process of transformation *of* the participant, be it student learner or researcher. This process of transformation is necessarily a unique, negotiated process in each case.

This leads to two notions of transformative quality in education, enhancing the consumer and empowering the consumer. A quality education is one that effects changes in the participants and, thereby, presumably *enhances* them. Value added notions of quality provide a summative approach to enhancement (Astin, 1985, 1991; Barnett, 1988; CNA, 1990b; PCFC, 1990d).

The second element of transformative quality is *empowerment* (Harvey and Burrows, 1992). This involves giving power to participants to influence their own transformation. This is much more than accountability to the consumer that is found in customer charters. Consumerist charters essentially keep producers and providers on their toes, but rarely effect decision making processes or policy. The control remains with the producer or provider.

There are four ways of empowering students:

- through student *evaluation* of programmes;
- guaranteeing students minimum *standards of provision* and giving them responsibility for monitoring the provision;
- giving students *control* over their own learning;
- developing students' *critical* ability, which attempts to empower students not just as customers in the education process, but for life.

The pragmatic approach to quality

Given the difficulties in defining quality in higher education, some commentators have opted out of trying to find an underlying theory or definition (Dochy *et al.*, 1990; Moodie, 1986). Vroeijenstijn (1991) says 'it is a waste of time to try to define quality'. The basis of this argument is that quality is a relative concept, that different interest groups in higher education have different priorities and their focus of attention may be different. For example, the focus of attention for students and lecturers might be on the process of education while the focus for employers might be on the outputs of higher education. It is not possible, therefore to talk about quality as a unitary concept, quality must be defined in terms of a range of qualities, with recognition that an institution may be of high quality in relation to one factor but low quality in relation to another. The best that can be achieved is to define as clearly as possible the criteria that each interest group uses when judging quality and for these competing views to be taken into account when assessments of quality are undertaken.

Analysis of the literature therefore suggests that confusion surrounds the definition of quality in higher education. Definitions of quality vary and, to some extent, reflect different perspectives of the individual and society. There appears to be no consensus about which definition should be used in higher education.

Furthermore, even if a single definition for quality was adopted such as 'fitness for purpose' or 'meeting customer's needs', very different sets of quality criteria could be constructed depending on who is determining the purpose or how the customer is defined. Adopting a single definition or viewing quality from the perspective of only one interest group therefore runs the risk of producing a set of quality criteria which is one-sided and does not capture the different dimensions of the concept.

Conceptual model for the first phase of the project

We developed a working hypothesis during the first stage of the *QHE* project based on our analysis of current practice and conceptualisations of quality in higher education. Quality is a relative concept. Its definition varies according to who is making the assessment of quality, which aspect of the higher education process is being considered and the purpose for which the assessment is made.

The focus of the empirical research involved identifying diverse interest groups, or 'stakeholders', in higher education and exploring what they regarded as important criteria for assessing quality. We initially identified eight stakeholder groups:

- students;
- employers;
- ‘government’, subdivided into ministerial departments (DFE, DE);
- funding councils;
- teaching staff in higher education institutions;
- managerial staff in higher education institutions, including representative bodies (for example, CDP, CVCP) and administrative and support staff;
- accrediting and validating bodies (for example, BTEC, CNAAB);
- assessment bodies (for example, HMI).

The aim was to find out the views, on quality, of each of these groups. This involved a tripartite strategy. First, the focus of interest of each group was examined, to see, for example, whether it emphasised teaching or research or was it concerned with input, process or output of higher education. Second, the underlying definitions of quality used by the groups and their political and philosophical underpinnings were explored. Third, the criteria used by each group when making judgements about quality in higher education were determined.

The ‘stakeholder’ approach is an analytical tool which other researchers have also used to look at quality in higher education (Vroeijenstijn, 1991; Yorke, 1991). To use the ‘stakeholder’ approach effectively required that no assumptions should be made about how a particular group might define quality or about its main focus of interest. Anything that a particular group felt was important was considered relevant.

At the end of the first phase of the project we aimed to have a set of quality criteria, ranked in order of preference, which reflected the views of all the stakeholders. At one end of the spectrum each ‘stakeholder’ group might think about quality in a different way and its focus of attention might also be different. We thought it more likely, however, that there would be some convergence of views on particular issues.

Existing quality assessment and assurance techniques will be evaluated against these criteria in respect of their appropriateness and usefulness in the context of higher education with a view to determining which areas needed further research and development in the second phase of the project.

Chapter 3

METHODOLOGY

Introduction

The research team used several complementary methods of data collection to find out the views of the stakeholders. The choice was informed by the nature of the group and the existence of published material. A mixture of qualitative, quantitative and documentary analytic research was undertaken. This provided broad statistical data and a depth of understanding.

Employers

The employer representatives on the steering group provided invaluable information about how to discover employers' views of quality in higher education. They were an important resource for determining the character of the employer questionnaire and seminars. The suggestions of the steering committee were augmented by two in-depth interviews with key personnel in organisations representing employers: the Confederation of British Industry (CBI) and the Council for Industry and Higher Education (CIHE).

As a result of the interviews the research team concluded that a focused approach, concentrating specifically on the outputs of higher education relevant to employers, was most likely to yield results.

Higher education can be viewed as a process which has two main outputs: an educated work force and research (Cave *et al.*, 1991). The *QHE* research sought the views of employers on these outputs in two ways. First we asked about graduate recruitment using a short questionnaire. Second, we held two seminars for employers' representatives.

The employer seminars

Two employer seminars were held: one at Esso on 28th February 1992 and one at Price Waterhouse (Training) on 5th March 1992. The seminars had different themes. Both concentrated on the outputs of higher education relevant to employers. One seminar was concerned with quality in relation to the provision of an educated work force. The other was about the broader relationship between employers and higher education in areas such as research, consultancy, sponsorship, joint syllabuses and the provision of training courses. The former was, therefore, broadly about 'people' and the latter about 'ideas'.

The focus for each seminar was a discussion paper prepared by the project team. The discussion papers were revised in the light of the seminars and combined to form one position statement which was circulated, for comment, to all those who attended (or who hoped to attend) a seminar (Burrows, Harvey and Green, 1992a).

The graduate recruitment questionnaire

A short questionnaire, concentrating on qualities which organisations look for when recruiting graduates, was circulated to a sample of 750 employers (Harvey, Burrows and Green, 1992a).

The questionnaire was kept short to encourage recipients to respond. As a result it gives only broad indicators of priorities among respondents.

The questionnaire was distributed by the Association of Graduate Recruiters (membership 500) via its journal *Janus*. It was also circulated by the Association of District Councils to all of its members (approximately 250) and by the Civil Service Commission to five departments. The sample, therefore, consisted mainly of large employers. It is hoped to extend the survey to a sample of small businesses.

Chapter 4 provides a summary of employers views on quality in higher education.

Students and staff in higher education institutions

Student and staff views on important criteria for quality were explored using a questionnaire. The aim was to get a broad cross-section of staff and students. A number of possible quality criteria are specified and students and staff are asked to rank each of these criteria on a scale ranging from 1 (the criterion is of no relevance) to 4 (the criterion is absolutely essential).

The team undertook a literature search to identify the quality criteria and measures currently in use by bodies such as HMI, the funding councils (PCFC, UFC) ¹, the accrediting agencies (CNA, BTEC) and the vice-chancellors' and directors' committees (CDP, CVCP). This gave us the 'official' line of the funding, assessment and validating bodies. To these we added the views of teachers' representatives via the literature produced by the two main unions (NATFHE and AUT). Finally we used the research conducted by the Student Satisfaction Project at the University of Central England (formerly Birmingham Polytechnic) and elsewhere (Mazelan *et al.*, 1991) to include criteria that students had specifically identified. In all we listed about 300 criteria. These we distilled down, by merging overlapping criteria, to around 100 distinct elements.

The resultant questionnaire was pre-piloted to check question ambiguity and then a complete pilot was undertaken at an institution not included in the final sample. The questionnaire was subsequently modified to take into account the results of the pilot, the comments made by the steering group, and parallel work by the research team on employers' views on quality in higher education.

Sixteen institutions were involved in the survey, nine from the UFC sector and seven from the PCFC sector. The former group ranged from traditional, established collegiate universities through to the newer universities. The PCFC sector included long-established polytechnics (now universities) and those being newly established as universities. The research team also took account of geographic location, size, age, and type of course structure (modular and non-modular) in order to obtain a diverse sample of institutions.

Each institution distributed 800 questionnaires, 400 to students, approximately 250 to academic staff and 150 to non-academic staff. ² In each institution the student sample was intended to reflect the number of students that the institution has in each PCFC or UFC programme area. The aim was to produce an overall student sample that reflected, as far as is possible, the number of students in each programme area nationally.

Each institution constructed its own sample following guidelines set by the project team. Most institutions publicised the questionnaire, prior to sending it out, by the inclusion of an article written by the project team in their institutional newsletter.

In each case, questionnaires were distributed to staff via the internal mail system and collected the same way. In addition to the questionnaire and covering letter, each staff member in the sample received a follow-up letter, after eight days, which encouraged them to complete the questionnaire if they had not already done so.

There were two basic methods for distributing and collecting the student questionnaires, depending on the circumstances appropriate to each institution. First, key courses in each

programme area were identified and questionnaires were distributed and collected by members of staff, usually course tutors. Second, students in each programme area were randomly selected from student lists. Students were then contacted direct via pigeon holes, their term-time addresses (or in one case, their home address). Collection points for completed questionnaires were established in central locations such as the library or the refectory on each site.

There are strengths and weaknesses with both these methods. The first results in a much higher response rate from students. However, it is only successful if there is a high degree of management support for the project in identifying appropriate course tutors, negotiating their support and chasing them to ensure that the questionnaire is administered and returned. The second method is much easier to administer but the response rate is poorer. As the project team was reliant upon the good will of the institutions taking part in the project, it was not possible to specify which approach should be used. Where appropriate, we encouraged the use of the first method.

We received over 4000 usable replies and thus the approach produced a large amount of quantitative data. Through comments, responses to open questions and letters received from potential respondents, a considerable amount of qualitative data was also received. The questionnaire provided us with the views of a diverse sample. However, as with all questionnaires, the approach is limited. The concept of quality in higher education is very complex. Although the questionnaire was fairly extensive, and some respondents spent a lot of time assiduously completing it, the questionnaire could only scratch the surface of this complex issue. The lack of a universally agreed set of terminology relating to quality in higher education meant that the criteria respondents were asked to comment on were expressed in fairly simple terms. Even then, differences in understanding inevitably arose.

Furthermore, providing respondents with a set of questions, to which they are asked to respond, directs and restricts the way that they are able to address the issue of quality in higher education. The qualitative material provides alternative perceptions and is one means by which we are able to get beneath the surface of the quantitative analysis. This has yet to be analysed. In addition, we intend to use the reported results of the survey as a basis for further exploration of quality issues and appropriate quality criteria through a series of discussion seminars and conferences. The preliminary results of the survey are summarised in Chapter 5.

Government, funding agencies, quality assessors and assurers

The team undertook an extensive review of documentary material on quality produced by Government departments, funding agencies, accrediting agencies, assessment agencies, management organisations and academic auditors. This material included White and Green Papers, legislation, reports, circulars, discussion documents and letters (Burrows, Harvey and Green, 1992c, 1992e, 1992f, 1992g).

The documentary analysis was backed up by in-depth interviews with key personnel in many of the organisations. The results of these enquiries are outlined in Chapters 6 and 7.

ENDNOTES TO CHAPTER 3

¹ Her Majesty's Inspectorate (HMI), Polytechnics and Colleges Funding Council (PCFC), Universities Funding Council (UFC), Committee of Directors of Polytechnics (CDP), Committee of Vice Chancellors and Principals of Universities in the United Kingdom (CVCP), Council for National Academic Awards (CNAA), Business and Technician Education Council (BTEC); National Association of Teachers in Further and Higher Education (NATFHE), Association of University Teachers (AUT).

² Three institutions distributed different numbers of questionnaires. One small institution had less than 800 staff and students in total. One other distributed 600 questionnaires to students because a small response rate was anticipated due to the timing of the distribution. Another institution wanted, for its own purposes, to carry out a larger sample. Approximately 1000 questionnaires were distributed to staff and 700 to students. The response rate from this institution was higher than from most other institutions. To ensure that this is not unduly influenced the results, the data from this institution was compared with the data for the remainder of the appropriate sector. There is an extremely high correlation (0.98) which suggests that the inclusion of this larger sample has not affected the overall results.

Chapter 4

EMPLOYERS' VIEWS

Introduction

Employers' views on the quality of higher education were explored through an examination of the available literature, in-depth interviews with key representatives of employers' organisations and group discussions.

One hundred and twenty four organisations responded to the questionnaire, ranging from central and local government, through manufacturing, construction and energy, to retail, financial, information technology and leisure industries. Most of the respondents were representatives of large organisations; only 8% of organisations who responded employed fewer than 250 people.

This chapter provides a synthesis of the different research and summarises the conclusions. Full details of the qualitative research can be found in *Is Anybody Listening?* (Burrows, Harvey and Green, 1992a). The results of the questionnaire survey are available in *Someone Who Can Make an Impression* (Harvey, Burrows and Green, 1992a).

Concepts of quality

Most employers felt that concepts of quality in higher education were too much dominated by the value systems of the providers. In their view, this led to quality being judged by criteria more relevant to research than teaching. Therefore, the notion of quality as 'customer satisfaction' has some attraction as it ensures that the providers take the needs of 'customers' into account.

There was general agreement that students are customers of higher education. There was less consensus about whether there are other customers whose needs should be considered. Some took the view that students were the only customers. The needs of employers for an appropriately educated work force would still be indirectly met because most students were looking for an education that would help them secure satisfactory employment.

Despite the benefits that might result from equating quality with student satisfaction, two major problems were envisaged. First, it might result in too much emphasis being given to the short-term needs of students and too little to the long-term needs of employers. Second, other aspects of higher education, such as research, might suffer if student satisfaction is the primary focus for the quality of teaching and learning. There was agreement that a definition of quality that focused on the needs of just one 'stakeholder' would be inappropriate for higher education.

An appropriately educated work force

For most employers, the extent to which higher education helps to provide an appropriately educated work force is central in judging quality.

When considering what students should learn, an analysis of the criteria that employers use when recruiting graduates can be taken as an indicator of what industry expects higher education to provide. Broadly speaking there are two requirements: 'subject specific' knowledge and skills and 'transferable' knowledge, skills and attitudes.

