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of monitoring standards and performance in higher education. Contains
16 references. (Author)

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LEARNING: THE FORGOTTEN DIMENSION?

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Learning: The Forgotten Dimension?

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Abstract

Governmental pressures for universities to demonstrate greater efficiency while maintaining the quality of their activities have resulted in a range of performance indicators being adopted. However, questions of quality in teaching, learning and research are hardly addressed by these indicators: Instead, more tangible measures of input and output predominate. The *quality of learning* arising from the experience of higher education is rarely considered, although any valid measure of a university's performance must take account of the intellectual development of its students. A combination of qualitative and quantitative evaluations is necessary to the process of monitoring standards and performance in higher education.

Learning: The Forgotten Dimension?

The Background.

Throughout the 1980's there has been mounting pressure from governments in
Europe and elsewhere for institutions of higher education to demonstrate greater
efficiency in the utilisation of resources, while at the same time maintaining the
quality of teaching and research. The British Government's policies for
increased public accountability in the university sector have been mediated
through bodies such as the Committee of Vice-Chancellors and Principals and
the Universities Grants Committee (e.g. Committee of Vice-Chancellors and
Principals 1987), resulting in the development and publication of a range of
performance indicators for use in universities. These indicators are primarily
intended to allow comparisons to be made between institutions, although they
may be supplemented or modified to facilitate the comparison of departments
within an institution. Recommendations concerning the maintenance and
monitoring of standards in universities were published in a separate document
(Committee of Vice-Chancellors and Principals 1986). It will be argued that, in
both of these management led movements, a key issue - the quality of students'
learning arising from the experience of higher education - has been overlooked if
not forgotten altogether.

The Quest for Greater Institutional Efficiency.

The performance indicators listed by the C.V.C.P. are wholly administrative, as
they concentrate on factors that relate to efficiency in the utilisation of resources
rather than to educational quality and standards. Academic questions of quality
in university teaching, learning and research have hardly been addressed:
Instead, the more tangible and largely managerial measures of input and output
have been adopted. These may be easier to quantify and to collect than those of a
more qualitative (and hence more elusive) nature, but entail the imposition of
values and objectives from outside the academic community. The emphasis
upon managerial indicators of performance may provide greater control, but
may also prove to be detrimental to the achievement of educational quality and
effectiveness (Pollitt 1987). If institutions of higher education are increasingly to
be regarded as 'production enterprises', we must be clear what the 'products' are,
or risk producing - with great efficiency - a totally inappropriate output.

Some universities have attempted to develop indicators of performance that
address the issue of educational effectiveness (see, for example, Rutherford 1987
and West 1988). However, these are generally concerned with the appraisal of
formal curricula or of observable teaching activities and artefacts rather than the
process or content of student learning. Output measures such as graduation
rates, numbers of 'good' degrees attained and graduate employment patterns are
fraught with difficulties when used as the basis for appraisal or comparison:
These difficulties include

- considerations of the 'value added' by the experience of higher education, depending upon entrants' differing levels of ability and the contribution of a particular institution to the final outcome;

- the subjectivity of notions of what actually constitutes a 'good' degree and the normative nature of much student assessment;

- the risk of being over-concerned with the numbers of graduates to the neglect of what they are able to do or achieve in terms of intellectual and other skills;

- the limited validity of monitoring graduate employment in terms of first occupation, as many graduates change career direction after their first appointment.

Furthermore, all such measures face problems in terms of mature-aged students and/or those lacking the normal entrance requirements for university study; in other words, the very people that are likely to represent a growing proportion of U.K. higher education students in the 1990's and beyond (Department of Education and Science 1987).
Later in this paper it will be argued that the quality of student learning does not necessarily correlate with the level of degree attained, nor with graduation *per se*. Any valid measure of a university's performance must take account of the intellectual development of students in higher education.

Maintaining Standards in Higher Education.

