

**QUALITY ASSURANCE IN AUSTRALIAN HIGHER EDUCATION:
A CASE STUDY OF THE UNIVERSITY OF WESTERN SYDNEY NEPEAN**

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1. PROJECT PURPOSE

Reviews of quality initiatives in higher education have become a regular part of academic life throughout the western world. The University of Western Sydney Nepean (UWS Nepean) has agreed to participate in the project organised by the Organisation of Economic Co-operation and Development on “Quality management, quality assessment and the decision making process”.

In doing so, UWS Nepean has proceeded to comply with the two objectives of the project: *i)* to clarify the purposes, methods and intended outcomes of different national systems of quality assessment, and *ii)* to investigate their impact on institutional management and decision making.

In preparing the description of the Australian context an attempt has been made to conceptualise and review national initiatives of quality assessment in terms of their purposes and contexts.

In carrying out a case study of UWS Nepean the focus has been to clarify the purposes, methods and intended outcomes of the Australian system of quality assessment and to investigate the impact of such on UWS Nepean’s management and decision-making.

2. THE AUSTRALIAN HIGHER EDUCATION SYSTEM AND QUALITY ASSURANCE PERSPECTIVES -- CONTEXTUAL BACKGROUND

2.1. International level

The world wide phenomenon to address issues of quality assurance has been evident in the higher education systems in most Western World countries during the past ten years. National comparisons of institutions, the utilisation of ISO standards, the interest in cross-national analyses are examples of such interest.

Governments have contributed to this debate by calling for improved management practices in higher education, insisting on better use of resources for quality assurance and challenging institutions to submit to quality audits. The motivations of governments vary from a genuine commitment to improve quality standards of operation to a concern for implementing budgetary cuts and economic

development imperatives. Some would argue that these value judgements are not necessarily incompatible in operational terms.

2.2. National level

In Australia the development of quality assurance in higher education has been influenced by significant changes in government policy and societal expectations.

Five independent but inter-related factors can be cited:

- changes in the system of higher education in Australia and status allotment;
- expansion and diversification of student bodies since the 1970s;
- federal government general policy directions and quality initiatives;
- federal government research policy directions and quality initiatives;
- exploration of new approaches to quality assurance.

Each of these factors will be considered in turn.

2.2.1. *Changes in the system of higher education in Australia and status allotment*

Australia's university system dates back to 1851 when the University of Sydney was founded. By 1951 eight other universities were established. They showed a common intellectual tradition but differed widely in terms of size, funding and age. The ongoing expansion of universities placed increased financial demands on the government in times of economic recession while society expressed a growing demand for higher education places.

Policy changes were initiated in 1965 when the Prime Minister delivered speeches in both houses of Parliament declaring that in the next decade Australia should deliver advanced education in new types of colleges (Ministerial Statement: Tertiary Education in Australia, Commonwealth Parliament Debates, p. 67). Following this announcement the federal government developed a broad comprehensive system of tertiary education known as the binary system. The system recognised the existing university sector and established the colleges of advanced education sector. The college sector included central institutes of technology; regional colleges; metropolitan multi-purpose colleges; colleges in which teacher education was the main activity; and a mixture of other institutions, small in size and usually specialised in focus (Department of Employment, Education and Training, p. 15).

From 1967-1978 the colleges of advanced education carried the brunt of post war higher education expansion with enrolments increasing from 100 000 in 1968 to 159 500 in 1978 (*ibid.*, p. 3). During this time 37 per cent of enrolments in the advanced education sector were in teacher education. Gradually the demand for teachers declined precipitating a wave of changes including the expansion of discipline offerings predominantly in the college sector; in some instances changes occurred across the binary divide. By the 1980's the higher education sector encountered a complexity of factors which challenged the status quo. Examples of such factors include the blurring of differences in the roles of the university and the college of advanced education; a depressed level of funding in a period of recession; the move to make three formerly independent federal commissions responsible for universities, advanced education and technical and further education now accountable to the newly created Tertiary Education Commission; and the growing democratisation of higher education

by the abolishment of tuition fees and the improvement of access. These factors gradually destabilised the binary system which was characterised by rapid expansion and diversity of student numbers, the restructuring of institutions, and escalating costs. Growing concern emerged about the effectiveness and efficiency of the current binary system. A perceived decline of standards was associated with the falling funding per student place. Stakeholders and communities increased pressure for greater public accountability. These realities ushered in a decade of structural reform and quality debates.

Major structural changes in the higher education sector followed the release of the federal government's 1987 Green Paper "The Challenge for Higher Education in Australia" and the White Paper "Higher Education: A Policy Statement in 1988". These papers proposed the abolishment of the binary system and the establishment of a Unified National System. The Australian Vice-Chancellors' Committee responded by suggesting that new universities should have a significant student base load of a minimum of 5 000 equivalent full-time students and at least four or five fields of study. Colleges of advanced education which did not meet the criteria searched for ways to maintain viability; mergers, amalgamations, partnerships were explored. Colleges of advanced education which were in close proximity to existing university considered merges. The government's overall objective was to reduce the number of small institutions and to create larger institutions which would be called universities. There were wide structural changes. This was a period of extensive turmoil for staff, students and communities as new universities were being formed and different academic cultures forced to mix and merge.

The unified national system of higher education came into existence by the end of the decade. In essence, the unified system removed the colleges of advanced education sector resulting in one university sector. With the quite dramatic increase in the number of universities came an increase in competition among university institutions. The newly established universities attempted to demonstrate their equivalence and the older universities their pre-eminence.

In 1986 the Commonwealth Tertiary Education Commission's publication "Review of Efficiency and Effectiveness in Higher Education" noted that the potential for rationalisation of institutions would soon be achieved, resulting in long term economies of scale (Commonwealth Tertiary Education Commission, p. 5). The binary system moved from having 19 universities and 49 colleges of advanced education (including non-government institutions) to 38 members of the unified national system and eight funded institutions outside it (National Board of Employment, Education and Training, April 1989).

The acquisition of university status for the new universities created a growing awareness of increased public accountability including responsibility for research. Institutions were expected to undergo transformations in short time frames to bring about the necessary changes within the context of rationalisation. Quality issues were included in the debates that took place but the major system changes overtook quality discussions in the public forums.