Most employers agree that too little attention is given to the development of transferable skills in higher education but opinions differ about the appropriate balance between transferable skills and subject-specific knowledge. To some extent these variations relate to the nature of the role that the graduate is expected to fulfil. Not all differences between employers, however can be explained in this way. While most employers agree that transferable skills are important, there is less agreement about the level of subject knowledge required. Indeed, some companies, that could be said to be heavily dependent on subject knowledge, do not necessarily recruit graduates who have relevant degrees; relying instead on in-house training. In other areas, however, particularly those controlled by professional bodies like medicine and law, it is impossible to practise without a relevant degree.

Qualities of the Graduate

The European Commission (1991) noted that skill shortages are prevalent in the Community. There is a growing body of research and opinion that suggests British industry and commerce needs 'versatile and adaptable' graduates (CIHE, 1987) if it is to develop and remain competitive into the next century.

There is a growing emphasis on 'transferable skills' such as communication skills, team working (Stoddart, 1991; Cleaver, 1991), 'self skills' and analytic ability rather than 'subject specialism' (CBI, 1991).

In an effort to identify what qualities employers look for when recruiting graduates respondents were asked to *rate* on a scale from 'irrelevant' (0) to 'absolutely essential' (100) the importance of 15 qualities that graduates might be expected to have. The results are shown in Table 4.1.

No quality was seen as irrelevant but there were clear priorities. The most important qualities for the total sample were 'effective communication' and 'team work'. In a recent HMI (1991b) study of 52 companies, good communication skills were also viewed as an essential attribute of graduates by 90% of respondents.

Specialist subject knowledge was regarded as the least important quality in our sample.

Reflecting established wisdom (CIHE, 1987) and research (Cannon, 1986), employers appear to want graduates who can work effectively in a modern organisation that demands initiative, group working and flexibility. Overall, employers rated 'organisational' skills higher than traditional 'academic' skills, such as specialist subject knowledge, imagination and creativity, enquiry and research skills and the ability to relate to a wider context. As one respondent put it, we want graduates who are able 'to make an early impression on the organisation'.

Not only is specialist knowledge rated as relatively less important by employers, but those skills and abilities that might relate to broader horizons are also poorly rated. Although not asked directly, employers express little interest in 'understanding'. The current concern among some educational theorists about the 'deep approach to learning' (Ramsden, 1986) is not reflected by employers.

It is also, perhaps, surprising that while effective communication is top of the list of qualities, use of information technology is seen as relatively unimportant. The qualitative research (Burrows, Harvey and Green, 1992a) suggested that employers rate the use of information technology as of less relative importance for two reasons. First, many graduates (particularly younger ones) now have considerable experience and familiarity with information technology. The same fears that once abounded in relation to 'computers' is no longer so marked. Second, and contingent upon the first, graduates can be rapidly inducted into the information technology of a particular organisation. Thus employers do not regard the ability to use information technology as such an essential quality. The relative unimportance attached to information technology also reflects the views of school leavers. In a recent CBI (1991) study only 14% of potential students indicated that information technology skills were among the benefits they would most like to gain

from higher education.

The priorities indicated in our sample by the importance ratings of the 15 qualities were reflected in the *rankings* given to a subset of items. The respondents were asked to rank skills, qualifications, knowledge and reputation of the higher education institution in order (from 7 'most important' to 1 'least important'). Employers once again showed a preference for team work, communication and self-skills over knowledge, degree classification, intelligence and reputation of the institution the graduate had attended (see Table 4.2).

The poor *relative* showing of subject specialist knowledge may, in part, be due to graduate recruiters taking for granted a minimum level of specialist knowledge. In some areas, as was suggested above, a degree in the appropriate subject is an essential prerequisite for selection to stage one of the graduate recruitment process.

The poor showing of subject specialist knowledge may also be attributable to the kinds of organisations that responded. For example, one respondent noted that subject specialist knowledge was more important for science, engineering and research and development posts than for other posts in the organisation. Another pointed out that subject specialist knowledge in the form of a relevant degree was essential or very desirable for some posts in the organisation. Four respondents indicated that subject specialist knowledge was the single most important quality. These respondents represented a major construction firm, two local authorities recruiting for a range of posts and a central government organisation recruiting professional economists.

Only in those areas where specialist subject knowledge is regarded as an essential prerequisite for doing the job is it seen as an essential quality. Surprisingly, this excludes some areas where subject specialism might be assumed to be important. Most of the accountancy firms (86%) regarded subject specialism as irrelevant or unimportant and even one of the legal practices regarded it as of little importance.

The 21 respondents who rated specialist subject knowledge as essential were predominantly from local (6) and central government (4) These amounted to half the central government respondents (50%) and a quarter of the local government respondents (25%). The remaining 11 respondents who rated subject specialist knowledge as absolutely essential, represented a wide variety of organisations

The qualitative research reflected these findings with a consensus that too much emphasis is placed on subject specific knowledge and skills in higher education at present. However, there was a warning that it would be equally inappropriate if the balance were to swing too far the other way.

Qualities of the higher education institution

In judging the quality of a higher education institution in providing the right sort of graduate for their organisation, respondents were asked to *rate* the importance (from 'irrelevant' to 'absolutely essential') of a set of criteria relating to institutional characteristics and provision. Not surprisingly in view of the discussion above, developing transferable skills was rated as the most important criterion in judging quality, closely followed by teaching effectiveness (see Table 4.3). Research reputation of the institution was not regarded as an important criterion.

The available literature suggests that employers are looking for an education system to develop 'life-long learning' (CIHE, 1987; DTI/CIHE, 1990; European Commission, 1991; Stoddart, 1991). The informal interviews and the discussion groups reaffirmed the need for an education system to produce graduates who were well equipped and keen to continue learning. It was therefore a surprise that the respondents to the questionnaire rated life-long learning as relatively unimportant. This may have been because the respondents were mainly graduate recruiters and were asked about institutional criteria within the context of graduate output. They may thus have regarded the provision of opportunities for further study as not germane to the assessment of the

quality of graduates.

In the qualitative research, employers placed much more emphasis on life-long learning. The rapidly changing nature of modern industrial society means that, as people move through their careers, they need to learn new skills or keep up-to-date with advances in their own field of specialisation. Employers suggest that higher education can support this need for 'life-long learning' in two ways. First, undergraduate programmes should develop in the student an ability and desire to learn and to carry on learning. Second, there should be greater commitment from higher education to continuing education courses that will enable employees to carry on learning while they are working. Flexible study patterns, work-based learning and systems for credit accumulation and transfer are considered helpful here.

Employers were, thus, more concerned that graduates gain 'the habit of learning' rather than that higher education necessarily provides short courses or other opportunities for further learning. In short, the focus of concern with opportunities for life-long learning is that students are empowered to make the most of opportunities that they encounter.

Effective careers guidance was rated as an important quality criterion. This may well reflect the particular concerns of the respondents, the majority of whom (63%) indicated they were responsible for graduate recruitment. Whatever the reasons there is a relative lack of endorsement for open access and a preference for selective recruitment within higher education institutions.

In the view of employers, not enough students graduate from higher education with a clear idea about what they want to do and the opportunities open to them. They are often unclear about the character of specific jobs and about the qualities that employers are looking for when recruiting. A careers counselling system which empowers students to make effective career choices is therefore considered to be an important need of both students and employers.

Expanding higher education

Most employers agree that, in the long term, they will need a more highly educated work force than could be provided by a selective system of higher education. The current expansion in the numbers of students entering higher education is therefore welcomed but with important caveats.

There is anxiety about how the move from a selective to a mass higher education system will be managed. If there is insufficient funding to underpin the expansion, employers fear that there will be an overall drop in standards. Many employers are also concerned that the changes will lead to greater variation in the standards of courses, which will be confusing for those recruiting graduates. Those present at the seminars were unanimous that the current emphasis in the United Kingdom on ensuring roughly comparable standards across the higher education system was an important feature that needed to be preserved.

Industry and higher education collaboration: research, training and sponsorship

The criteria that employers use for judging quality in relation to collaboration with higher education are less clearly articulated than those which underpin graduate recruitment. Very often the criteria are not directly related to quality and are more to do with personal contacts or geographical location. Lack of information is one of the reasons for this. Clear and precise marketing by institutions helps to overcome this problem but there is often too little comparative information available to allow discrimination between institutions.

The focus of attention of employers in judging quality in areas such as research and training is on the inputs (resources, expertise of staff, and so on) and the process. One reason for this is that

in many cases employers are collaborators as well as customers and are therefore directly involved in the process rather than receiving an end-product. Another reason is that, regardless of whether the relationship is one of customer or collaborator, employers have to make judgements about higher education before the output is produced. If an enterprise is to invest money or time in an institution, it needs to be confident that the investment is likely to achieve the desired results. Decisions to collaborate with a particular institution are frequently based on judgements about the quality of particular individuals or departments rather than criteria relating to the institution as a whole.

A 'professional' or 'business-like' approach to collaboration at the institutional and personal level in areas like negotiation of contracts, quick and effective response to enquiries, reliability and good presentation skills, are seen as important by many employers. The ability of an individual, department or institution to establish and maintain collaborative relationships is also rated highly.

Employers are certainly looking for value for money when determining with which institution to collaborate. Efficiency is therefore a criterion when judging quality. In addition, special criteria suggested for judging quality with regard to collaborative research included: familiarity with the field; the existence of expert staff; and the right facilities.

Special criteria suggested for judging quality with regard to training and joint courses included: flexibility in approach to teaching and learning; academic recognition for training programmes and work-based learning; a product designed specifically to meet the needs of the company; vocational relevance in joint courses; and evidence that a quality management system is in operation.

Those present at the seminar found it difficult to identify criteria for judging quality in relation to sponsorship and other forms of industrial backing. To some extent this is because the criteria used differ depending on the reasons for sponsorship. Where the reason is to boost public or local community relations, the reputation and credibility of the institution in the eyes of the public is paramount in deciding whether or not to give backing.

Not all companies have a clear policy concerning sponsorship. Their objectives for sponsoring a chair or donating funds are not articulated. Decisions seem to be reactive rather than proactive. For this reason they are unable to establish clear criteria either for sponsoring one institution rather than another or for judging the effectiveness of the collaboration.

Conclusion

The responses to the *QHE* employer's questionnaire reaffirm the strong interest that the commercial and public sectors have in recruiting graduates with communication, team-work, analytic, problem solving and self-skills. The qualitative research emphasised the need for a balance between subject specific knowledge and transferable skills. It also emphasised the need to empower students to develop life-long learning.

The research on employers' perspectives has suggested that employers have a number of priorities when assessing the quality of higher education. Although graduate recruiters may emphasise different things from other members of their organisation who seek collaboration with higher education, the following set of criteria emerged as the most important. This does not mean that all other criteria are regarded as unimportant but, overall, they are relatively less important than those listed below. The criteria have been grouped by level, system, institution and programme. The criteria in bold type, prefaced by ●●, were given top priority. The other criteria were seen as slightly less important.

Systems level criteria

- **Sufficient students graduating from HE to meet the need for a highly educated work force.**
- Maintenance of existing standards and comparability of standards between courses and between institutions.
- Adequate provision for continuing education to support life-long learning.

Institutional level criteria

- **There is a careers counselling service which empowers students to make effective careers decisions.**
- **There are effective links with employers that influence the character of programmes.**
- **There are adequate human resources to support teaching and learning (and staff are properly qualified).**
- There are explicit systems for quality assurance (which take into account the views of employers and students).
- There is an effective policy for improving access, which affects programme entry requirements, structure and content, and so on.
- There are sufficient human and physical resources to support collaborative research effectively and efficiently.
- There is a professional approach towards collaboration and training, including an ability to maintain collaborative relationships and clear information about what institutions offer.
- Institutional staff are committed to employer links.

Programme level criteria

- **Programmes are vocationally relevant (including opportunities for work-based placements).**
- **Students leave with transferable knowledge and skills.**
- Programmes should promote learning skills that will enable and encourage students to carry on learning after leaving higher education.
- The subject content of the programme is up-to-date.
- The subject content relates to the programme's aims and objectives.
- Students are encouraged to be actively involved in, and given responsibility for,

learning.

- Assessment covers the full range of course aims and objectives.
- Students leave equipped for life long learning.
- Programmes are characterised by effective and flexible teaching.

Table 4.1 Knowledge skills and attitudes

Attributes	Mean score	% essential
Effective communication	93	81
Team work	91	75
Ability to solve problems	87	62
Analytic skills	85	59
Flexibility and adaptability	84	58
Self skills (confidence, management, etc.)	83	54
Decision making skills	80	46
Independent judgement	79	42
Numeracy	77	43
Logical argument	75	36
Enquiry and research skills	71	29
Imagination and creativity	66	18
Use I.T.	65	19
Relate to wider context	58	11
Specialist subject knowledge	56	18

Table 4.2 Skills, knowledge and reputation

Ranked items	Mean score	% ranked top or second
Communication skills	4.9	47
Self skills	4.7	37
Team-work skills	4.5	31
Intelligence as measured by tests	3.7	24
Degree classification	3.6	18
Specialist subject knowledge	3.5	24
Reputation of institution attended	3.0	19

Table 4.3 Qualities of the institution

Qualities of the institution	Mean score
Developing transferable skills	82
Teaching effectiveness	80
Effective careers guidance	70
Specialist undergraduate programme	61
Broadly-based undergraduate programme	60
Selective recruitment policy	59
More open access policy	48
Opportunities for life-long learning	42
Research reputation	41

Chapter 5

STAFF AND STUDENTS

Introduction

This section summarises a preliminary analysis of one aspect of the national survey of staff and students undertaken as part of the *Quality in Higher Education* project. It focuses on that part of the survey that dealt with individual criteria of quality. A set of criteria emerge as having priority that transcend discipline area, sector, institution, or type of respondent (staff or student). Full details can be found in *Total Student Experience* (Harvey, Burrows and Green, 1992d).

The questionnaire

The survey was based on a questionnaire, which included a set of 111 possible criteria for assessing quality. Students and staff are asked to rate each of these criteria on a scale ranging from 1 (the criterion is of no relevance) to 4 (the criterion is absolutely essential). The 111 criteria are divided into 18 dimensions, 9 dimensions covering the course or programme of study (entry; programme structure; programme content; programme management; teaching; learning; knowledge, skills and attitudes; assessment; outcomes) and 9 covering the institution (approval and review procedures; staff development and appraisal; research and consultancy; management; general environment; institutional resources; student support and welfare; equal opportunities and access; collaborative links).