The British Government stated in its most recent White Paper on Higher Education that "Quality in higher education depends primarily upon the commitment of the academic community to the maintenance and improvement of standards" and has indicated that it will "seek to ensure that systems are in place to promote and give effect to that commitment and to monitor the results" (Department of Education and Science 1987, p. 16). The guidelines on academic standards published by the C.V.C.P. (Committee of Vice-Chancellors and Principals 1986) represent a number of procedures that the academic community can utilise to monitor and maintain the quality of their activities.

Although these guidelines (relating to the planning of new courses and to the monitoring of existing ones) should be welcomed, procedures in themselves can neither engender nor ensure the commitment of the academic community to improving standards. In particular, the procedures remain vague about the purposes of higher education and how best they can be achieved. The academic community has tended to take such issues for granted, but it is increasingly clear that purposes (and the means of achieving them) must be explicitly stated and discussed at a time when administrative/managerial concerns appear to prevail. Through the explicit consideration of such fundamental issues, universities can demonstrate their capacity for promoting and maintaining academic quality (Barnett 1986).

Much rhetoric surrounds the outcomes of undergraduate education: As well as acquiring new knowledge and skills, we want our students to demonstrate 'critical thinking', 'high level problem solving', 'independent intellectual inquiry' or to understand and conceptualise phenomena in the manner of a particular discipline or profession. The long term effects of higher education have more to do with intellectual development and the processes of learning

than with the particular content (see, for example, Powell 1985 and Taylor, Morgan and Gibbs 1983). However, recent research on students' experiences of learning suggests that there is often a lack of congruence between stated course aims and the actual curriculum presented, particularly the demands of the assessment procedures (see, for example, Marton, Hounsell and Entwistle 1984). In examinations, low level cognitive demands (the recall of factual information and the rehearsal of well-established procedures) tend to predominate and shape the ways in which students undertake learning tasks. The quantitative criteria applied in much student assessment (concentrating on *how much* students know rather than *how well* they understand) make it possible for students to gain enough marks to pass without actually developing real understandings of basic ideas and principles or changing the way they conceptualise important phenomena.

Qualitative research on student learning (developed from the work of Marton and his associates) has not only provided a framework for examining and understanding the learning processes in higher education and their outcomes, it has also shown how the quality of undergraduate courses can be improved. "We must learn to celebrate process as well as product in student learning in order to enhance its standard: to see effectiveness in terms of how students manipulate tasks and conceptualize content" (Ramsden 1986). Monitoring in an academic community should ensure that learning tasks are appropriate for the purposes of university education and that student support and assessment practices encourage the promotion of students' intellectual development.

Combining Qualitative and Quantitative Evaluations.

In trying to assess the quality and performance of institutions of higher education, it is suggested that quantitative measures (that tend to be favoured by administrators and policy makers) can provide only a part of the picture, while qualitative evaluations (favoured by university teachers and researchers) may give greater validity to the exercise but are more difficult to use on a comparative basis. A combination of qualitative and quantitative evaluations is necessary to the process of monitoring and maintaining standards and performance in higher education. The following account of routine monitoring procedures and other evaluative studies undertaken at the Open University provides an illustration of 'quality assessment and control' within a collaborative and self-critical community of academic and support staff.

'Quality Control' at the Open University - A Case Study.

The Open University (O.U.), now the largest university in the U.K., was established twenty years ago to provide part-time higher education for adults studying in their own homes. The university has no entrance requirements in terms of certification from previous education and many students are in full-time employment. It has a modular degree structure, offering students an almost free choice from over one hundred full- and half-credit courses that can be accumulated to make up an individual's degree profile; six credits for the B.A. degree, eight credits for a B.A. Honours degree.

Teaching at a distance involves academic staff and students being separated, both geographically and temporally, such that instruction is largely mediated through written or recorded materials. All courses comprise teaching texts and audio-

visual materials (supported by set readings, practical activities, assignments, etc.) that have been specially prepared by a team of academic and other staff working in collaboration. The 'published' materials developed in this way normally remain in substantially the same form for several cohorts of learners, although some modifications and amendments can be made when necessary. It is tempting to view the teaching materials as the 'products' of the university - they are visible and can be (and are) inspected by the public at large. However, it is what students learn from interacting with our materials and with tutors and fellow students that constitutes the 'product' of our institution. The separation of teachers from learners also entails the absence of direct verbal and non-verbal feedback from students that is so important in all teaching. Systematic procedures had to be devised to provide our students with opportunities to comment on the quality of the courses they were studying and on the system of distance education with which they were engaged. In terms of monitoring and maintaining academic standards, it was also necessary to establish procedures to obtain the evaluative information we required from others in the higher education community. The procedures utilised at the Open University combine qualitative and quantitative methodologies to provide a complex picture of the institution's performance.