2.2.2. Expansion and diversification of student bodies since the 1970s

The Australian higher education system expanded and diversified markedly between the 1970s and 1996 due to changes in government policy and changing community expectations regarding access to higher education. Participation in higher education increased and student bodies reflected a diversity of races and ethnic groupings.

The expansion and diversification of the higher education system occurred against the backdrop of policy changes in resourcing and equity. The resourcing of higher education is characterised by a move from complete funding by the States in 1850s to a gradual involvement of the federal government by the mid 1970s to complete funding by the federal government by 1988. Post war expansion of higher education was financed by the State Government, including the State Education Departments. Ultimately, with the rapid expansion of higher education, the federal government took over full responsibility for higher education funding. By 1974 the federal government had abolished tuition fees.

These system initiatives were supplemented by the introduction of income tested student assistance schemes. Policy changes facilitated the entrance of financially, culturally and socially disadvantaged into higher education. The system moved from servicing the social and intellectual elite to one characterised by mass participation. Students from sections of society hitherto unfamiliar with higher education gained admission to the system.

As higher education expanded costs escalated. The Hawke Government in 1987, introduced guidelines to impose a Higher Education Administration Charge of \$250 per student per year from 1987 as a contribution to administrative costs. The Higher Education Contribution Scheme commenced on 1 January 1989 (Commonwealth Tertiary Education Commission, pp. 51-52).

Students were required to pay approximately 20 per cent of the average costs incurred by the federal government or \$1 800 adjusted each year in accordance with the Higher Education Operating Grants Index. Payments would be made up front with a discount of 15 per cent or defined through the taxation system when taxable income reaches an indexed minimum threshold. It was argued that the deferred payment scheme did not lock out disadvantaged groups from higher education. The level of payment and the rate of repayment is currently under review by the federal government.

In 1986 new streamlined overseas student entry procedures were introduced permitting the marketing of Australian courses overseas on a full cost recovery basis. Prior schemes for private students from developing nations continued but were considered as official development aid (Department of Employment, Education and Training, p. 59).

Between 1983 and 1992 overseas student numbers increased from 13 500 to 39 490 representing about 7 per cent of the total student population (Committee of Review of Private Overseas Student Policy, pp. 30, 208-209).

Export education was taken up by most universities as something desirable in a process of campus internationalisation. International students from the western world brought high standards and legitimate expectations of course delivery; the principle of having the user pay placed pressure on suppliers by consumers. Institutions were required to search for the best ways of delivering education or face severe criticism and sanctions from clients and peers in the international community.

In addition to policy changes in the resourcing of higher education, from 1983 the newly elected Labour Government started to implement broad policies of equity and social justice. It was argued that a mismatch existed between the social composition of society and that of tertiary institutions. The federal government allotted extra growth in university funded places for disadvantaged groups and moved to increase school retention rates and income support policies. AUSTUDY was established to encourage secondary students to remain in school. The Aboriginal Participation Initiative (1985-1987) resulted in 1 000 additional places in higher education. The Higher Education Equity Project Programme (1985-1987) was introduced with funding for innovative pilot projects

increasing participation by disadvantaged groups. In the year following, funding was made available under the Higher Education Equity Programme (Department of Employment, Education and Training, p. 195). Significant growth occurred in the system totalling about 43 400 places by 1987 from increased intakes in 1983, 1984 and 1985 (*ibid.*, p. 80) resulting from government policies related to equity and social justice. Student bodies started to reflect a diversity of races and ethnic groupings; mainly homogeneous student bodies became heterogeneous. Common values, goals and outcomes were gradually disappearing as the student mix incorporated more students of varying abilities in the era of mass higher education. Earlier government policies restricted access, fostering value consensus; improved access generated goal differentiation within and between institutions. Expanded systems appeared to have more extrinsic functions to perform such as addressing labour market needs and facilitating graduate employment. The learning environment changed and the methods of delivering education had to be reassessed. Within this climate, concerns were expressed about the possible dropping of educational standards.

The Australian Vice-Chancellors Committee and Higher Education Council's 1992 discussion paper entitled "The Quality of Higher Education" noted a timely threat to quality with greater variety in routes of entry to higher education through a range of access courses, experiential learning and training.

Within this context institutions collectively and individually reassessed methods for performing essential functions. Competition for students and market forces led institutions to consider quality issues. Such issues were of seemingly lesser importance in a previous period of stability, when the emphasis was on achieving the award not the value of the educational experience.

2.2.3. Federal government general policy directions and quality initiatives

Since the 1970s the Australian Federal Government through the Commonwealth Tertiary Education Commission (CTEC) encouraged institutions to monitor performance. In 1979 CTEC introduced its "Evaluations and Investigations Programme" (EIP) to promote "a climate of critical self-assessment within institutions and across the tertiary education system" (CTEC, p. 30). Studies were funded which concentrated on the evaluation of courses, organisational units and resource usage in tertiary institutions.

In the late 1980s institutions merged into a unified national system of higher education; the majority of institutions gained university status either in a stand alone or amalgamated capacity. The role of the State in course approvals and assessments ended and a new era of quality assurance began.

The 1986 CTEC's report entitled "Report of Efficiency and Effectiveness in Higher Education" remarked that overall institutions had not developed standard procedures for systematic self evaluation. CTEC commenced a series of major discipline reviews in Australian universities to examine the quality in teaching and research across the system as a whole. In reality, only a small number of discipline based reviews were carried out starting with engineering (1988), teacher education in mathematics and science (1988), accounting (1990), agriculture and related education (1990), computing studies and information sciences education (1991). The federal government did not continue with discipline based reviews. The cost of such reviews would have been one factor which contributed to the suspension of such. The reactions of universities to the published reports and the unprecedented public comparisons of institutions also had an impact on the decision not to proceed with any other discipline reports.

The federal government proposed that independent studies be carried out with respect to each discipline review three to five years after its completion. The purpose of such was to report on the implementations of recommendations arising from the review. Three such reviews have been initiated.

Other federal government initiatives included the release of the Higher Education Council's policy paper "Higher Education: The Challenges Ahead in 1990" which included benchmarks based on peer and employer approval of graduates.

In 1991 the federal Minister for Higher Education and Employment Services released the paper, "Higher Education: Quality and Diversity in the 1990s" which addressed the need for credible quality assurance processes and provided for a number of initiatives which included:

- seed funding to establish within institutions quality management mechanisms;
- formation of a committee for the advancement of university teaching;
- establishment of a quality assurance mechanism to conduct quality reviews of Australian universities and to reward excellence;
- exploration of the quality initiatives in higher education by the Higher Education Council.