The criteria included in the questionnaire are derived from a literature search intended to identify the quality criteria and measures currently in use. (Details of the methodology are provided in Chapter 3). The questionnaire was piloted and, following the analysis of the responses, the final set of 111 criteria was constructed.

These criteria are, therefore, in no way predicated upon a single definition of quality. Instead the criteria reflect a range of approaches such as 'fitness for purpose', 'customer satisfaction' and 'excellence'.

The sample

Questionnaires were distributed to a sample of 13500 students, teaching and non-teaching staff in 16 institutions. The institutions ranged from established collegiate universities through to the most recently established universities. They were selected on the basis of geographic location, size, age, type of course (modular and non-modular) and sector.

The respondents consisted of 1585 students, 1486 academic teaching and research staff (that is, those who indicated that their job description included teaching or who were employed solely as researchers) and 946 academic-related, managerial or administrative staff. Two thirds of respondents were from the UFC sector.

The respondents identified with a wide variety of subject areas (see Table 5.1).

Nearly half the staff were lecturers (48%). The remainder comprised heads and professors

(8%), deans and higher management (2%), office managers and administrators (11%), personal assistants, secretaries and clerks (4%), technicians (8%) and researchers (7%) (see Table 5.2).

The preferred criteria of staff and students

Three broad and striking results emerged from the analysis of the criteria: the perceived relevance of nearly all the criteria, the high level of agreement across sectors, disciplines and between staff and students, and the low rating attributed to some criteria often taken-for-granted as indicators of quality.

Relative importance

A notable feature of the responses was the relative rather than absolute importance attached to criteria. The vast majority of the 111 criteria were thought to be of *some* importance in assessing quality. In one respect, it is not surprising that the majority of items were rated quite highly as they all derived from various 'expert' opinion as to how quality in higher education should be assessed. However, the results identified a clear set of priorities.

Agreement

There were very high levels of agreement across students and staff, across subject disciplines and across institutions as to the relative importance of the different criteria. The correlation between students, teaching staff and non-teaching staff and between sciences, social sciences and arts were all extremely high ($r \geq 0.9$). Similarly the correlations between separate disciplines and between different institutions were also very high ($r \geq 0.8$).

Overall, then, the data overwhelmingly shows high levels of agreement on the importance attached to different criteria for assessing quality. This agreement transcends institutional, sector, subject, staff and student boundaries. Even when broken down into 18 subgroups by type (student, teaching or non-teaching staff) by broad area (sciences, social sciences and arts) and by sector (PCFC, UFC), the correlations remained high (ranging from $r = 0.62$ to $r = 0.96$).

The priorities

As a result of the survey it is possible to identify a single group of criteria from the list of 111 that are regarded as the most important by all groups of respondents. The analysis by staff and students, by discipline and by institution referred to above was complemented by the subgroup analysis. From the subgroup analysis 26 items were shown to have very high levels of agreement across all subgroups. These were compared with ratings by institution and subject area (especially combined studies, which were not included in the Arts-Sciences-Social Sciences subgroup breakdown). These 26 items that resulted from this examination are shown in Table 5.3 under dimension headings. (The percentage of the sample that rated each item as essential is also shown).

It must be remembered that these criteria are the ones regarded as the most important from the list provided. Other criteria, that respondents may have identified through their qualitative comments, are not considered in this analysis.

The highest rated items for the total sample are dominated by resource, programme content, assessment and knowledge, skills and attitude items. Library provision and access, workshops and laboratories, and access to information technology facilities were the main resource criteria. Given recent concerns about library provision (HEFCE, 1992a), its high profile is not altogether

surprising.

Commonly, students cannot easily get the books that they are recommended to consult. The bookshops associated with the institution are often limited The libraries themselves are often crowded and noisy. (Lloyd, 1992)

The prevailing view among respondents appears to be that libraries should support teaching and learning rather than scholarship (Ratcliffe, 1992). The library having adequate resources to cater for the research demands of staff is ranked 31st as a criterion of quality.

A teaching item tops the list but it probably is not the most obvious one. However, concern with aims and objectives of courses and the way content (and assessment) relates to them are seen as very important.

More important, overall, than teaching, is student learning and assessment of work. The resource items clearly relate to student learning and reflect the importance given to encouragement of students' active involvement in the learning process. Valid, objective and fair assessment, with clear criteria, that results in useful feedback for students are items that are rated very highly. Apart from achieving aims that both staff and students understand, programme content that is coherent and structured, that inspires students and gives them confidence and is at a standard that reflects the award, are also important indicators of quality.

Some knowledge, skills and attitudes developed by students as a result of the programme are rated highly: notably effective communication, independent judgement (critical thinking), problem solving and analytic skills. This is analysed in more detail below.

The least important criteria

A significant feature of the results was that some taken-for-granted aspects of quality were seen as relatively less important than is often presumed. Such things as entry standards, low drop-out rates and high percentages of good class degrees are often seen as important indicators of quality. Similarly, quality is often linked to the research profile of the institution. Relatively speaking, none of these were regarded as important. There is relatively little support for high entry standards (the item is ranked 110th out of 111) nor is it important that few students fail or withdraw. Similarly, a high proportion of top class results is not seen as important in assessing quality.

The relatively low importance attached to entry and outcome indicators possibly suggests that respondents favour more open access to higher education and are prepared for students to experience rather than 'succeed' in higher education. However, items that may make entry more flexible, such as recognition and assessment of prior learning, programme structure facilitating transfer, and a variety of points of entry and exit are rated as relatively unimportant in assessing quality.

Other items that fall in the bottom twenty are the institutional surroundings and the sports facilities. The HEIST Report (Roberts and Higgins, 1992), for example, noted that some second year students mentioned sports facilities as a reason for choosing their institution. Similarly the institutional surroundings ranked among the most significant aspects in judging the best and worst features of their institution. While sports facilities and environment might be of some consequence for prospective students and significant areas when it comes to student satisfaction, they are regarded as relatively unimportant quality criteria by staff and students in the system.

Links with employers and the world of work are also seen as relatively unimportant in assessing quality. The ability of the institution to attract research contracts from employers, the programme taking into account employer needs, the incorporation of the views of employers in course approval and review, work experience as an integral part of the learning process and assessment in the work environment are all ranked in the bottom twenty items. This is not

encouraging for academic-employer collaboration and goes against the hopes of the Council for Industry and Higher Education, which argues one of the three conditions for business to maintain and expand its input to higher education is

companies and their representatives, such as the Confederation of British Industry, should continue to know that their voices are heard by those responsible for setting higher education's general priorities. It is proper for academics and business-people to continue to challenge each other robustly about the overall purposes of degree-level learning and its relation to the demands of working lives. (CIHE, 1991, p. 2)

This lack of importance given to employer collaboration is mirrored in the low rating given to collaboration with other academic institutions.

Despite the expressed views of some teaching inspectors (Gibson, 1986), preparing students in advance for taught courses was regarded as a relatively unimportant criterion for assessing quality.

Respondents did not think that the programme concentrating on specialist knowledge was important for assessing quality. Conversely, they did not rate a broadly based undergraduate education as much more important. The key to content seems to be not the scope of the course in general, but, as we have seen, whether what is provided is linked to the aims, is inspiring and reflects the award at the end.

The overall results, briefly outlined above, suggest that students and staff do not attach much importance to elements of quality such as research output, maintaining entry 'standards', and performance indicators, such as course completion rates, student achievement rates, efficiency ratios and ratios of private to public funds (PCFC, 1992).

It appears that underlying the staff and student perspective on the quality of higher education is a concern with the student learning experience. This is not restricted to what happens in formal teaching situations but relates to the *total student experience*. It is perhaps this emphasis on the student experience that accounts for the high rating of learning resource, assessment, and course content items and a low rating for research, the world of work and input and output indicators. The former have a direct impact on the student learning experience while the latter are perhaps perceived as having only an indirect impact.

Knowledge skills and attitudes

Several items were included in the questionnaire on the importance of skills, attitudes and knowledge. These items can be compared with an identical set of questions used in the survey of employers (see Chapter 4). 'Independent judgement' and 'effective communication' are regarded as the most important skills-related items for the students and staff. Indeed, as we have seen these are among the top twenty criteria overall for judging quality. At the other end, specialist subject knowledge and numeracy are seen as relatively unimportant, as are the ability to use information technology and team work (see Table 5.5).

Comparing 'employer' and 'academic' rankings of the knowledge, skills and attitudes items shows that communication, analytic skills and ability to solve problems are rated highly by both groups. Conversely, specialist subject knowledge is ranked at the bottom by both groups. Employers appear to want graduates who can work effectively in a modern organisation that demands initiative, group working and flexibility. Not only is specialist subject matter rated as relatively unimportant by employers, but those skills and abilities that might relate to broader horizons are poorly rated. Academics, while denying the central importance of specialist knowledge, give a high rating to independent judgement.

There are clear differences between academics and employers on the importance of certain skills (team work, independent judgement) as can be seen from the highlighted items in the ranked lists (Table 5.6). However, there is also a surprising degree of agreement that specialist

subject knowledge is relatively less important than other criteria.

Conclusion

The survey suggests that there are a set of quality criteria that have a high priority amongst all staff and student groups. The key criteria identified by staff and students are summarised below.

Institutional level criteria

- There are adequate physical resources (library, workshops, IT) to support teaching and learning.
- There are adequate human resources to support teaching and learning (and staff are properly qualified).
- **There is adequate access for people with disabilities.**

Programme level criteria

- The programme has clear aims and objectives which are understood by staff and students.
- Programme content is coherent and there is logical progression.
- The subject content of the programme inspires students.
- The subject content relates to the programme's aims and objectives.
- Students are encouraged to be actively involved in, and given responsibility for, learning.
- The standard of the programme is appropriate to the award.
- Assessment is valid, objective and fair.
- Assessment criteria are clear and understood by staff and students.
- Assessment covers the full range of course aims and objectives.
- Students receive useful feedback from assessment (and are kept informed of progress).
- Students leave with transferable knowledge and skills.

- **Prospective students receive adequate information about the character of the programme.**
- **The programme is effectively managed.**

Table 5.1 Type of respondent by subject area (%)

Subject area	Students	Teaching staff	Non-teaching staff	Total
Agricultural, biological	2.7	7.1	5.3	4.9
Business, management, finance, public administration.	14.4	7.7	22.3	13.5
Medical, dental, veterinary,	4.2	5.0	3.2	4.3
Health, nursing, social work, etc	2.2	3.3	2.5	2.7
Engineering, technology	6.6	11.5	8.4	8.9
Humanities (literature, history, philosophy.)	6.9	6.0	1.6	5.5
Languages	1.8	1.8	0.6	1.6
Education	4.6	3.5	4.4	4.1
Art, design, performing arts	4.9	3.2	3.2	3.8
Sciences (physics, maths, chemistry)	8.0	11.8	6.7	9.2
Social science (inc. economics, politics and psychology.)	11.0	9.1	3.3	8.6
Architecture, building, planning, environmental studies	3.9	2.5	1.6	2.9
Law	1.4	2.4	0.5	1.6
Information technology, communication, librarianship	2.1	2.5	11.7	4.3
Other	3.2	3.8	6.0	4.0
Combined*	22.1	18.8	18.6	20.2

Table 5.2: Job title by sector

Job title	PCFC %	UFC %	Total %
Assistant/associate lecturer	1.1	2.0	1.7
Lecturer	12.6	29.5	23.0
Senior lecturer	24.7	14.1	18.2
Principal lecturer	10.4	1.3	4.8
Head/Chair of school/department	5.9	3.5	4.4
Professor	1.3	5.9	4.2
Dean/Associate Dean	1.6	0.7	1.1
Director/V-C/Asst Dir./Pro V-C/Registrar	1.4	1.0	1.2
Office manager	3.3	1.6	2.3
Administrator	9.4	8.8	9.1
Personal assistant/secretary	2.4	2.0	2.1
Clerk/Clerk-typist/Wp-typist	2.5	1.4	1.8
Technician	10.5	5.7	7.5
Senior/Research Fellow	0.9	3.5	2.5
Research Officer	0.3	1.5	1.0
Researcher/Research Assistant	2.9	4.2	3.7
Other *	8.7	13.2	11.4
Total sample sizes	975	1537	2517
Total %	38.7	61.1	100

Table 5.3 The Highest Rated Items

Criteria	% essential
TEACHING	
The aims and objectives of the programme are understood by staff.	85
INSTITUTIONAL RESOURCES	
There is adequate access to library facilities (time and location).	83
The library has adequate resources to cater for the learning demands of students.	83
The library has adequate resources to cater for the teaching demands of staff.	75
There are sufficient and adequately equipped workshops and laboratories.	71
There are sufficient staff to support effective use of the library.	68
There is adequate access to information technology facilities.	67
There are accessible technical and support staff to assist IT & laboratory users.	60
ASSESSMENT	
Assessment methods are valid, objective and fair.	80
There are clear criteria for assessment that are understood by staff and students.	74
Students receive useful feedback from assessed work.	72
Assessment tests whether the aims and objectives of the programme have been met.	63
CONTENT	
The academic standard or level of the programme is appropriate to the award.	76
The content is designed to achieve programme aims and objectives.	70
The programme content inspires students and gives them confidence.	67
The programme content has a coherent sequence and structure.	65
KNOWLEDGE SKILLS AND ATTITUDES	
The ability to communicate effectively (written and oral).	74
Independent judgement (critical thinking).	72
Ability to solve problems.	64
Analytic skills.	63
Enquiry and research skills.	60
LEARNING	
The aims and objectives of the programme are understood by students.	72
Students are encouraged to be actively involved in the learning process.	66
MANAGEMENT	
A commitment to quality is part of the ethos and culture of the institution.	65
EQUAL OPPORTUNITIES	
There is adequate access to buildings for the disabled.	65
ENTRY	
Prospective students are given adequate information about the programme.	61