The limitations of many of the commonly discussed performance indicators can be demonstrated when applied to a distance teaching university with a modular degree structure that does not require students to possess entrance qualifications. For example, a large proportion of O.U. students remain in full-time employment; many are 'underqualified' for higher education and a considerable number achieve the personal or vocational enhancement they desire (change of job or role within an organisation, acquisition of new skills, improved effectiveness at work, etc.) after completing several courses - but without graduating. Adult learners tend to have goals that are not wholly instrumental, although currently it seems that extrinsic outcomes of higher education are all that are considered worthwhile by central planners (Cullen 1987).

This section describes briefly the range of 'quality control' procedures that have been utilised in the Open University. Most are undertaken on a routine basis during the development or presentation of courses; others are used only in certain circumstances. Table 1, drawing upon papers prepared for the D.E.S. appointed Visiting Committee of the Open University (Kirkwood 1987 and Crooks 1988), classifies the routine monitoring procedures according to *when* in the course development process the evaluation takes place and *who* is responsible for making the appraisal. The focus of these procedures is the individual courses within a modular structure.

Table 1: Monitoring and Evaluation Procedures at the Open University, U.K.

Group making appraisal of teaching effectiveness.	Procedures employed during course development - i.e. before presentation to students. (Formative Evaluations)	Procedures employed appraisal of during presentation of courses to students. (Summative Evaluations)
Staff	Critical commenting by members of course team.	Analysis of student progress data.
	Panel of experienced tutors comment on proposals for content and presentation.	Tutor de-briefing at end of year.
	Analysis of characteristics of students on course being replaced or taking related course(s).	Routine analysis of grades for continuous assessments.
	Approval of assessment materials by Examination Board for course.	Monitoring of tutor-marked assignments by course team.
		Standardisation of exam marking.
		Conflation of continuous assessment and exam results by Exam Board for course.
External Academics	Course Assessor(s) comment on draft materials in terms of content and quality of teaching - Report to course team and to Vice-Chancellor.	External examiner approves assessment arrangements and materials.
	Approval of assessment policy and materials.	External examiner(s) attend Exam Board meetings for all courses and submit report to university.
Students	Consumer research of potential students.	Postal surveys of students' reactions to the course.
	[Detailed evaluation of all or part of existing course - especially if intended for re-use.]	Interviews with students (face-to-face or by telephone) about teaching effectiveness.
	Developmental testing of all or parts of course materials.	Direct contact between course team members and students at tutorials and at residential schools.

A wide variety of evaluative information is used to shape courses during their development and to modify and improve individual courses during their presentation to several cohorts of students. In addition, there are many occasions when it is considered necessary to undertake an evaluation study of a particular innovation or component used in a number of courses. Such studies are likely to be concerned with drawing out generalisations from the use of a particular aspect of the teaching, or with establishing the effectiveness of a particular strategy or teaching medium.

However, our evaluation procedures must go beyond providing just an assessment of the instructional materials and situations; they must also illuminate the learning and development that occurs both within individual courses and over the range of courses students combine to form their programme of studies. Research been undertaken into the intellectual development of students as a result of their studies; for example, qualitative changes in the understanding of key concepts and relationships in the social sciences. The development of students as learners (and in other ways) over the period of their undergraduate studies has be .1 the focus of longitudinal studies (Taylor & Morgan 1984 & 1986).

In Conclusion.

The demands for greater efficiency in higher education must not be allowed to detract from efforts to improve educational quality and effectiveness. Maintaining and improving academic standards should involve due consideration of the purposes of higher education and concern that the quality of student learning is not allowed to remain a forgotten dimension.

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