The underlying thrust of the paper was to foreshadow the introduction of differential funding of Australia's universities on the basis of their assessed performance in quality management (Department of Employment, Education and Training, p. 128).

The Higher Education Council's response to the policy statement was produced in the report "Higher Education: Achieving Quality" (October 1992). This report supported the establishment of the Committee for Quality Assurance in Higher Education whose terms of reference included the audit of "quality assurance and management priorities" within Australian higher education institutions and recommended to the Minister on the allocation of funds additional to operating grants on the basis of assessed quality management performance of institutions.

The Committee for Quality Assurance in Higher Education was established in 1993. It invited institutions to voluntarily participate in quality reviews with a view to receiving additional funding under the federal government's quality assurance strategy. Such initiatives added strength to quality related activities in the higher education sector.

An influence on the proposed quality visits was Piper's (1993) work on "Quality Management in Universities, Volume 1". It supported quality initiatives in the university sector by outlining a framework for considering quality management and quality audits in the context of government policy on performance funding. The process required judgements to be made about an institution's overall quality assurance procedures.

In the first year of the review programme the Quality Assurance Committee undertook a generic approach viewing three areas of university activity: teaching, learning, research and community relationships. In the second year greater emphasis was placed on teaching and learning; in the third year the emphasis was on research and community relationships. Pending the outcome of the reviews, participating institutions would receive in varying degrees additional funds. In the first

round of quality visits funding was based on the category of institutional classification allocated by the Committee (from one to six). Categories 1 to 5 received funding based on a percentage of the operating grant; group 6 received a flat payment taking into account the size of the institution's operating grant.

In subsequent years a slightly different funding formula was applied. In round two universities were classified into three categories with funding ratios applied to categories as 4:3:2. In the final round of quality visits in 1995 funding was linked to a ranked listing of various components each assigned a percentage and dollar distribution. Incentive funding as part of reward schemes in Australia is an example of how the manipulation of marginal funding can have a system wide impact on institutional practice. No quality visits have been planned beyond 1995.

Generally, federal quality initiatives have challenged institutions to demonstrate, in the context of their mission and goals, the effectiveness of their quality assurance policies and priorities, the excellence of their outcomes and the efficiency and effectiveness of their operations. Institutional self assessment and public reporting of outcomes in the form of institutional comparisons gathered momentum in the unified national system.

To assist universities in the processes of self examination the federal government set up schemes by which institutions could receive additional funds for quality initiatives, *e.g.* National Priority Reserve Fund Grants, financial schemes established under the aegis of the Committee for the Advancement of University Teaching, and the Evaluations and Investigations Programme.

Such schemes assisted universities to set in place ongoing monitoring processes and corporate information systems to provide evidence of outcomes.

Prior to the federal election in 1996, the then Minister for Employment, Education and Training announced a review of the higher education system (Hoare Review) with the objective of developing excellence in management of and accountability for the resources available to the sector. The review was to embrace such areas as accountability arrangements and reporting requirements for public funds; the effectiveness of governance and organisational structures; employment and personnel practices; financial management arrangements and the appropriateness of current division of responsibilities. Only a short time was set aside to conduct the review. This federal initiative was interpreted by the sector as primarily having links with diminishing resource allocations rather than quality assurance.

The outcome of the review was a series of recommendations outlining: the roles and responsibilities of governing bodies and Vice-Chancellors, the importance of incorporating both strategic thinking and strategic processes in management and leadership development; a reconsideration of workplace practices; the adoption of a comprehensive approach to performance management; a stronger focus on staff development; an overhaul of industrial relations in the sector; the setting in place of financial and asset management arrangements; and the linking of management information systems to institutional reporting requirements.

Due to the change of government in Australia in March 1996 the outcome of these recommendations is unknown.

2.2.4. Federal government research policy directions and quality initiatives

Australian Universities have a rich tradition of trying to achieve excellence in research both on an individual as well as an institutional level. Historically, research performance in the university sector has held a position of eminence. Since the demise of the binary system the new universities have moved to establish research credentials as they compete against the older universities.

Major system and institutional changes have pressured universities to assess research quality and efficiency. A maze of complexities in the evaluation process exists within universities' research environments.

In Australia the federal and State governments have played a significant role in research development due to the low level of performance and funding of research development by the business sector. Major inquiries bearing on the higher education research system include the Australian Science and Technology Council (ASTEC) Report (1987) "Improving the Research Performance of Australia's Universities and Other Higher Education Institutions" and the Smith Committee Report (1989) "Higher Education Research Policy". ASTEC's report recommended that the government endorse a major role for higher education institutions in the national research system (ASTEC, p. 18). The Smith Committee Report supported this recommendation and indicated that "high quality should be the hallmark of all research whether basic, strategic or applied, conducted in higher education institutions", (Smith Committee Review, p. 19). It also recommended that the Australian Research Council should have a strong focus on "excellence" in carrying out its role. Both committees endorsed the importance of directing resources to researchers of outstanding ability.

The government responded in 1989 to the endorsed positions of ASTEC and the Smith Committee Reports by releasing a Ministerial Statement "Research for Australia: Higher Education's Contribution". It recommended that research funds should be distributed competitively and that explicit criteria be set up by which the funds would be distributed.

Two issues dominated the debate: how to ensure that limited resources were distributed most effectively in the higher education system and how best to address questions of balance between direct/indirect funding, depending on the emphasis given to specific objectives and to the objectives of the total research activity in the higher educational sector.

In relation to the first issue the Ministerial Statement on higher education contribution (Hon. J.S. Dawkins, 1989, p.12) recommended that research funds should be distributed competitively and that explicit criteria be set up by which the funds would be distributed. This proposition was pivotal to the Commonwealth's decision to establish the ARC "clawback" of operating funds from the pre-1987 universities as a segment of the ARC's funding arrangements and to introduce requirements for institutions to have Research Management Plans.

In relation to the second issue of balance between direct and indirect funding, the scenario remained somewhat stable between 1986 and 1988. However, from 1989 to 1991 the proportion of ARC funds increased significantly to reach 48 per cent of total commonwealth competitive funding while mission-oriented schemes increased by only 15 per cent. In summary, total competitive funding increased by 120 per cent with "excellence" based funding increasing by 225 per cent and mission-oriented funding increasing by 70 per cent.