Table 5.4 The Lowest Rated Items

Criteria	% essential
RESEARCH	
Staff are highly academically qualified to undertake research.	28
The institution is successful in obtaining research contracts with employers.	23
TEACHING	
Students are prepared in advance for taught sessions.	18
ENVIRONMENT	
The institutional surroundings are attractive and pleasant.	26
There are adequate sports facilities.	18
PROGRAMME STRUCTURE	
The structure facilitates transfer between programmes.	19
There is a variety of points of entry and exit.	16
EMPLOYER AND WORK ITEMS	
The programme content takes into account the needs of employers.	25
Views of employers are incorporated into approval and review of programmes.	24
Work experience is an integral part of the learning process.	18
Where appropriate, assessment is undertaken in the work environment.	16
OUTCOMES	
Few students withdraw from the programme.	22
The course produces a large proportion of top class result.	16
Few students fail the programme.	16
PROGRAMME CONTENT	
The programme provides a broadly-based undergraduate education.	26
The programme concentrates on providing specialist knowledge.	13
ENTRY AND PRIOR EXPERIENCE	
Recognition is given to relevant prior learning.	23
High academic standards are required for entry.	11
There are arrangements for assessing experience prior to the programme.	10

Table 5.5 Ratings of knowledge skills and attitude items

Attribute	All academic mean	Student mean	Teaching staff mean	Non-teaching staff mean	Employer mean
Effective communication	89	88	91	91	93
Independent judgement	89	86	92	92	79
Ability to solve problems	86	83	88	88	87
Analytic skills	85	81	90	90	85
Enquiry and research skills	85	81	87	87	72
Logical argument	84	80	88	88	75
Self skills (awareness, confidence, etc.)	80	81	78	78	83
Decision making skills	80	81	79	79	81
Imagination and creativity	78	75	80	80	67
Flexibility and adaptability	76	76	76	76	85
Relate to wider context	74	76	73	73	58
Team work	72	75	69	69	91
Use I.T.	71	71	70	70	65
Specialist subject knowledge	70	68	72	72	57
Numeracy	69	66	70	70	78
Sample size *	4066	1585	1486	946	124

Table 5.6 Listing of knowledge, skills and attitudes ratings

	EMPLOYERS	ALL ACADEMICS
1st	Effective communication	Effective communication
2nd	Team work	Independent judgement
3rd	Ability to solve problems	Ability to solve problems
4th	Analytic skills	Enquiry and research skills
5th	Flexibility and adaptability	Analytic skills
6th	Self skills (awareness, confidence, etc.)	Logical argument
7th	Decision making skills	Decision making skills
8th	Independent judgement	Self skills (awareness, confidence, etc.)
9th	Numeracy	Imagination and creativity
10th	Logical argument	Flexibility and adaptability
11th	Enquiry and research skills	Relate to wider context
12th	Imagination and creativity	Team work
13th	Use I.T.	Use I.T.
14th	Relate to wider context	Specialist subject knowledge
15th	Specialist subject knowledge	Numeracy

Chapter 6

THE QUALITY ASSURERS

Introduction

In this section we briefly consider the main criteria for assessing quality that emerge from those organisations primarily concerned with assuring quality. The work of CNAA and CVCP Academic Audit is similar. Both have informed and have been informed by the thinking of the various senior management organisations, CVCP, CDP and SCOP. The approaches developed by SCOTVEC and BTEC, although mainly in relation to vocational education, also point to quality assessment criteria. The discussion in this chapter is based on documentary analysis¹ and in-depth interviews with key personnel.² For a full account of the research and the quality related work of these organisations, see *The Quality Assurers* (Harvey, Burrows and Green, 1992e).

Council for National Academic Awards (CNAA)

The Council for National Academic Awards' (CNAA) primary concern is with quality *assurance* at both the course (or programme) and institution level. CNAA's secondary concern is with quality improvement.

CNAA focuses equally on inputs, process and outputs. When CNAA was first established it concentrated largely on inputs, on the intentions of the new sector institutions. CNAA is still, in some quarters, reputed to be primarily concerned with inputs. However, course reviews focus as much on outputs as on inputs.

CNAA avoids any single approach to quality and there is no definition of quality anywhere in the documentation produced by CNAA.

Courses

As CNAA was established as a degree awarding body its main focus of attention is courses. It assures the quality of the standards of courses leading to CNAA qualifications, including the undergraduate degree, to the public, to students and to employers of graduates. However, CNAA has long noted the importance of factors outside the control of the course team in influencing the quality of the student experience. The main focus of attention for CNAA is teaching and learning at undergraduate and postgraduate level.

Several principles underpin the work of CNAA. First, the minimum standards of awards must be comparable with those in the old university sector. Second, there should be a variety of modes of study and course structures available to students in order to advance education and the extension of educational opportunities. Third, programmes should promote general educational aims: the development of the students' intellectual and imaginative powers; understanding and judgement; problem solving skills; ability to communicate; ability to see inter-relationships and to

perceive the field of study in a broader perspective. Fourth, teaching staff must be properly qualified and experienced, and their teaching must be invigorated and informed by their active participation in research or related scholarly or professional activities. The quality of teaching on an approved course must be maintained and where possible enhanced.

The main criteria used by CNAA when courses are being proposed (validation) or are being reconsidered after a period of time in operation (review) relate to resources, course aims and objectives, course content, admission, assessment and course management.

Institutions

CNAA also assists institutions in their own quality assurance. Institutional review has been a significant component of CNAA's approach to quality assurance. Accreditation is granted when an institution has demonstrated that it is capable of offering students a stimulating educational environment and is capable of maintaining and enhancing the standards of its courses without CNAA involvement.

In this aspect of CNAA's work, where the focus is on the institution, there are different criteria for judging quality. CNAA considers the effectiveness of the arrangements used by an Academic Board to assure itself about the academic quality of the institution's courses; the effectiveness of the institution's arrangements for ensuring that its courses reflect advances in their subject discipline(s); and in pedagogical practice (staff development and research). CNAA also addresses the means by which the Academic Board satisfies itself that new and existing work is adequately resourced (academic and resource planning) and that there are adequate arrangements for managing and maintaining the academic standards of courses taught and resourced jointly with other institutions. When accrediting institutions, CNAA also considers the ways in which the Academic Board confirms that the institution's courses are being taught, managed and operated satisfactorily through course monitoring and management. Finally, it looks at the provision made for the welfare of students and for enriching their experience of higher education.

Accreditation of institutions also requires that institutions demonstrate that they are self-critical academic communities. This requires that a commitment to quality is an integral part of the ethos and culture of staff at all levels. Ways of promoting the identification and transmission of good practice and the active engagement of the individual institution with the broader higher-education community are also prerequisites of accreditation.

Vice-Chancellors', Principals' and Directors' Representative Organisations and the Academic Audit

Higher senior management organisations, the Committee of Directors of Polytechnics (CDP), the Committee of Vice Chancellors and Principals of Universities in the United Kingdom (CVCP) and the Standing Conference of Principals of Colleges of Higher Education (SCOP) have primarily been concerned with quality assurance. Quality improvement may become more prominent as a result of the activities of academic audit. As with CNAA, there may be by-products, such as staff development, that occur via audit. Audit teams hopefully have a helpful impact on the institutions that they visit. However, the prime role of audit teams is not to improve quality *per se*. The main focus is the university's systems and procedures for quality assurance.

Institutions under the management of CDP and SCOP have been subject to the quality assurance principles of CNAA. The CVCP, under pressure from the government, established a more formal mechanism for addressing quality assurance in the UFC sector when it established its Academic Audit Unit.

CVCP, CDP and SCOP argue that all aspects of the education process are relevant to quality assurance (inputs, through processes, to outcomes). However, some elements, tend to have higher priority than others.

CDP, CVCP and SCOP tend to agree that quality should be considered in relation to the mission of the institution. They, therefore, tend towards a mission-based 'fitness for purpose' rather than a 'gold standard' approach to quality.

Autonomy and quality assurance

The CDP and the CVCP fully support the view that the prime responsibility for maintaining and enhancing the quality of teaching and learning rests with each individual institution. However, they also see the need for externally provided assurance that institutions' quality control mechanisms are adequate. Hence, with SCOP they have recently (1992) established the Higher Education Quality Council (HEQC). However, there is an increasing re-emphasis on the self-critical academic community. Universities, learning from the CNAA experience of accreditation, are being encouraged, via the new Higher Education Quality Council, to develop institutional self-evaluation. It is seen as the best safeguard of the quality of the process and of standards.

The existence of rigorous quality assurance mechanisms is thus seen as an important component of quality assessment at both an institutional and programme level. Quality assurance includes a number of elements. First, there must be systems for course design, development and review (including independent evaluation of new proposals) and for feedback from students, employers and other interested parties. The implied criteria are that there need to be regular channels in place that are in use properly to communicate information about the effectiveness of teaching and learning. Second, there must be mechanisms for monitoring existing programmes, including programmes that the university validates but which are run in other institutions. There must also be procedures for ensuring that the monitoring mechanisms are effective and that action is taken when necessary (including closing programmes where quality has fallen below an acceptable threshold). Third, learning support services should be monitored in relation to the requirements of programmes of study. Fourth, there should be clear lines of accountability for the conduct of the programme of study. Fifth, monitoring of entry and induction procedures at under- and post-graduate level should take place. Teaching and learning should be monitored and there should be mechanisms for monitoring and informing students of their progress. This is one of the most important aspects of the work of Academic Audit. There should be effective mechanisms for the conduct of examinations, external examining and appeals procedures (Brookman, 1992). Sixth, the concern with assurance mechanisms reflects two other central systems level criteria: accountability and access.

Accountability

Accountability, for the effective use of public funds, lies at the heart of the CVCP/CDP/SCOP conception of efficient and effective management. The CDP, in particular, is confident that institutions have an excellent record on accountability. Both the CVCP and the CDP are actively involved in the development of performance indicators that might help demonstrate accountability whilst contributing to the effective and efficient management of institutions. The need for quality audit is accepted as a means of demonstrating accountability for the use of public funds.

Access

The CDP and the CVCP are committed to the government policy of expanding student numbers.

A central criterion of quality, then, is how the institution or programme addresses access. This involves encouraging different types of students to take part in higher education; providing flexibility in study modes; providing creche facilities; and providing student counselling. Access, then, goes hand in hand with flexibility. There are three areas in which flexibility is important: the delivery and design of courses, given that different students have different teaching and learning needs; sensitivity to employer and students needs; and responsiveness to the needs of the local community.

Flexibility should be seen within the context of clearly specified programmes. Quality programmes have clear aims which are reflected in their academic content, structure and level. Assessment methods should be appropriate to the stated learning objectives.

Courses and teaching

Courses or programmes should have a statement of objectives and goals that can be communicated to students. Students should understand the goals of the programme and the teaching team should be able to judge whether students have achieved them. The CVCP Academic Audit Unit is primarily concerned with the teaching function of the university, at under- and postgraduate level, and what the university is doing to enable students to complete a course and gain an award. It is concerned with any aspect of research that is linked to tuition and gaining a degree. It is not concerned with individual staff research that is not related to a degree registration.

Staff development

Staff development, as it affects the teaching function, is seen as an important element of quality and should be adequately supported (CVCP, 1987). The CVCP has established a staff development unit to ensure that, nationally, staff development and training provision has a high priority. The CVCP Academic Audit Unit closely examined the extent to which staff development is taken seriously as a proper part of the professional role in higher education.

Vocational relevance, knowledge and transferable skills

For the CDP, vocational relevance is a central criterion of quality at the programme level. Vocational relevance at degree and diploma level involves developing strong links with employers. The development of transferable skills is a growing priority.

The Scottish Vocational Education Council (SCOTVEC)³

SCOTVEC is the body in Scotland responsible for developing, awarding and accrediting vocational qualifications. It works in cooperation with all sectors of industry and commerce, and with government, training and educational institutions to ensure qualifications are relevant to the needs of employment, flexible enough to respond to change and nationally and internationally recognized. It was established in 1985 by the Secretary of State for Scotland.

In its curriculum-development role, it ensures the quality of training and education provision by validating units and programmes of study. In its awarding role, it assesses the quality of delivery by means of centre- approval procedures and verification of internal quality-management systems.

SCOTVEC deals with more students in schools and further education colleges than students in higher education. Its Higher National Certificates and Diplomas, though, are increasingly being designed to articulate with the first and second years, respectively, of university degrees in Scotland. Its initial focus on competence-based qualifications, through the implementation of the National Certificate, has led recently to the adoption of a similar design for its HNCs and HNDs. These had formerly been based on the traditional academic model of specific syllabuses and end-examinations. Quality assurance procedures, which until 1991-92 differed between National Certificate and Higher National provision, are now being harmonized.

SCOTVEC is mainly concerned with quality assurance, although this includes an element of quality control. SCOTVEC has a twofold quality assurance role. First, it monitors standards and qualifications (quality control). Second, underpinning the first, are the quality criteria which relate to the way the institution operates as a delivery centre (irrespective of any course that it offers).

Courses

Centralised criteria for quality assurance are now being developed by SCOTVEC within a new framework. This consists of six principles, on which the quality system's procedures are to be based; a set of quality control and assurance elements that will provide a reliable means of maintaining consistent standards of SCOTVEC awards; and a quality auditing system that will determine the balance of responsibility between centres and SCOTVEC for the operation of the elements of the quality system.

The first of the six principles is that the system will ensure that candidates' achievement is compared accurately against the level of achievement required for the award. Second, the system promotes good practice in the management, delivery and assessment of SCOTVEC qualifications. Third, it provides a channel of communication between users and SCOTVEC. Fourth, it allows as much devolved responsibility as is compatible with the maintenance of consistent standards across centres and over time. Fifth, the system should be understandable to users and generate their confidence. Sixth, it should be effective in deployment of resources, economical in the demands made on those to whom it is applied and free of practices or procedures which restrict access or opportunity.

Despite the focus on outputs, SCOTVEC has quality assurance criteria that relate to the quality of the inputs and processes, although these are mediated by outcomes requirements. They focus on aims and justification, access and modes of delivery, course design, articulation and coherence, teaching and learning, assessment, course organisation and management, staffing and resources.

Institutions (centres)

SCOTVEC uses several criteria to determine whether a centre may offer existing SCOTVEC units and awards. There are two components: approval of a centre and approval to offer specific awards. Criteria used in granting approval relate to:

- **management and organisation**
- **staff recruitment and development policy**
- **internal quality assurance systems**
- **consultation and liaison with other agencies**

- **premises and learning environment**
- **access and equal opportunities policies**
- **candidate support**
- **internal and external verification of assessment**
- **resources**
- **staffing.**

Business and Technology Education Council (BTEC)

The Business and Technology Education Council (BTEC) adopts a fitness for purpose approach to quality.⁴ The purpose, however, has evolved. Five years ago, BTEC saw employers as their customers and prepared students for employment in a relevant area. Now BTEC takes a wider view of who are its customers: these include students, institutions, employers, parents and society as a whole. Essentially, however, the emphasis has changed to the student and BTEC focuses on the provision for students. BTEC now has twin purposes. First, to ensure students are fit to move directly into employment in whatever vocational area their BTEC qualification was taken. Second, providing students with wider opportunities by preparing them for progression to further study. These purposes underpin the criteria that BTEC use in addressing quality.

BTEC is basically a quality assurance organisation dealing with vocational education. However it also has a quality control and a quality assessment function. BTEC is unusual in having identified detailed quality criteria which are published in their *Moderators' Handbook* (BTEC, 1991b).

Courses.

BTEC's primary concern is assuring the quality of the processes of teaching and learning in institutions that are delivering BTEC courses. The process of how a student learns is vitally important. It is the BTEC view that quality can not solely be judged on the basis of competency outcomes. BTEC's process of validation looks at what institutions intend to do and reviews what actually happens in practice.

This process is also *assessed* through the moderator system. Moderators rate individual course quality criteria on a six point scale. The criteria are grouped under four *themes*: management, learning, assessment and review. The criteria of quality within each theme are operationalised in terms of specific indicators that moderators look for when assessing a BTEC course. The criteria within each theme are as follows.

Management

Recruitment is carried out with integrity. The course team work together to ensure effective operation of the programme. There is an active strategy to enable employers to contribute to the programme. Staff resources meet the needs of the programme. Physical resources are provided and maintained at a level to meet the needs of the programme. Where all or part of the programme has been franchised to other centres, adequate quality control procedures are implemented to ensure that the delivery at franchisee centres is of comparable standard to that operating at the main centre.

Learning

The programme provides opportunities for students to be actively involved in, and given responsibility for, their own learning. Learning experiences are relevant to present or future employment. There is a planned approach to the systematic development of all common skill competences. Work experience is an integral part of the learning experience. Students' realistic expectations of the programme are fulfilled.

Assessment

An assessment strategy is implemented by the team in accordance with published guidelines. The assessments support the programme aims and rationale. There are clear and appropriate criteria for assessment. Where appropriate, assessment is undertaken in the relevant work environment. Accreditation of prior learning is carried out with integrity. Arrangements for the internal quality control of assessment are agreed by the team and implemented. Assessment is carried out with integrity.

Review

Planned procedures for the monitoring, review and evaluation of the programme are implemented by the team. Review procedures lead to the formulation of a clear action plan which is implemented.

Standards

BTEC is also required by the Secretary of State to ensure national consistency of standards. Thus it has a quality control function. National consistency of standards across courses operating at different institutions ensures that the customer knows that somebody with a BTEC qualification has met a defined standard.

BTEC is changing focus because the government has required it to become part of the NCVQ framework. NCVQ is almost exclusively concerned with outcomes in terms of how a student has performed against sets of standards and competences. The BTEC moderator role is therefore being changed to encompass the requirements of the NCVQ external verification role.

Common skills

BTEC places considerable emphasis on the development of what it calls 'common skills'. These are defined as transferable skills which play an essential role in developing personal effectiveness in adult and working life and the application of specific vocational skills. The development of common skills is intended to provide a basis for continual learning and reflects the need for a more flexible work force. These common skills are: managing and developing self; working with and relating to others; communicating; managing tasks and solving problems; applying numeracy; applying technology; applying design and technology.

Conclusion

The key criteria of the quality assurers that have emerged from the analysis of documentary sources and the in-depth interviews with key personnel are summarised below.

System level criteria

- **Sufficient students graduating from HE to meet the need for a highly educated work force.**
- **Maintenance of existing standards and comparability of standards between courses and between institutions.**

Institutional level criteria

- There are explicit systems for quality assurance (which take into account the views of employers and students).
- There is an effective policy for improving access, which affects programme entry requirements, structure and content, and so on.
- There are effective systems for staff development, relating to both subject matter and teaching skills.
- **Higher education institutions have clearly stated aims and objectives (consistent with the aims of higher education as a whole) and are effective in achieving their mission.**
- **A commitment to quality is part of the ethos and culture of the institution.**
- **Staff engage in research and other professional activities to support teaching.**
- **There are adequate physical resources (library, workshops, IT) to support teaching and learning.**
- **There are adequate human resources to support teaching and learning (and staff are properly qualified).**
- **There are effective student welfare and support services (and they are monitored).**

Programme level criteria

- The programme has clear aims and objectives which are understood by staff and students.
- Programmes are vocationally relevant (including opportunities for work-based placements).
- Assessment is valid, objective and fair.
- Students leave with transferable knowledge and skills.
- **The subject content relates to the programme's aims and objectives.**
- **The programme is effectively managed.**
- **Teaching methods reflect the varying needs of the learners.**

- **Assessment criteria are clear and understood by staff and students.**
- **Assessment covers the full range of course aims and objectives.**
- **Students receive useful feedback from assessment (and are kept informed of progress).**

ENDNOTES TO CHAPTER SIX

¹ Source documents used in this chapter include BTEC (1991a, 1991b, 1991c), CDP (1991a, 1991b), CDP/CVCP/SCOP (1991a, 1991b, 1992), Stoddart (1991), CNA A (1990), Lindop (1985), DES (1990), CVCP (1985, 1986, 1987, 1991), CVCP Academic Audit Unit (1991, 1992), Gunning (1991) SCOTVEC (1990, 1991a, 1991b, 1992).

² Detailed accounts of the positions of the stakeholders identified in Chapters 6 and 7 will be available in Harvey, L., Burrows, A. and Green, D., 1992e and 1992f.

³ SCOTVEC is in a transitional phase. SCOTVEC, historically, has been concerned with vocational education and training. SCOTVEC's original role in relation to vocational education and training was mainly concerned with craft and technician training in industry and commerce. The highest awards that they gave in the past were HNCs and HNDs (with the exception of some vocational postgraduate awards such as graduate secretaries). SCOTVEC qualifications have been designed for advanced further education, rather than what has traditionally been known as higher education. Much has changed in the world of vocational education in the past five years and the rate of change has been accelerating. All these developments have been competency based and look at what people can do. SCOTVEC preceded NCVQ in the development of a competency system of education when, in 1984, the Scottish National Certificate was established. It provided statements of what people can do and performance criteria for levels of performance. SCOTVEC has undertaken significant research, on behalf of the Employment Department and others, into accreditation of work-based learning, accreditation of prior learning, and other topics.

⁴ BTEC is aiming to be a total quality company and its Quality Management System has been designed within the framework of ISO 9001.

Chapter 7

THE GOVERNMENT AND THE QUALITY ASSESSORS

Introduction

In this chapter we explore the position that the government takes about quality in higher education.¹ The view expressed by the Department for Education has clear implications for the policy position of the funding councils (previously the Universities Funding Council (UFC) and the Polytechnics and Colleges Funding Council (PCFC) and currently the Higher Education Funding Councils for England (HEFCE), Scotland (SHEFC) and Wales). The Department of Employment offers an alternative, more restricted, government perspective on higher education.

We explore the position developed by PCFC in relation to teaching quality as background to the approach and criteria that are emerging from HEFCE and SHEFC (the Welsh funding council has yet to express its thinking in this respect). As the pilot study of a proposed assessment methodology drew considerably on the expertise and experience of Her Majesty's Inspectorate for higher education, the HMI view and criteria for quality will also be outlined. For a full account of the research and the quality related policies and activities of the government and organisations discussed in this chapter, see *The Quality Assessors* (Harvey, Burrows and Green, 1992f).

The Department for Education (DFE)

Government policy on higher education has led to a large number of relatively rapid changes in the system. In the process, the Department for Education has developed a 'watching brief' on higher education, with direct responsibility for assessment of quality shifting to the funding councils, following the *Further and Higher Education Act, 1992*. The DFE has an important role in advising the Privy Council about degree awarding powers and it will continue to exercise that responsibility by monitoring the audit reports. The 1992 Act allows the Secretary of State to ask the Funding Councils to undertake quality assurance as well as quality assessment, although it is expected that the Higher Education Quality Council will take responsibility for the former.

The DFE's main concern is system-wide although the pledge to introduce a student charter (discussed below) reflects an increasing interest in the student experience.

The government has confirmed its commitment to the aims of higher education as defined in the *Robbins Report* (DES, 1987). These include instruction in skills, promotion of general powers of the mind, advancement of learning and transmission of a common culture and common standards of citizenship. To this, the *White Paper* (DES, 1987) added the need to serve the economy more effectively. However, most of the emphasis in recent years has been on only one

of these purposes: meeting the needs of the economy. This is because the government feels that this area has not been well served by higher education. The other purposes do not figure highly. This may or may not mean that the government does not think that they are important purposes for higher education. The *Green Paper* (DES, 1985) says that they are important but unless higher education serves the economy more effectively there will be less funds available for these other purposes.

Government policy on higher education has, in the past, been dominated by a fitness for purpose view of quality. The Department of Education and Science (the precursor to the DFE) tended to a view of quality in higher education, as 'fitness for purpose in meeting the needs of society'. For example, in *The Development of Higher Education into the 1990's*, the government's concerns are, first, that higher education must contribute more effectively to the improvement of the economy. Second, that higher education must produce more students with the right qualities to meet skills shortages (such as scientists and engineers). Third, that higher education institutions must be more flexible and adaptable because society's needs are changing rapidly. Fourth, that higher education institutions should be more responsive to the needs of the local community, not just in relation to the economy but in relation to extension of the community's artistic, cultural and recreational facilities.

The clearest articulation of the 'fitness for purpose' approach comes in paragraph 1.8 of the *Green Paper*.

The present structure of higher education is complex but each type of institution has a valuable contribution to make, provided that what each does is fit for the purpose which it serves. While the universities are the principal guardians of pure academic excellence and the main source of creative research, they are not the paradigm for HE [higher education] as a whole. The polytechnics and other institutions have a distinctive responsibility to prepare people for a wide range of activities.

The 'fitness for purpose' definition, however, is not the only definition which emerges from Government publications. In the latest White Paper, quality was equated with achieving high academic standards (with no mention of the relevance, of what students might be learning, to the needs of society). Quality is also seen in terms of value for money (Harvey and Green, 1992). The government places great stress on efficiency as well as effectiveness in the higher education system and has introduced funding systems intended to increase efficiency and effectiveness in the use of resources (DES, 1985, 1987, 1991).

The DFE is currently preoccupied by two, system level, political imperatives: first, to improve the accountability of higher education for the use of public funds; and, second, to increase the participation rate in higher education. The DFE is also concerned with quality improvement. It encourages developments to the system that will improve the quality of higher education. However, this necessitates looking at quality at the institution and course level.

Recently, there has been a shift in emphasis towards the output of higher education. This is not entirely new as the *Green Paper* (DES, 1985) noted that:

external judgements about quality can be attempted by comparing the success of students in obtaining jobs, their relative salaries and their reported performance in employment.

Similarly, the 1987 *White Paper* (DES, 1987) noted that academic standards and quality should be judged primarily on the basis of students' achievements. In the 1991 *White Paper* (DES, 1991) the view was taken that quality should be judged by the evaluation of quantifiable outcomes. However, this was insufficient in itself and should be backed up by external judgements based on direct observation. 'This includes the quality of teaching and learning, its management and organisation, accommodation and equipment' (in other words, evaluation of inputs and processes).

However, the recent emphasis is on outputs in a broader sense and in particular the

development of performance indicators. In this respect, the DFE is shifting away from the primary concerns of HMI, which were inputs and process. Nonetheless, the DFE recognises the relationship between inputs and outputs and thus regards 'value added' as an important, although methodologically complex, concept.

At the same time there is a growing interest in the students' view of quality. This parallels developments elsewhere in the public services and is enshrined in the commitment to develop a Students' Charter. The government is intent on increasing national prosperity through a more highly educated work-force. Higher education must satisfy students requirements both in terms of being job-related and in providing opportunities for self-development.

Criteria for assessing the quality of the higher education system

A set of general criteria for assessing the quality of the higher education system can be deduced from recent Government publications.²

- The higher education system produces sufficient highly educated people to meet the needs of the economy. This involves an increase in access and accessibility of higher education to groups currently underrepresented.
- Maintenance of academic standards even though the numbers of students in higher education will grow and there will be greater diversity in their backgrounds.
- Quality assurance mechanisms within institutions are effective and are explicit and open so that they demonstrate accountability for the use of public funds.
- Management systems in higher education institutions (and in associated funding bodies) are able to provide efficiency and effectiveness in the use of public funds. This requires the development of performance indicators to demonstrate value for money.
- Higher education institutions are flexible and adaptable so that they can respond effectively to the changing needs of society. This may require changes in management structures in institutions.
- The higher education system responds quickly to meet identified skills shortages. This requires controls over number of student places in specific areas and special courses in skills-shortages areas.
- The higher education system provides opportunities for education throughout life, for career purposes and for greater personal fulfilment. The provision of continuing education should be one of the principal parts of HE work.
- Higher education institutions have effective systems for staff development, appraisal and accountability, both relating to subject matter and teaching skills. This implies responsiveness to changing needs of students, employers, and so on.
- Higher education courses prepare students effectively for employment. Hence a greater emphasis on the development of personal transferable skills, positive

attitudes to work, and, for vocational courses, relevance of what is taught, in terms of subject content, to work.

- Higher education institutions have good links with employers so that they are better able to respond to the needs of employers.
- Higher education institutions have clearly stated aims and objectives, consistent with the aims of higher education as a whole, and are effective in achieving their mission.
- Public funds for basic and strategic research are allocated selectively to research of high quality to ensure best use of scarce resources.
- Transparency in the planning and use of research funds in the interests of accountability.
- Account is taken of the views of students.

Quality assurance

The government's view is that quality and value for money are best preserved when the laws of the market are allowed to operate. The government has adopted two tactics to encourage the market. First, it has increased the proportion of funds that institutions receive from student fees. This is intended to encourage expansion and to create a more direct relationship between customer and provider, as in other public services. Second, it has sought, by direct and indirect means to increase competition between institutions.

However, for two reasons, the government has stopped short of making competition the sole determinant of expansion (DES, 1991). First, competition alone does not provide a 'safety net' for quality and standards. Second, there is currently too little information about the quality of the provision in higher education for students to make effective choices. It is, in due course, the task of the quality assessment units, which advise the Funding Councils, to make available, to students and employers, the information that they gather about the relative and actual quality of institutions. This will enable students and employers to select the institution which best meets their needs.