With the establishment of the Australian Research Council in 1988 and its four supported Committees, a number of quality focused research initiatives were put in place. Examples of such include:

- large grants scheme to support high quality research by teams of individuals (above \$20 000 or \$30 000 pa depending upon discipline);
- small grants scheme (minimum \$5 000; maximum \$20 000; or \$30 000 depending upon discipline) to provide block institutional grants to support, on a competitive basis, high quality research projects of modest financial cost, to be carried out by researchers of proven excellence;
- 1990-1994 research infrastructure assistance to provide the post 1987 new universities with assistance to develop research infrastructure (\$80 million overall was provided);
- post 1994 research infrastructure assistance to provide support for high quality research through the:
 - block grants to assist in remedying deficiencies in research infrastructure (\$42.3 million allocated in 1995) allocated on the basis of the national competitive growth index; and
 - grants from the research infrastructure assistance (equipment and facilities) programme for developing co-operative arrangements among institutions for the purchase of equipment and facilities to be used collaboratively (\$14.85 million allocated in 1995);
- research quantum to recognise and reward institutions via their operating grant for success in acquiring Commonwealth competitive grants and for their weighted graduate research degree equivalent full time student units.

The Australian Research Council since its establishment has focused on two broadly defined tasks of: (1) providing advice to the National Board of Employment, Education and Training on resources to be allocated to a range of research schemes; and (2) making recommendations to the Minister for Employment, Education and Training on national research priorities and the co-ordination of research policy.

In meeting these responsibilities, a programme of evaluation of outcomes was set in place, it focused on the Large Grants Scheme. The programme requires reviews to be carried out by a team of three or four eminent researchers from Australia and overseas. The review focuses on the general funding in the selected discipline area and the inputs and impact of the researchers who are substantially supported financially. Twenty such reviews have been undertaken to date.

In 1990, the federal government's White Paper on "Science and Technology, a Blue Print for the 1990's" was published; it announced a major review of higher education's research infrastructure. The policy statement "Quality and Diversity" was released in 1991; guidelines emerged for the universities on increasing the relevance of research, setting out research priorities, identifying areas of research concentration and improving one's competitive funding base. The impact of such focused predominantly on the best researchers who would be able to obtain support from funding bodies

giving weight to the speculation that the research debate was more about shrinking government resource rather than concerns about the quality of research.

While some institutions have expressed concern about the government's motivation for recent research policies, institutions generally have expended considerable effort in the last decade to evaluate research with a view to improving its excellence, funding allocation and efficiency (Department of Employment, Education and Training, 1993, p. 247). Peer review remains the main mechanism for evaluation however, initiatives in Australia have resulted in the conduct of some in depth studies in regard to the nature and weighting of performance indicators in the evaluation of research output.

2.2.5. Exploration of new approaches to quality assurance

The government moved to establish a national enquiry into education and training in 1976. The growing emphasis on monitoring and evaluation in higher education was given formal expression in the terms of the National Inquiry into Education, Training and Employment (the Williams Inquiry), which focused on "the means of evaluating the quality and efficiency of the system" (Williams Report, 1979).

In 1976 the Commonwealth Tertiary Education Commission, responding to pressure for inward accountability and efficiency, recommended the establishment of a special funding programme to support research and development projects aimed at directly improving the quality and efficiency of educational processes. While the initial focus of this funding programme was on evaluation studies of particular institutions and educational practices, the programme guidelines were later expanded to give greater emphasis to studies aimed directly at broader issues of state and national policy. Two of these studies "Performance Indicators in Higher Education", Volume 1 (1982) by Linke and others and Volume 2 (1984) by Bourke dealt especially with the development of potential measures of educational quality and efficiency.

Prior to the major structural changes announced in the White Paper in 1988 which flagged the demise of the binary system in favour of the establishment of the Unified National System, quality assurance measures were the prerogative of individual universities. In the colleges of advanced education sector in New South Wales quality assurance measures were predominantly focused on the process of course accreditations, heavily controlled by the Higher Education Board.

Quality assessment procedures operative in the 1970s in the colleges of advanced education system were thorough in terms of the examination of issues which contribute to quality assurance. The New South Wales Higher Education Board through its Academic Committee undertook the approval, review, and evaluation of new and ongoing courses at both government and non-government colleges of advanced education. All courses which were federally funded were required to undergo this approval process; in addition courses which were privately funded sometimes voluntarily sought the status of such recognition. A specific set of guidelines was produced to assist the institution in preparing documentation for each course submission and review. Peer professionals were appointed by the Higher Education Board to visit each institution prior to the introduction of new courses and every three to five years after a course was introduced. Judgements were made for the most part on basis of best practice in institutions offering similar courses although the norms were unspecified. Self referenced (trends over time) institutional information was also taken into account.

As the former colleges of advanced education gradually acquired university status they were given far greater latitude in the determination of courses to be introduced and the processes to be used in quality assurance. In turn, these colleges brought to the new universities more formal course assessment skills than those exercised in the older universities. As the new universities developed and staff profiles included academics from the college sector as well the traditional university sector views were blended in the development of hybrid quality assurance processes and procedures.

The Commonwealth Tertiary Education Commission released a publication entitled “Efficiency and Effectiveness in Higher Education” (Hudson *et al.*, 1986). It noted that institutions had been remiss in developing standard procedures for systematic self assessment; thereafter the Commonwealth Tertiary Education Commission placed more emphasis on system-wide studies.

The first systematic attempt to define and apply at the national level a range of both input and performance indicators for higher education was made by the discipline review of Engineering.

The report, “The Discipline of Engineering” preceded the publication of the Higher Education policy paper by the then education minister, John Dawkins, who made reference to the mention of performance indicators as “an initial but important step in developing a more rigorous and systematic approach” in such matters.

In 1991, the Report of a Trial Evaluation Study was commissioned by the Commonwealth Department of Employment, Education and Training (DEET) and entitled “Performance Indicators in Higher Education” (Linke, 1991). The use of performance indicators in their own right as assessors of quality did not receive widespread support, however the public debate on the topic contributed to a growing awareness of quality related issues and the contribution that performance indicators can make in education.

Linke’s work defined a range of potential indicators which could be applied at various organisational levels (from individual to organisation to system) as a basis for at least partly assessing the level of educational performance. Bourke’s study involved a detailed review of the development and application of performance indicators in advanced countries and highlighted the “absence of systematic and routine scrutiny of performance” at the departmental level and identified a list of characteristics which should be assessed on a regular basis.

Public perception in Australia suggested performance indicators were utilised in sectors other than education. Linke (1992:195) forged ahead with the supposition that such indicators had a role to play in education. He suggested that “their underlying purpose is to serve as a guide in making decisions on ways in which organisational performance might be improved. Their function is to identify the principal characteristics or components of successful performance, expressed in terms amenable to either quantitative measurement or reliable estimates of relative achievement, and thus to provide a profile of performance levels attained by a particular organisation, and at a particular time, against which to compare that of other organisations or the same organisation at different times”.

The public interest in performance indicators was further informed by the OECD work group definitions which emphasise the “signalling function” of performance indicators (Commission of the European Communities, 1993). The use of such indicators presupposes an information base against which such indicators can be measured. Indicators can provide qualitative and quantitative type information which have the capacity of assisting with quality judgements rather than judging performance or quality.

In 1993 a Quality in Higher Education Conference, was held in Sydney Australia in which the purpose of using indicators and the level of aggregation of performance indicators was addressed. Distinctions were drawn with respect to norm referenced indicators, criterion-referenced indicators and self referenced indicators. Mackay emphasized the importance of identifying an appropriate level of data aggregation (university/institutional level, faculty level, department/course level) for each indicator. Institutions were cautioned to preferably develop a small set of indicators using triangulation of data from several related sets of indicators rather than isolated single indicators.

Extensive public discussion on performance indicators created an expectation that accountability in education involved at least in some way the inclusion of performance indicators. Societal demands for accountability ushered in a consciousness that outcomes and processes should be capable of articulation. These should be positioned against objectives and be capable of measurement. The development of indicators was one way of addressing these concerns in the context of the quality debate.

Following the release of “Diversity and Performance of Australian Higher Education” Series 22, the federal government set up the Joint Working Party on Higher Education Indicators in 1994.

It was charged with the responsibility of providing advice to the Department of Employment, Education and Training (DEET) on the development, collection, maintenance and publication of an appropriate and verifiable set of indicators on the work of higher education institutions.

One noted outcome was the publication of the Higher Education Series which listed 68 indicators grouped in four categories: students, staff, resources and research. Information is published on institutions which are part of the Unified National System or are funded by DEET. The stated purpose of the publication is to illustrate the diversity of Australian higher education institutions. The indicators are more measures of quantity rather than quality. Nevertheless selected indicators which focus on an institution’s capacity for attracting research funding, or its profile of graduate employment provide reference points for quality related issues.

The push for the inclusion of indicators as measures of quality occurred as government funds diminished and higher education expanded. Such factors have contributed within Australia to moves to develop performance indicators of both a qualitative and quantitative nature to assist in the judgement of quality and the efficient application of resources.

3. THE UNIVERSITY OF WESTERN SYDNEY AND QUALITY ASSURANCE PERSPECTIVES

3.1. The federated University of Western Sydney

3.1.1. The federated level

The University of Western Sydney Nepean (UWS Nepean), the subject of this case study, is a member of the University of Western Sydney(UWS), in New South Wales. UWS is Australia’s first federated university established in 1989 under the University of Western Sydney Act 1988.

It is necessary to provide background information on UWS to better understand UWS Nepean. For this reason a brief description of the federated university follows; it includes reference to quality issues which have effected the University of Western Sydney.

The Federated University of Western Sydney has developed rapidly from three colleges of advanced education upon which it was founded. Its federated structure comprises UWS Hawkesbury, UWS Macarthur and UWS Nepean co-ordinated through the Office of the Vice-Chancellor. The federated structure has been based on Hawkesbury Agricultural College which traces its history to 1891; Nepean College of Education established in 1973 and Macarthur Institute of Higher Education established in 1974. Hawkesbury and Nepean were the foundation members of the University of Western Sydney. Macarthur joined the federation after its establishment.

3.1.2. Profile of the federated University

The university is situated within sixty kilometres of the central business district of Sydney and predominantly serves the population of Greater Western Sydney. The University is physically situated in the northwest, midwest and southwest communities of Western Sydney in the state of New South Wales. The University operates from six sites -- Kingswood/Werrington, Westmead (UWS Nepean); Richmond and Blacktown (UWS Hawkesbury); and Bankstown and Campbelltown (UWS Macarthur). The University's headquarters at Werrington North co-ordinates funding arrangements with the federal government and devolves to the network level the management and operation of courses and related activities.

While not considered a regional university in the same way as institutions in rural Australia, the University prides itself on establishing strong links with the region serving its educational needs. Many of the University's graduates are individuals who are the first in their family to achieve a university award. The University's presence in the region has been a major factor in raising educational standards and in creating a desire to succeed among the region's residents.

In 1995 the University of Western Sydney enrolled 22 803 students and was the third largest university in New South Wales with 63 per cent of the student body studying full time. The University has a large percentage of part time and mature age students. Over 55 per cent of the student body is female. About 16 per cent of the total enrolment is postgraduate.

University enrolments are spread over the three network members in their respective faculties. UWS Hawkesbury has four faculties: Agriculture and Horticulture; Health, Humanities and Social Ecology; Management; Science and Technology. At UWS Macarthur there are five faculties: Arts and Social Sciences, Business and Technology, Education, Health and Law. UWS Nepean has eight faculties: Commerce, Education, Engineering, Health Studies, Humanities and Social Sciences, Science and Technology, Visual and Performing Arts, and Law.

3.1.3. Governance of the federated member

The University's governing body is the Board of Governors whose members are either ex-officio, appointed or elected in accordance with the University's Act enacted at State level. The peak academic body is the Academic Board; it carries the overall responsibility for quality assurance. This structure is currently under review.

3.1.4. Impact of quality assurance on governance

The establishment of new Australian universities as part of the unified national system presented a challenge to the government and to institutions to ensure that a demonstrated change took root which genuinely transformed colleges of advanced education into “real” universities. During this time of system change the federal government supported “in principle” the use of a mentor programme in which experienced universities assisted newer institutions.