The government believes that quality is the responsibility of the individual institutions and, in line with its laissez-faire approach sees no reason for there to be an overarching body to control quality. However it supports the notion of a self-regulated system of quality audit embodied in the Higher Education Quality Council.

It believes that any doubts about the effectiveness of self-regulation are more than offset by the self-interest which institutions have in demonstrating that internal quality controls continue to be rigorous. (DES, 1991)

Quality assessment

The government suggests two approaches to quality assessment. First, performance indicators relating to quantifiable outcomes (including value-added). It suggests that performance indicators will be insufficient on their own. Second, external judgements based on direct observation of what is provided. This focuses on process.

Although content to allow the institutions to own and control the quality assurance process, the government has linked quality assessment to funding. Each funding council has been required to

establish quality assessment committees and to determine a methodology for assessing quality of teaching.

The Employment Department and the Training Enterprise and Education Directorate (TEED)

The Employment Department's main concern is quality improvement in higher education with regard to meeting the needs of the economy. It has an implied fitness for purpose approach, in the sense of meeting the needs of the 'economy' or of employers or individual learners.

One of the aims of the Employment Department is 'to support economic growth by promoting a competitive, efficient and flexible labour market'. The Employment Department, therefore, looks at higher education from this specific point of view. The criteria it uses for judging higher education are therefore related to this issue.

There are several implicit criteria by which the Department might assess quality at a system and at an institutional or programme level.

System level criteria

For the Department a quality higher education system is one that is flexible and can respond quickly to rapid technological, economic and social change. The system should produce a sufficient supply of graduates to meet the needs of the economy for a highly skilled work-force. It should be able to respond to identified skills shortages in specific areas. A quality higher education system should provide adequate support for continuing education courses and thus help to provide 'life-long learning'

Institution or course level criteria

At the institutional and course level the Department regards a quality institution as one in which the management structure facilitates flexibility and responsiveness to external change, establishes partnership with local employers and provide opportunities for work-based learning for students.

There should be successful policies to widen access and accessibility of higher education to all those with an ability to benefit by providing for new client groups such as mature people, underrepresented groups and people requiring continuous professional development.

Staff development should be provided that is designed to enable staff to remain responsive to new approaches to teaching and assessment and to gain insight into the needs of employers.

A quality course is one that ensures that the outcomes of learning include the development of 'transferable personal' skills as well as subject-specific knowledge and skills.

Polytechnics and Colleges Funding Council (PCFC)

In *Teaching Quality* (PCFC, 1990b) the committee of enquiry adopted a 'fitness for purpose' definition of quality in which the student and the student's needs are given priority in the model for teaching quality. The report establishes a number of conditions necessary if teaching is to be effective. These include clarity of aims and objectives; a curriculum organisation and delivery policy which includes a readiness to consider different methods of promoting learning; a policy for the professional development of teaching staff; a means of involving student and employer views in judging the curriculum, its delivery and outcomes; and a framework within which an institution can evaluate its own success in meeting its objectives and adjust its practice

accordingly.

The report also suggested six strategies that the funding council could use as a basis for forming judgements about the quality of teaching in individual institutions and in the sector as a whole.

- **Establish minimum conditions for the quality of teaching which each institution would be expected to meet in order to receive funding above the basic element provided by the Council.**
- **Require, in addition, a statement on the enhancement of teaching quality from each institution seeking an allocation of funds for additional student places.**
- **Promote and support institutional self-evaluation – the committee holds that institutional self-evaluation should be part of the strategic planning process.**
- **Promote and develop quantifiable and other information relating to the quality of teaching.**
- **Ensure that teaching strategies and strengths are monitored in order to review practice in the institutions and contribute to the dissemination of good practice.**
- **Encourage further enquiries into the relationship between institutional ethos and teaching quality. (There is a suggestion that what separates the good or satisfactory from the excellent is related to institutional ethos).**

There are three underlying principles in the *Teaching Quality* report. First, ‘teaching’ must be broadly interpreted; it is not just what goes on in the classroom. Second, teaching must be responsive to students’ needs, that is, it must reflect the different backgrounds and expectations of students. Third, the conditions necessary for good teaching must be taken seriously and priority given to ensuring the conditions are fulfilled. There needs to be ‘consistency of purpose throughout the institution and a commitment to improving the quality of teaching as a matter of priority’. Institutional ethos is seen as crucial.

Her Majesty’s Inspectorate (HMI)

HMI no longer have a role in the assessment of higher education as a result of the 1992 Act except in the area of initial teacher training. However, HMI’s experience of inspection offers some well established criteria for assessing the quality of teaching and learning. The main role of the inspectorate for the last 150 years has been to *report* to the Secretary of State on the quality of provision in the country.

HMI adopted a version of the fitness for purpose approach to quality and this informed the assessment of programmes of study. HMI ascertained the aims and objectives of a course and attempted to ‘assess whether or the not the organisation and management, resources and range and appropriateness of provision allow these aims and objectives to be effectively achieved’ (HMI, 1989). Only then did HMI undertake a comparative analysis. They judged ‘whether the aims and outcomes compare with those of similar courses/areas of work and whether they are appropriate’ (HMI, 1989). This comparability analysis drifts from a fitness-for-purpose approach towards a quality-control function.

However, HMI did not adopt a set of ‘gold standards’. When looking at student work, HMI took account of the nature of the student group. They did not start with a standard view of what a student should be.

Courses

The focus of attention was on the quality of teaching and learning. However, teaching was broadly defined to include all activities that have an impact on the students' learning experience. The evaluation of learning was HMI's central purpose.

HMI considered inputs and outputs as well as process. They looked at the nature of the student intake and at staffing. They looked at outcomes such as the final degree classifications and student destinations. Inspectors were trained to spend as much time looking at written work such as examination papers, examiners' reports and projects as they did observing what happened in classrooms. What constituted a top-rated and a bottom-rated course provides an indication of the focus of attention of inspections (HMI, 1989).

A *top rated course* is one that is 'generally good, or with some outstanding features or with many good features'. It is marked by well conceived objectives and by a well organised purposeful programme of teaching. Classes are noted for lucid teacher exposition at a challenging level, leading to well-judged, sharply- focused student assignments. Students respond intelligently and diligently and display evidence of secure learning and progression. Students' oral and written work is generally of a good standard. Teaching takes place in a well designed, clean and supportive learning environment and is able to draw on a good range of equipment and other resources. Students are provided with regular indications of their progress and can build on the advice and guidance derived from assessment.

At the other end of the scale, a course is described as having 'many shortcomings, generally poor' if it is an ill-designed and badly organised course with doubtful content not well suited to students' needs. Students are lack-lustre and poorly motivated. The course is conducted in poor accommodation and there are significant resource shortages in many areas. This designation implies an unacceptably poor provision in need of major overhaul.

Institution

Some inspections took place at the institutional level, to see how it was functioning as a whole. This was an infrequent part of HMI work as such inspections were expensive. Recently, for example, HMI organised inspections looking at institutions that have experienced rapid expansion.

System

HMI also did survey reports that looked at provision across the country. For example, they examined the impact of PCFC funding on science equipment. These system-level reports have occasionally had a direct impact on Treasury allocations.

HMI thus reported at different levels for different purposes but these reports were always based on observation of what was actually going on. HMI considered it insufficient to simply assess outputs, at any level. Nor is it feasible to rely solely on student evaluation of the process.

Pilot Quality Assessment

The *Pilot Quality Assessment Working Document* (HMI, 1991a) was prepared by HMI and probably provides the most up-to-date list of the criteria they used when making judgements about the quality of teaching and learning. The criteria relate to aims and curricula; academic management and quality control; resources; staff development; the quality of teaching and assessment; the standard of students' work; and the nature of the student intake, support systems

and progression.

The Higher Education Funding Council England (HEFCE)

The Higher Education Funding Council England (HEFCE) tends towards a mission-based 'fitness for purpose' approach to quality (Harvey & Green, 1992) in as much as an institution is required to state its mission and specify its aims and objectives. The quality of the institution is to be judged in terms of how successful that institution is in meeting its aims and objectives.

The funding council opposes the notion of quality as a single 'gold standard' because it wants to retain diversity in the nature of higher education institutions. HEFCE is not a planning body and its view is that institutions must take responsibility for judging, determining and ensuring quality.

The funding council's main concern with quality relates to its remit to provide accountability for the use of public funds. Legislation requires the new funding bodies to assess quality in higher education.

HEFCE is concerned with both teaching and research and will give equal weight to both purposes. However, the assessment of teaching and the research assessment exercise are distinct processes.

Quality Assessment Committee (QAC)

Since the *Further and Higher Education Act 1992*, quality assessment is the responsibility of the funding councils. The Act places on HEFCE the statutory obligation to 'secure that provision is made for assessing the quality of education provided in institutions for whose activity they provide, or are considering providing, financial support'. It also requires that the Council establish a Quality Assessment Committee (QAC) to advise on the discharge of its duty in relation to quality assessment.

The QAC, in the consultation paper (HEFCE, 1992b) has endorsed the following principles:

- **Teaching and learning are inseparable: teaching involves the whole management and promotion of student learning, including accessibility to learning resources.**
- **The quality of teaching and learning can only be understood in the context of an institution's aims and objectives.**
- **Quality can be specified in terms of the match between the teaching and learning process and the students' ability, experience, expectations and attainment.**
- **Quality can be assessed in terms of the student achievement and in terms of the totality of the learning experience**

QAC argues that there are a number of dimensions of quality including: learning support facilities; the quality of staff; arrangements for staff development; scholarship and research; institutional ethos; academic standard of graduates; employability of graduates; student and employer 'satisfaction'; and 'added-value'.

In particular, pilot assessments designed to test the methodology will expect to see evidence of the following (HEFCE, 1992b):

- **curricula and syllabuses with clear aims and objectives that meet the needs of**

students and employers

- **variety in the promotion and assessment of learning**
- **academic and personal support for students**
- **clear, explicit and consistent assessment methods and arrangements at the appropriate level**
- **comparability of student performance across institutions**
- **students developing an enthusiasm for learning and both specialist and general skills**
- **adequate staffing and a programme of staff development**
- **suitable teaching accommodation and adequate learning resources**
- **a means by which the views of students and employers can be used in evaluating curricula, delivery and outcomes**
- **an identifiable framework within which an institution can measure and evaluate its own success in meeting its objectives.**

QAC thus see the assessment of teaching as more than observing what occurs in the classroom. Everything that has an impact on students' learning needs to be taken into account. QAC, however, accepts that there are a variety of stakeholders who will place different emphases on the quality criteria.

There are three elements in the proposed teaching assessment methodology: the collection and analysis of a set of performance indicators; self assessment by the institution of the quality of education; a visit from an assessment team. Assessments are intended to be at the discipline or subject area (such as history, mechanical engineering, chemistry, and so on) with each subject being assessed every four or five years.

Assessments will judge the quality as falling into one of three categories: excellent (education is of a generally very high quality) satisfactory (this category will cover most education) and unsatisfactory (education is not of an acceptable quality).

The reports produced during the quality assessment process should provide very useful information to institutions that would help them to *improve* quality.

Scottish Higher Education Funding Council (SHEFC)

The Scottish Higher Education Funding Council also adopts a mission-based fitness-for-purpose approach, although placing considerable emphasis on institutional self-evaluation in its most recent consultation paper on quality assessment (SHEFC, 1992). However, in its references to adequate quality control mechanisms it also implies a 'gold standard' view of quality.

Aspects and elements of quality

SHEFC identifies twelve 'aspects' of quality assessment ranging from aims and curricula to outcomes and quality control. Each aspect incorporates several 'elements' and these are briefly summarised below.

Aims and curricula

Curriculum aims and objectives are explicit and known to staff and students. They correspond to the needs of students, society and the economy. Curricula accurately reflect declared aims and objectives and the needs identified: balancing content and skills.

Curriculum design and review

Courses are imaginatively designed to meet the needs of potential students and provide alternative curricula modes. Course design seeks to maximise access. Courses are periodically reviewed and there is a regular liaison between the institution and potential employers.

The teaching and learning environment

Teaching accommodation and specialist facilities are sufficient in quantity and appropriate for the curriculum. The physical environment is well maintained and accommodation is economically deployed and imaginatively used.

Staff resources

The teaching-staff complement is sufficient and suitable for the curriculum and there is adequate support staffing in relation to such things as library, technician, administrative and student services. Staff development needs are systematically identified and acted upon.

Learning resources

There are sufficient physical resources to deliver the curriculum, including equipment, materials, information technology, audio-visual and library support.

Course organisation

Learning programmes are effectively organised and managed. Course work and assessments are systematically scheduled and feedback is regularly obtained from students, analysed and acted upon as appropriate.

Teaching and learning practice

Teaching and learning are based on course aims. Teaching methods are varied and make effective use of facilities. Teaching is well planned and prepared and effectively performed.

Student support

The need of all students for guidance and support is recognised and provision made for advice and assistance in the curricular, vocational and personal domains, including advice to potential students during the application and enrolment phases.

Assessment and monitoring

Assessment arrangements correspond to all the aims and aspects of the curriculum. A range of assessment methods is used. The assessment schemes and the standards applied are clear and explicit to ensure that assessment schemes are valid, reliable and fairly administered. Student are informed of progress which is systematically monitored.

Students' work

Coursework is regularly set and assessed and is at the appropriate intellectual level. Coursework reflects the full range of curricular aims, including the development of generic skills. Student achievement, as represented by their coursework, is comparable with that of students on similar courses elsewhere.

Teaching and learning output and outcomes

Performance indicators are regularly used to inform institutional assessment of achievement in relation to education aims and objectives. Results are monitored and analysed and appropriate action taken.

Quality control

Consistent and coherent quality control policies and strategies are applied and periodically reviewed. Quality standards are clearly defined, generally agreed and known to all concerned. Responsibility for quality control is explicit. Documentation and procedures are in place and effectively used. The views of externals and students are invited, considered and acted upon. There is a general commitment to excellence in teaching and learning.

Conclusion

The main criteria that emerge from the examination of the government and the quality assessors are as follows:

System level criteria

- Maintenance of existing standards and comparability of standards between courses and between institutions.
- **Sufficient students graduating from HE to meet the need for a highly educated work force.**
- **A system that can respond quickly to meet identified skills shortages in specific areas.**
- **Adequate provision for continuing education to support life-long learning.**

Institutional level criteria

- Higher education institutions have clearly stated aims and objectives (consistent with the aims of higher education as a whole) and are effective in achieving their mission.
- There are effective links with employers which influences the character of programmes.
- There are adequate physical resources (library, workshops, IT) to support teaching and learning.
- There are sufficient, properly qualified, human resources to support teaching and learning.
- **Institutions are efficient in the use of public funds (value for money).**
- **There are explicit systems for quality assurance (which take into account the views of employers and students).**

- **There are effective systems for staff development, relating to both subject matter and teaching skills.**

Programme level criteria

- The programme has clear aims and objectives, which are understood by staff and students.
- Students are encouraged to be actively involved in, and given responsibility for, learning.
- The standard of the programme is appropriate to the award.
- Assessment is valid, objective and fair.
- Assessment covers the full range of course aims and objectives.
- Students receive useful feedback from assessment (and are kept informed of progress).
- **Students leave equipped for life-long learning.**
- **Teaching methods reflect the varying needs of the learners.**
- **Staff perform effectively in classrooms.**

ENDNOTES TO CHAPTER SEVEN

¹ The main sources used in this chapter are DES (1985, 1987, 1991), Training, Enterprise and Education Directorate, (1990, 1991), Employment Department (1991), HMI (1989, 1991), PCFC (1990a, 1990b, 1990c).

² Criteria 1, 2, 3, 5 are explicit in the 1987 *White Paper*, Criteria 1 and 2 are explicit in the 1991 *White Paper* and Criteria 1, 2, 4, 5, 7 are explicit in the 1985 *Green Paper*.

Chapter 8

SUMMARY OF THE

CRITERIA

Introduction

Drawing on the research described in the previous chapters, the tables below summarise the key quality criteria for each stakeholder group. The tables identify the criteria at the system, institutional and programme level. Those criteria that are regarded as a priority by each stakeholder group are identified by a double bullet point (●●) and those that are important by a single bullet point (●). An empty cell denotes that the criterion was not identified as important in judging quality by the stakeholder group concerned. It does not necessarily mean that the group thinks that the issue is irrelevant.

Criteria specified here may conceal differences between stakeholder groups concerning underlying objectives. Access, for example, could be seen as an important criterion in judging quality if the objective is to increase the size of the highly educated work force. Access could also be an important criterion if the objective is to reduce social inequalities.

Criteria may also hide differences within stakeholder groups. For example, some employers feel that specialist subject knowledge is of little or no importance to them in judging quality. For other employers it is essential.

Most groups give a high priority to developing ‘transferable’ knowledge, skills and attitudes. There are, however, differences between groups concerning which skills and attitudes are the most important (see Chapter 5).

It is important that this summary table is not taken out of context. It should be seen in relation to the detailed analyses summarised in other chapters and available in *QHE* reports.

Core Criteria

The criteria described in the tables represent the key criteria for each stakeholder group. There are clear differences in the priorities and concerns of specific groups. The original intention of the project was to find a set of core criteria about which there was a consensus of opinion. This objective has been revised in the light of our findings as there are some criteria which, although they are only a priority for one or two interest groups, are considered so important by those groups that leaving them out would distort the overall picture.

Nevertheless, some priorities do emerge. Those criteria which are considered important by four or more groups are highlighted in Tables 8.1–8.3.

Table 8.1 System level criteria

	Employers	Students in HE	Staff in HE	Managers in HE	Government	Validating bodies	Assessment bodies	Funding councils
Sufficient students graduating from HE to meet the need for a highly educated work force	●●			●●	●●			
A system that can respond quickly to meet identified skills shortages in specific areas.					●●			
Maintenance of existing standards and comparability of standards between courses and between institutions	●				●●	●●	●●	●
Adequate provision for continuing education to support life-long learning	●				●		●●	

Table 8.2 Institutional level criteria

	Employers	Students in HE	Staff in HE	Managers in HE	Government	Validating bodies	Assessment bodies	Funding councils
Higher education institutions have clearly stated aims and objectives and are effective in achieving their mission.				••	••			••
Institutions are efficient in the use of public funds (value for money)					••			•
Institutions are flexible and adaptable so that they can respond effectively to the changing needs of society					•			
There are explicit systems for quality assurance (which take into account the views of employers and students)	•			••	•	••		••
A commitment to quality is part of the ethos and culture of the institution		•		•	•	•		•
There is an effective policy for improving access, which affects programme entry requirements, structure and content, etc.	•			••		••		••
There are effective systems for staff development, relating to both subject matter and teaching skills				••	•	•		••
There are effective systems for staff appraisal and accountability					•			
Staff engage in research and other professional activities to support teaching						••		
Staff engage in research to develop knowledge								
There are effective links with employers which influences the character of programmes	••				•		•	••
There are adequate physical resources (library, workshops, IT) to support teaching and learning		••	••			••	••	••
There are adequate human resources to support teaching and learning (and staff are properly qualified)	••	••	••			••	••	••
There is a careers counselling service which empowers students to make effective careers decisions'	••							
There is adequate access for people with disabilities		•	•					
There are effective student welfare and support services (and they are monitored)				••			•	
The institutional environment is pleasant and conducive to learning						•	•	•

Chapter 9

ASSESSMENT AND ASSURANCE

Introduction

This chapter briefly reviews the existing literature on quality assessment and quality assurance (Burrows, Harvey and Green, 1992e, 1992f, 1992g). The review forms the basis for the recommendations outlined in the concluding chapter.

Quality Assessment

The term 'quality assessment' is ill-defined and can be used in a variety of contexts. Here it is used to describe a process which attempts to evaluate some aspect of quality in higher education. The process may result in a quantifiable evaluation or it may not. It may be internal to the institution or external. There might be one or more reasons for the evaluation including quality improvement, control or accountability.

In the United Kingdom three main approaches to quality assessment can be identified: performance indicators; peer review and inspection.

Performance Indicators

Definitions of the term 'performance indicator' vary. The one employed in this summary is taken from Cave *et al.* (1991) '...an authoritative measure – usually in quantitative form – of an attribute of the activity of a higher education institution. The measure may be ordinal or cardinal, absolute or comparative'.

Performance indicators may serve a variety of different purposes including assisting in the deployment of resources, increasing accountability and providing feedback to those involved in a particular activity (Head, 1990). Pollitt argues that the purposes which performance indicators serve influence their character (Pollitt 1990). Yorke (1991) argues that performance indicators required for external accountability tend to be 'hard' in the sense of requiring 'proof beyond reasonable doubt' and that less credence may be given to 'soft' data on the grounds that it is 'potentially contaminated by self-interest'. A course team, on the other hand, may be using performance indicators in order to improve quality. In this circumstance a variety of judgements of quality may be used and it may be more appropriate to use 'softish' judgements. Klein and Carter (1988) suggests that performance indicators can be used as 'dials' or 'tin openers'. If they are to be used as dials, (for example, direct use in determining funding allocations) then they must be able to measure accurately inputs, outputs and processes of higher education. If they are to be used as 'tin openers' then there is less requirement for extreme accuracy as their purpose is to identify issues requiring further examination or to provide feedback to an organisation.

Research into the nature, purposes and scope of performance indicators in Britain and Europe

has found that there are a number of methodological and other problems with using performance indicators as the sole method of quality assessment, particularly when inter-institutional comparisons are intended (Dochy, 1986; McVicar, 1989; Harris and Dochy, 1990).

It is technically very difficult to produce indicators of quality in higher education that relate outputs to inputs and processes (Wagner, 1987; Johnes and Taylor, 1990). In many circumstances, contextual issues other than the quality of teaching and learning may have an impact that is difficult to identify and eliminate. Many performance indicators are only partial in nature or only indirectly measure achievement of an objective thus providing opportunities for strategic behaviour on behalf of the unit being assessed, which may observe the letter of the performance indicator but neglect the original intention (Pollitt, 1990). The pattern of work of those whose performance is being measured may be affected in unintended ways thus reducing the effectiveness of the performance indicator in measuring the objective or variable (Cave *et al.*, 1991).

In addition to the methodological weaknesses of performance indicators described above, other caveats have been identified concerning their use including: the danger that easily measured objectives may be given higher priority than less easily measured ones (Sensicle, 1991); that measuring the quality of outputs of higher education may prove time-consuming and costly as well as methodologically complex (Pollitt, 1990); that some indicators may be ambiguous in meaning: a high 'A' level point score for entry could be interpreted favourably or unfavourably depending on the mission of the institution (Head, 1990; Cave *et al.*, 1991).

These caveats about the difficulty of measurement and about the use and interpretation of performance indicators have led to recommendations that they should be used as 'tin openers' rather than 'dials'. Various evaluative frameworks have been developed in order to reduce the dangers of introducing inappropriate performance indicators (Ball and Halawachi, 1987; Sizer, 1990a; Allsop, 1990; Cave *et al.*, 1991).

Performance indicators of the quality of teaching and learning include: graduate destinations; degree classifications; measures of the value-added to students; wastage and completion rates and student evaluations. Evaluation of the literature suggests that further work is needed to improve performance indicators of quality in teaching and learning using an appropriate evaluative framework.

Peer review

Another approach to quality assessment is peer review. This term is used to describe a wide variety of different approaches to quality assessment where human judgement is involved (Goedegbuure *et al.*, 1990a). Peer review may or may not involve direct contact with the unit or person being assessed. It may or may not be informed by more 'objective' data, such as performance indicators. The use of the term 'peer' may be restricted to those working in the same academic discipline. In some circumstances, however, the peer team may include academics from other disciplines or people representing groups outside the academic community (such as, employers or representatives of the professions).

At least three different approaches to quality assessment based on peer review can be identified in higher education: reputational studies; external examining; and peer review based on a team evaluation following a visit to a department or institution.

Although peer review has been used as a method of quality assessment for many years there appear to be surprisingly few studies of its effectiveness as a method of evaluation. The major methodological criticisms of this approach is its subjectivity and unreliability. Reputational rankings have been criticised for rater bias (Solomon and Astin, 1981; Cox and Catt, 1977) and because raters are often not sufficiently well informed to make judgements about the quality of programmes at other institutions (Conrad and Blackburn, 1985). Research into the external

examiner system in the United Kingdom found considerable inconsistency in the judgements made by external examiners concerning degree standards (Warren Piper, 1990). Peer review of courses or institutions based on team visits are also problematic. Reviewers have been found to be biased as a result of their educational, social and institutional background (Blume and Sinclair, 1973). Similarly, different peer teams have exhibited inconsistencies in judgements (Healey, 1980).

Four other criticisms of peer review based on a team visit have been voiced. First, peer review is self-serving (especially if subject specialists predominate on the panel) (Davis and Strontz, 1985). Second, it tends to concentrate too much on the inputs to teaching and learning and does not give enough attention to delivery and educational outcomes (DES, 1985; Adelman and Silver, 1990). Third, there is often lack of clarity about the criteria used in making judgements (Kalkwijk, 1991). Fourth, it can be costly and time consuming (UFC, 1989). Some of these criticisms may be due to characteristics of particular approaches to peer review rather than flaws in the underlying method.

Peer review has been primarily used to ensure threshold quality rather than to make comparative judgements about courses and institutions. It is questionable whether peer review is the right vehicle for making comparative judgements because of the qualitative nature of the judgements that are involved.

The strengths of peer review are: that it is compatible with academic values; it is the approach to evaluation that academic staff find most acceptable (Wicks, 1992); it enables contextual issues to be taken into account in a way that performance indicators cannot (Cave *et al.*, 1991); and it is a flexible method, which can be adjusted to traditions in all disciplines (Goedegbuure *et al.*, 1990b). When coupled with self-evaluation, peer review provides a better vehicle for quality improvement than performance indicators (Vroeijerstijn, 1991; Brennan, 1990).

Similar findings have also been found in a recent study of peer review of research quality. The *Boden Report* (Boden, 1990) was commissioned by the Advisory Board for the Research Councils in the United Kingdom. It evaluated the strengths and weaknesses of using peer review for the appraisal of proposals for research. While noting that peer review was imperfect, the report found that there was no practical alternative to peer review for the assessment of basic research. A weakness of peer review identified in the report was that it is not a sufficiently precise tool to make 'fine' distinctions between numerous proposals clustered round the borderline of funding. The report rejected the use of quantitative measures (performance indicators) as the sole basis for awarding research grants. However, it recommended that performance indicators could inform peer review and encourage peers to be more explicit about the thinking behind their judgements. A long list of recommendations for the improvement of the peer-review system included making clear the nature and weighting of criteria used in decision-making and careful selection of appraisers.

Inspection

Inspection has been a major method of quality assessment in the United Kingdom but there have been few systematic attempts to evaluate its effectiveness as a method of evaluation (Wilcox, 1989). Inspection, as it has operated in higher education, shares many features with peer review. The major approach to quality assessment is qualitative rather than quantitative. However there are two features which separate it from the peer-review process: the special knowledge of the system which is collectively owned by the inspectorate; and the inclusion of direct observation of the teaching and learning as one aspect of the evaluation process.

As with peer review, it is difficult to test the validity and reliability of inspectors' judgements (Wilcox, 1989). In the past, the criteria underlying HMI's judgements were not made public, which compounded this problem. In recent years, however, there has been pressure on HMI to

make the basis for its judgements more transparent since HMI ratings informed funding decisions in the polytechnic and college sector. A list of criteria used in relation to higher education has been published in a PCFC document *Recurrent Funding and Equipment Allocations 1990/91* (PCFC, 1990a) (see Chapter 7, above).

Two other problems arise from using inspection as a method of evaluation. First, there are logistical difficulties in inspecting all institutions or courses within a realistic time span without significant increases in staffing levels in the inspectorate. Second, there is the likely opposition from those who believe that self-regulation is a better option.

The *Further and Higher Education Act 1992* has reduced the HMI role in higher education to a minimal one. Only teacher education will continue to be inspected. Nevertheless, the government has expressed the view that those involved in quality assessment in the new funding councils 'should include staff recruited initially from those with responsibility for higher education in her Majesty's Inspectorate' (Secretary of State, 1992) and HMI have been closely involved in the pilot quality assessments undertaken jointly by the PCFC and UFC. It is therefore likely that the techniques employed by the inspectorate will inform the quality assessment methodology. Further research into the techniques employed by the HMI in areas such as direct observation of teaching may therefore be of value.