Such a relationship was established between the University of Sydney and the University of Western Sydney. It was the outgrowth of earlier links between the University of Sydney and higher education initiatives in Western Sydney.

The University of Sydney played a role in the development of academic governance and quality assurance within the University of Western Sydney between 1989 and 1992. The role was executed by:

- nominating four University of Sydney academic staff members on the foundation UWS Board of Governors;
- nominating University of Sydney academic staff to the Academic Board;
- encouraging University of Sydney academic staff to serve on course, staff selection and other committees;
- encouraging staff to provide assistance and advise as the new University extended the scope and level of its teaching and research.

In addition, the University of Sydney sponsored the University of Western Sydney into membership of the Australian Vice-Chancellor’s Committee.

Professional relations were formed between the staff of the two universities which had a positive impact on the formative years of the University of Western Sydney. The necessity of the new University to function as a competitor with the University of Sydney for students and staff created a functional imperative to sever the mentor model. It was mutually agreed that these arrangements would cease between the universities at the end of 1992.

In the current operational structure the Academic Board of the University of Western Sydney is the peak academic body responsible to the Board of Governors for developing academic policy and advising on the maintenance and enhancement of academic standards. In 1992 the Board dealt specifically with quality assurance processes in the University. The paper entitled “Quality and the Academic Board” required each Member to report on current methods for quality control and quality improvement in areas relating to courses, staff, students and research.

One specific area of quality impact made by the Academic Board was the setting of directions for the appointment of the professoriate in the new institution. There was a perceived belief that the appointment of professors should occur early in the history of the institution and that such appointments should be role models and catalysts for the development of research specialisations and focus areas for post graduate study. In fact, this has happened and the professoriate has made a major impact on quality outputs in terms of improving research performance and the management of post graduate student work.

3.2. Management of the federated University

The central management team of the University is comprised of the Vice-Chancellor as the chief executive officer of the University. He is assisted by three Deputy Vice-Chancellors who are the Chief Executive Officers of each of the three network members. As a result of the review of the University's operations in 1995 it is anticipated that this structure will change.

3.3. Impact of quality assurance on University management decisions

A number of external and internal imperatives have had an impact on quality assurance in the University of Western Sydney. Each is considered in turn.

3.4. External imperative

3.4.1. Federal government quality related policies

Numerous federal government quality initiatives focus on competitive funding schemes to enhance quality assurance. Such schemes contribute to creating a climate of competition among Australian universities.

The University of Western Sydney has actively participated in applying for funding under these schemes to publicly demonstrate its capacity to deliver quality programmes in a competitive environment.

The University management made the decision in 1992 to participate in the institutional assessment process undertaken by the federal government under the aegis of the Committee for Quality Assurance in Higher Education. In so doing it did not anticipate the review committee's approach to dealing with federated structures. In the first round of assessment in 1993 the committee's report tended to treat the University as if it was highly centralised. It urged more central direction, policy determination and oversight of quality. It noted that the network members operated in a decentralised mode. The review urged the University to capitalise fully on the varied strengths of its members and to arrive at an appropriate mix of centralism and autonomy. The final report stated:

"(...) the review team formed the impression of a rapidly expanding institution which is coming to grips with its new status as a federated University, but succeeding, largely at member level, in generating enthusiasm and commitment to quality teaching of a student body which includes many disadvantaged groups, to the gradual building of research ethos and to productive partnerships with the community" (Committee for Quality Assurance in Higher Education, March 1994, p. 12).

The second review in 1994 by the Committee for Quality Assurance in Higher Education focused on Teaching and Learning. At the federated level of the institution the University identified the Academic Board and its committees (*e.g.* Standing Committee on Quality Assurance, the Working Party on Teaching and Learning, the Post Graduate Studies Committee) as the principal quality mechanisms related to teaching and learning. The review committee noted that the Academic Board developed a teaching and learning policy, and passed resolutions concerning evaluation of teaching, promotions and the recruitment of staff.

The University of Western Sydney argued that as a federated University of three relatively autonomous bodies, aspects of teaching and learning are best addressed at the level where the students operate, that is at the network member level. In so doing the emphasis was placed on how the network member level achieved the University objectives.

Given the size of the university the Review Committee recognised the Academic Board's potential level of influence to disseminate good practice across the network members. It also noted the four tier process for the development and approval of courses, the first three stages of which relate to the faculty/member level and the fourth being the Academic Board. The Review Committee recognised that the University is committed "to ensure that the course area is relevant to the need of the region, the academic rigour is of highest standard and the resources are available to deliver the courses at that standard" Committee for Quality Assurance in Higher Education, February, 1995, p. 448).

During this visit the University identified in its quality portfolio several priorities for improvement with respect to teaching and learning. These included the development of a key set of performance indicators, the enhancement of information systems across the University and the capacity of staff to use such systems to improve teaching and learning. Other priorities included the further upgrading of library and computer services and the enhancement of post-graduate student support.

The third of the quality visits by the Committee for Quality Assurance in Higher Education was focused on research and community relationships. The Review Committee concluded that during the six years of operation as a university, the institution has moved to fostering a research culture through funding supports, strong interaction between staff and students, an increase in completed doctoral qualifications of staff and an increase in higher degree research completion. In terms of the community each member has worked successfully to relate to the local environment and to encourage regional participation in University activities. Areas for improvement included a move focused approach to identified research strengths, the alignment of mission with planning and budgeting processes and the maintenance of a sustainable level of growth in higher degree enrolment.

The funds given to the University of Western Sydney by the federal government in response to the quality visits are examples of incentive funding and complement other areas of national funding.

3.5. Internal imperative

3.5.1. Restructuring of the University of Western Sydney

The Board of Governors, the Academic Board and Central Management Committee are currently charged with the responsibility of overseeing processes of quality assurance, strategic decision making, policy formulation, institutional co-ordination, performance evaluation and representation of the University as a whole. The achievement of the University mission is mainly carried out through the University Members. The members operate with considerable autonomy in the provision of courses and research programmes, the servicing of students and other clients including business and industry organisations and community groups.

In 1995 a review of the University's structure and operations was undertaken by a Committee appointed by the Vice-Chancellor in accordance with a stated set of terms of reference approved by the Board of Governors with a view to initiating changes which would lead the University into the next decade. The review was precipitated by network initiatives which argued the dissatisfaction with and the dysfunctionality of the current structure in terms of efficiency and effectiveness. One area of

dissatisfaction was the inability of the federated structure to significantly contribute to the quality improvement process.