Conclusion

This section has reviewed the major approaches to quality assessment used in the United Kingdom. Recent legislation has given support to the view that self-regulation is compatible with public accountability. From September 1992 inspection will cease to be part of the framework for quality assessment in the United Kingdom. Peer review (including some form of observation) and performance indicators are therefore likely to be the predominant modes of quality assessment in the next decade.

There are difficulties with relying solely on either of these approaches. The overriding problem with the use of performance indicators is that, because of their partial nature, they cannot adequately take into account the contextual issues which might affect performance. In addition, their use may lead to unanticipated and undesirable behavioural changes in the unit which is being assessed. The major criticism of peer review is the subjectivity of the process leads to doubts about its reliability. Concerns about both these approaches have led many to argue that the best approach is a combination of the two:

in the absence of performance indicators, peer review is suspect because the element of judgement is too great. Reliance on performance indicators in the absence of peer judgements is equally suspect. Thus peer review and performance indicators should, and must, complement each other. (Sizer, 1990b)

Techniques previously employed by HMI informed the initial attempts at the development of an assessment methodology by the English Funding Council. However, recent consultation papers circulated by the Scottish and English Funding Councils suggest that a tri-partite approach is likely to be adopted, using peer review, performance indicators and self-evaluation. Further evaluation of the effectiveness and efficiency of these techniques might be of value.

Quality Assurance Models

In recent years there has been a trend in higher education towards internal systems of quality assurance and control in which the institution has primary responsibility for the quality of the courses which it offers. There are at least two separate, but related, reasons for this. One is the

belief that the most reliable safeguard of standards is not external controls but the development of the institution as a self-critical academic community (Lindop, 1985). Second is the belief that a system with few external controls will be more flexible and able to respond more quickly to the changing needs of employers and students (Goedegebuure *et al.*, 1990a).

Alongside this trend there has been pressure on higher education institutions to make their quality assurance systems more explicit and open in the interests of public accountability. Pressure for improved accountability has also led to increased emphasis on demonstrating that the outcomes of higher education are appropriate.

BS5750 and TQM

In the United Kingdom and in the United States of America demands for more explicit and open approaches to quality assurance have been one factor which has prompted some educational institutions to implement industrial models of quality assurance such as BS5750 and total quality management (TQM). Most of these institutions are in the initial stages of implementing these systems and it is therefore too early to evaluate how successful they are in improving quality in higher education. More research about the suitability of these approaches will be needed in the next few years.

BS5750 and TQM have their origins in the manufacturing sector and are principally concerned with improving the quality of *products* by careful identification of customers' needs and a focus on decreasing the degree of variation in the production process thus reducing waste and rework. All products should conform to a given specification and the aim should be to get each product 'right first time'.

There are some advantages in using these systems. BS5750 is an internationally recognised system which has credibility, particularly in the eyes of employers. The definition of quality as meeting customers' requirements means that education has to be considered from the point of view of the student or employer and not dominated by the view of the provider, which may be seen as an advantage by some interest groups (TEED, 1990). TQM, in particular, requires recognition that every employee in an organisation has a role to play in improving quality. In the educational context it can therefore be used to look at the quality of the whole organisation, not just the quality of courses (Heap and Solomon, 1992).

Industrial models in education

Evaluation of the literature, however, suggests that there might be some difficulties in adopting these models for higher education. First, the adoption of BS5750 and TQM requires acceptance of a definition of quality as meeting customers' needs: there would be no room for competing notions of quality. Chapter 2 outlines some of the difficulties in adopting a single definition of quality. Second, there are problems in identifying who is the customer and what is the product in relation to higher education yet both these systems rely on developing clear and unambiguous organisational objectives or product specifications (Rooney, 1991).

Finally, and perhaps most importantly, the teaching and learning process in higher education is difficult to 'control' in the sense used above. If the service itself is seen as the product then the following difficulties have been identified. First, a service is intangible. This means that it is much more difficult to establish standards and measure whether or not they have been achieved. Second, as production and consumption occur at the same time it is difficult to set up checks in the production process to prevent poor quality services reaching the consumer. Third, the process cannot be standardised or 'controlled' in the BS5750 meaning of the term, that is the inputs cannot be controlled to ensure that they are all the same because the producer is part of the service which involves a personal relationship with the consumer. Fourth, the consumer is

necessary to the production of the services in a way that is not true of manufactured goods (Bowen and Schneider, 1988).

The result of these characteristics is that standards are difficult to state and maintain (Walsh, 1991). Indeed, it may be that during the learning process decreasing the degree of variation is an inappropriate objective. The emphasis should perhaps be on increasing the degree of variation in the process to match the different needs of the consumers (in this case, students).

Models derived mainly from the manufacturing industry may therefore prove to be inadequate when it comes to improving the 'service encounter' itself. This is a problem which education shares with many other public and private services. In the last ten years there has been growing interest in developing alternative models of quality and quality assurance in the service industries (Grönroos, 1984; Parasuraman *et al.*, 1985). These approaches tend to place greater emphasis on those issues that have a key role in improving quality in the service industries, such as the character of the service encounter and recognition that the process of delivery as well as the outcome influences the consumers' perceptions of quality.

There is little evidence that the literature on service quality has had much impact on higher education. Work on the Student Satisfaction Project at the University of Central England in Birmingham draws on this field which is an indication of its potential (Green, 1990; Student Satisfaction Research Unit, 1991). The application of service quality models to education and training is an area which requires further research and evaluation.

Chapter 10

THE WAY FORWARD

Introduction

This chapter provides draws some conclusions about the nature of quality, quality assessment and quality assurance. It comments on the desirable characteristics of an overall methodology for assessing quality and tentatively evaluates existing methods of quality assessment and quality assurance against the quality criteria identified in Chapter 8. Finally, it suggests that further work is needed to evaluate the suitability of industrial models of quality assurance for higher education.

Quality as total student experience

Consideration of the quality criteria identified as important by the stakeholders suggests that many different aspects of higher education need to be taken into account. What happens during face-to-face contact between student and lecturer is only part of the story. What happens before the student enrolls and the institutional context in which the student learns, (including issues such as institutional ethos, institution-based resources such as the library and institution-based student services) all contribute to quality for some stakeholder groups.

Quality criteria change over time

Analysis of the criteria point to the relativity of quality. Improving access to higher education, for example, was not a key objectives in the United Kingdom until the mid 1980s. Student-centred approaches to teaching and learning are clearly considered important features of quality now by many groups, but would not have been so strongly represented a decade ago. Any methodology for assessing quality must therefore take into account the need for regular re-evaluation of quality criteria.

Inputs, processes and outputs

The focus of attention of stakeholder groups varies. The government and employers, for example, are mainly concerned about the outputs from higher education such as what students learn and how efficient the learning process is. The present United Kingdom government is not alone in arguing for an increased emphasis on evaluating the outputs in higher education. Similar arguments are also apparent in the Assessment Movement in the United States of America, and in statements by the governments in Australia and in the Netherlands (Burrows, Harvey and Green, 1992b).

For stakeholder groups such as students and staff, however, the inputs and the processes in higher education are at least equally important. Research supports the view that a 'product' based notion of quality may be inappropriate in the service sector in general and points to the need to take into account not only the end result but also the process of delivery. A methodology for assessing quality which focused too heavily on the outcomes of higher education might fail to

capture this important dimension of quality in higher education.

Multi-method approach to quality assessment

The main approaches to quality assessment in higher education are performance indicators and peer review. A review of existing literature suggests that neither of these methods is likely to be sufficient if it is used to the exclusion of the other. An overall methodology for assessing quality is therefore likely to require a combination of both. An evaluative framework would need to be developed to help reduce the dangers inherent in using these approaches.

Quality assessment and institutional mission

There is considerable support for maintaining the diversity within the higher education system in the United Kingdom. The government has expressed the view that new funding arrangements for teaching should be 'related to and safeguard the best of the distinctive missions of individual institutions' (DES, 1991). It is argued that some degree of specialisation is the most effective way of meeting a variety of needs in society. Thus, for example, some institutions may specialise in improving access to higher education while others may concentrate on advancing knowledge and expertise (research).

The range of quality criteria deemed relevant to an institution and the interpretation of data concerning quality assessment need to reflect the mission of the institution concerned. For example, if the mission places heavy emphasis on research rather than access, quality criteria concerning access would not be relevant; the content of courses may emphasise specialist subject knowledge rather than vocational relevance and more of the overall staff development budget might be spent on staff obtaining higher degrees than on improving staff teaching skills.

While recognising the need for diversity, results from the *QHE* project suggest that there may be some core criteria for judging quality in higher education which most groups with an interest in higher education agree upon. If all institutions were evaluated against these criteria and a profile of performance developed, this would help consumers to be sure of baseline standards and to select the type of provision which best suits their needs. For example, that a course is high on specialist subject knowledge but low on transferable skills.

Evaluation of methods of assessment against quality criteria

In the Table 10.1 existing methods of quality assessment and quality assurance are tentatively evaluated against the quality criteria identified in Chapter 8. The aim is to show which criteria are poorly evaluated by current methods and where there is potential for developing new methods. Cells marked with a double bullet point (••) represent an existing, largely satisfactory method for assessing the criterion. Cells marked with a single bullet point (•) represent an existing approach to assessing the criterion but doubts exist about its effectiveness. Cells marked with an empty circle (○) represent a potential method for assessing the criterion. Since, with the exception of teacher education, higher education will no longer be inspected, observation no longer plays a major role in quality assessment in higher education and this is reflected in the table. Areas, where it is worth evaluating observation as a means of assessing higher education are suggested since it could form part of a peer review process.

a high priority by a number of stakeholders and the effectiveness of measures of the quality of student outcomes rely on there being an effective means of ensuring comparability.

The processes of teaching and learning

While peer review focuses on the processes of teaching and learning, the focus is indirect and there may be questions about how effective this method is. In part, it will depend on the composition of peer review panels. Expertise in methods of teaching and learning as well as subject and professional expertise would be required to ensure coverage. Other methods such as observation and 'consumer' evaluations of learning (such as student or employer satisfaction studies) could be explored in greater detail.

Transferable knowledge, skills and attitudes

While most stakeholder groups rate this area highly in judging quality in higher education, there is anecdotal evidence to suggest that the development of transferable knowledge, skills and attitudes is not effectively assessed by existing methods. Development work in this area should be a priority.

Evaluating industrial models

Approaches to quality assurance taken from industry such as BS5750 and TQM are now being introduced in some institutions but little evaluation has taken place to see how effective they are in maintaining and enhancing quality. There is some evidence to suggest that while these systems may be effective in improving some aspects of higher education, they may prove inadequate when it comes to improving the quality of teaching and learning. Further evaluation of the suitability for higher education of these industrial models is therefore needed.

Conclusion

Tables 10.1 – 10.3 are tentative and should be considered a 'rough guide' that indicates the areas where further research might be most useful. There are four areas which seem a priority for further development.

Comparability of standards

Further development work is required if comparability in degree classifications between courses within institutions and between institutions is to be improved. This an important issue since comparability is given a high priority by a number of stakeholders and the effectiveness of measures of the quality of student outcomes rely on there being an effective means of ensuring comparability.

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Table 10.1 Systems level criteria and assessment methodologies

	National quantitative PIs	National qualitative PIs	External examiner system	Peer review of courses	Observation	Academic audit	BS5750	TQM
Sufficient students graduating from HE to meet the need for a highly educated work force	●●							
A system that can respond quickly to meet identified skills shortages in specific areas.	●●							
Maintenance of existing standards and comparability of standards between courses and between institutions	●		●					
Adequate provision for continuing education to support life-long learning	○							

Table 10.2 Institutional level criteria and assessment methodologies

	National quantitative PIs	National qualitative PIs	External examiner system	Peer review of courses	Observation	Academic audit	BS5750	TQM
Higher education institutions have clearly stated aims and objectives and are effective in achieving their mission.	○			○				●●
Institutions are efficient in the use of public funds (value for money)	●●						●●	●●
Institutions are flexible and adaptable so that they can respond effectively to the changing needs of society	○			○				
There are explicit systems for quality assurance (which take into account the views of employers and students)						●●	●●	●●
A commitment to quality is part of the ethos and culture of the institution						●●		●●
There is an effective policy for improving access, which affects programme entry requirements, structure and content, etc.	○			●				
There are effective systems for staff development, relating to both subject matter and teaching skills						●●	●●	●●
There are effective systems for staff appraisal and accountability	○					●●		
Staff engage in research and other professional activities to support teaching	○			●●		●●		
Staff engage in research to develop knowledge				○				
There are effective links with employers which influences the character of programmes				●●		●●	●●	●●
There are adequate physical resources (library, workshops, IT) to support teaching and learning	○			●				
There are adequate human resources to support teaching and learning (and staff are properly qualified)	○			●●				
There is a careers counselling service which empowers students to make effective careers decisions'	○	○						
There is adequate access for people with disabilities		○		○	○			
There are effective student welfare and support services (and they are monitored)	○	○						
The institutional environment is pleasant and conducive to learning		○		○	○			

Table 10.3 Programme level criteria and assessment methodologies

	National quantitative PIs	National qualitative PIs	External examiner system	Peer review of courses	Observation	Academic audit	BS5750	TQM
Prospective students receive adequate information about the character of the programme								
The programme has clear aims and objectives which are understood by staff and students				●●	○			
Programmes are vocationally relevant (including opportunities for work-based placements)	○			●				
Programme content is coherent and there is logical progression				●●				
The subject content of the programme is up-to-date			●	●●				
The subject content of the programme inspires students					●●			
The subject content relates to the programme's aims and objectives			●	●●	●●			
The programme is effectively managed				●	○			
Staff perform effectively in classrooms					●●			
Students are encouraged to be actively involved in, and given responsibility for, learning		○		●	○			
Teaching is varied and reflects the aims and objective of the course		○		●	○			
Teaching methods reflect the varying needs of the learners		○		●	○			
The standard of the programme is appropriate to the award			●		●●			
Assessment is valid, objective and fair			●●					
Assessment criteria are clear and understood by staff and students			●	●	●			
Assessment covers the full range of course aims and objectives			●		○			
Students receive useful feedback from assessment (and are kept informed of progress)		○		●	○			
Students leave with subject knowledge	●							
Students leave with transferable knowledge and skills	○	○						
Students leave equipped for life long learning	○	○						
Students are successful in gaining appropriate employment	●							
Few students fail or withdraw from the course	●							

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