By mid 1996 it is anticipated that a new federated operational structure will come into existence in which roles and responsibilities will be defined more clearly. Linked with the proposed new structure is the anticipated appointment of the Deputy Vice-Chancellor Planning who will also have responsibility for ensuring quality processes are in place and that a consistency exists in standards of approval and operation across the institution.

During this period of transition the existing statement of University Mission to promote excellence in teaching and research and commitment to the region has underpinned university activity however, it has not had the same level of influence as other external quality imperatives on university quality assurance processes and procedures.

4. THE UNIVERSITY OF WESTERN SYDNEY NEPEAN

4.1. The member level

The University of Western Sydney Nepean is the largest member of the federated university in terms of student enrolments. Background information previously stated with respect to the federated university provides a context without which this case study would be incomplete. In the remainder of this document reference will be made to network member factors and how they impinge on the quality assurance process.

4.2. The profile of the member

UWS Nepean is a foundation member of the University of Western Sydney since its establishment in 1989. UWS Nepean is currently situated on two campuses, the Penrith Campus which includes the Werrington North and South sites, the Kingswood site and the Westmead Campus which includes Westmead North and Westmead South. By 1997 the University hopes to move its Westmead operations to the new Parramatta Campus at Rydalmere.

In 1995 UWS Nepean enrolled 11 054 students of which 14.78 per cent were postgraduate, 59.9 per cent were full time and 55.1 per cent were female. Almost half of the enrolment of the University of Western Sydney resides at UWS Nepean. In 1995 the Westmead Campus carried approximately 40 per cent of UWS Nepean's enrolments. Traditionally the balance between the Penrith and the Westmead sites has remained in roughly that proportion. With the introduction of Engineering at Penrith and the introduction of law at Westmead it is envisaged that both sites will continue to expand.

The University of Western Sydney Nepean (UWS Nepean) is an outgrowth of The Nepean College of Advanced Education which was established in 1973. As a college of advanced education, prior to 1989, Nepean was part of the New South Wales State system of higher education. Its activities were monitored by the New South Wales Higher Education Board. Quality assurance was focused on course accreditation and was co-ordinated by the Academic Committee of the Higher Education Board at State level. This body developed stringent guidelines for course development and evaluation which involved peer assessment based on submitted institutional documentation at the time of course

approval and review (every 3-5 years). Nepean participated in this process until its move to university status in 1989.

4.3. Management of the member

The University of Western Sydney Nepean network member is headed by a Chief Executive Officer/Deputy Vice-Chancellor who is responsible to the Vice-Chancellor and the Board of Governors for the operations of the network member.

The Chief Executive Officer is presently assisted by a Pro Vice-Chancellor Research and a Pro Vice-Chancellor Academic who are individually responsible for their specific areas of operation. These two senior positions have been established in the last twelve months with a view to ensuring and promoting excellence in teaching, learning and research.

Currently, the network member draws advice from its External Advisory Committee comprised of professional, business and regional personnel dedicated to the advancement of the network member within the region. Due to the restructuring of the University as a whole it is anticipated that this committee will be replaced by another external body which will have increased responsibility for the oversight of the operations of the network member.

The Nepean Academic structure has developed progressively following the conferral of University status and the emergence of quality imperatives. Academic committees and working parties focus on enabling UWS Nepean to develop itself as a high quality institution in the shortest time possible. Its staff, students and regional community share an enviable support in advancing these aims.

The Academic Committee at the member level is the chief monitor of quality assurance; it is supported by the Courses Working Party, the Committee for Excellence in Scholarship and Teaching and the Research Management Working Party. All these bodies draw membership from the faculties, administrative divisions and students and all have been established in an evolutionary process in conjunction with the granting of university status.

The Academic Committee is currently the main body for academic discussion and decision making at the member level. It initiates action, receives reports, monitors academic quality and reports to the Academic Board of the federated University. It oversees the implementation of the Educational Profile of UWS Nepean. The current restructuring of the federated university has resulted in a re-examination of the effectiveness and role of a university-wide academic board in contrast to the effectiveness and role of the Academic Committee at the member level. Debates on quality assurance and control are of paramount importance in this debate.

The Research Management Working Party develops, monitors and reviews the Research Management plan and research outputs, develops policies and procedures aimed at fostering research and recommends priorities for internal funded research projects. It is the key research co-ordinating group providing an infrastructure to assist and foster quality research outputs at member level. It is chaired by the Pro Vice-Chancellor Research; all faculties are represented on the Working Party.

The Committee for Excellence in Scholarship and Teaching initiates action and monitors progress on matters related to quality in teaching and scholarship. It constructs and implements the Teaching and Learning Plan for the UWS Nepean network member. It is also endeavouring to gain institutional acceptance for a student assessment policy; assessment is seen as a crucial link between effective

teaching and high educational standards. The Committee deals with all issues which have a bearing on the delivery of good teaching. All faculties are represented on the committee.

The Courses Working Party monitors the process of course development and evaluation. It meets on a regular basis and deals with new course proposals as well as with the review of existing courses. It ensures the processes for course introduction and review are in accordance with published University requirements.

With respect to new courses the staff submit proposals to the respective Dean who in turns seeks approval from the CEO to proceed with the detailed preparation of the proposal. When the proposal is documented a course committee is established with external representation from employers, professional associations, the local community and academics from other universities to consider it in terms of academic rigour, relevance to the profession, objectives, admission and assessment procedures. A report is prepared which is considered by the relevant Faculty Management Committee who responds. Both the report and the response are forwarded to the Courses Working Party where they undergo a further evaluation in terms of its ethical concerns, duplications with other institutional offerings, capacity to be introduced in the current institutional setting. The academic committee is informed of the outcome of this process.

All existing courses are reviewed annually by a course advisory committee comprised of both internal staff and external members with external members filling at least 50 per cent of committee membership. Each faculty is charged with the responsibility of organising these reviews.

The course advisory committee examines the relevance of the offering, reviews the statistical information relating to the course, *e.g.* retention rates, application rates, pass rates (...) and ensures the assessment procedures are undertaken according to set guidelines. Reports are prepared and forwarded to the faculty and to the courses working party.

Every five years faculties and administrative divisions undergo a review by competent professionals who are external to the University. The various committees set up to carry out such reviews ensure appropriate procedures are implemented in accordance with UWS Nepean practice. Such committees generally review all aspects of the faculty's operations and have access to documentation relating to the courses, research, policies, practices relevant to the unit under review.

External professional bodies supplement internal committees and working parties by providing another measure of quality control in course design and stated outcome. Specific requirements set by such bodies have to be satisfied before graduates are formally recognised in selected professions. Examples of such bodies include the Australian Society of Chartered Accountants, Royal Australian Historical Society, the Australian Society of Psychologists, etc.

Underpinning the work of all the above mentioned committees and working parties is the staff development unit and the development and information management planning services unit. Since its establishment the staff development unit has worked co-operatively with academic and administrative staff to foster excellence and quality assurance procedures in the institution. It has been particularly successful in assisting staff to adjust to government and student agendas emerging from the diversification of the student body in the move to mass education and the changes emerging in higher education policy.

Current reorganisation of the unit's resources have brought together staff who work co-operatively with academics in expanding skill bases related to computer technology multi model teaching delivery options and advanced methods of teaching delivery.

The Development and Information Management Planning Services unit carries out data analysis related to the institution as a whole as well as to focused areas of operation, *e.g.* university applicants, students and graduates. It provides faculties with information for course assessments, student reviews, faculty reviews and for planning purposes.

4.4. The quality assurance culture at UWS Nepean

Quality assurance practices operative at the time of the establishment of the University of Western Sydney in 1989 were predominantly outgrowths of practices prevailing at the colleges of advanced education in New South Wales. They focused on course assessment rather than institutional assessment. Former colleges of advanced education staff were well versed in accreditation and course re-accreditation procedures which required demonstration by staff of the merit and quality of course offerings.

Since the establishment of the University in 1989 new quality assurance practices have been developed progressively. In UWS Nepean they reflect a hybrid approach somewhere pragmatically oriented between the practices of the older universities and the practices of the former colleges of advanced education. They involve both internal and external input and have been progressively reviewed since 1989. The current practices are based on the following guiding principles with respect to internal and external assessment.

The purpose of internal assessment at UWS Nepean is to establish self regulation and improve quality outcomes. The principles guiding internal assessment at UWS Nepean are the following:

- faculties assume responsibility for quality assurance practices linked with internal assessment and share responsibility with the network member, UWS Nepean for external assessment;
- assessment is based on previously agreed upon objectives;
- internal and external assessment form part of an integrated approach to total assessment;
- faculties are subject to assessment every five years; every course is annually assessed;
- the courses working party is responsible for the implementation of the course assessment policy;
- the research management committee is responsible for monitoring research outputs;
- the member Academic Committee is responsible for the analysis of assessment reports and faculty responses and overall quality assurance at the member level.

The principles guiding the involvement of external assessors at UWS Nepean are the following:

- external assessors assist the network member in demonstrating accountability that is, the requirement to demonstrate responsible actions to one or more external constituencies *e.g.* governments, employers, graduates, clients commissioning projects;
- external assessors serve as catalysts to initiate internal quality assessments and they help to maintain the quality of course offerings;
- external assessors assist the faculties to make judgements and comparisons to justify approaches, publicising ways in which they guarantee quality improvement;
- external assessors have the capacity to draw to the institution’s attention best practice in similar other organisations;
- external overseas visitors to a faculty enable bench marking against overseas standards.

4.5. Impact of quality assurance on member management decisions

To fully comprehend the impact of quality assessment on UWS Nepean’s management and decision making it is important to understand the imperatives bearing down on the institution, the member’s culture, structure and its decision making processes. These imperatives will now be considered in turn.

4.6. External imperatives

There are six major external imperatives related to quality issues which influence the decision making process of UWS Nepean. These include: system changes, staff workloads, regional and societal expectations, professional expectations, academic award restructuring and emphasis on customer service. Each imperative is described below:

4.6.1. System changes

In the unified national system individual universities brought to the quality debate varying levels of interest and expertise in quality assurance processes. UWS Nepean, as other former colleges of advanced education in New South Wales, brought a legacy of professional experience and interest in evaluation processes. The accreditation processes of the New South Wales Higher Education Board which dominated the colleges of advanced education sector for so long, created a framework within which all aspects of course development and implementation were scrutinised. This process of course accreditation was demanding and engaging for college staff.

Many former staff members of the Nepean College of Advanced Education remained staff members of UWS Nepean. They brought with them not only an awareness of the rigour with which courses should be assessed but for the most part an appreciation of the importance of course assessment as part of quality assurance. This was a valuable contribution to the development of course approval and review procedures the University Member as new staff were recruited from the older universities. Decisions taken regarding the role of quality assessment of courses at UWS Nepean reflect this focus.

4.6.2. Workload imperatives arising from system change

The transition from colleges of advanced education status to university status required staff to consider quality issues associated with the building of a research culture and the relationship of quality teaching to research and scholarship. Simultaneously staff tried to address these issues as well as the extensive and detailed processes of course accreditation previously required in the college system. Older processes by themselves were not focusing UWS Nepean in such a way as to provide a viable answer to the emerging quality issues. Staff workloads increased as they tried to address multiple but unrelated systems of quality assurance in the new university setting. Workload imperatives had a definite bearing on bringing on line as soon as possible new ways to promote quality assurance. UWS Nepean has adopted a hybrid version of course assessment which reflects considered best practice from the college sector blend with new quality imperatives arising from university status.

4.6.3. Societal/regional imperatives

Regional pride in UWS Nepean creates a climate in which it has to demonstrate achievement and credibility. The regional community perceives Nepean as a vehicle for social mobility. For many families Nepean is the institution from which the first family member will receive a degree.

The local media is active and ever so vigilant in reminding the community of news relating to UWS Nepean; the media actively searches for opportunities to exhibit best practice in University operations. It records UWS Nepean's ability to assist graduates to gain relevant employment. Within this climate there exists significant regional pressures on UWS Nepean to excel in its service of the region. These pressures are taken into account when directions are formulated.

4.6.4. Professional expectations

Professional associations play an active role in setting, demonstrating and evaluating the appropriateness of course design and content especially in the areas where professional accreditation/registration is required. Greater pressure is placed on universities by such bodies to document and demonstrate outcomes.

Employers, parents and students also articulate professional expectations. With the introduction of the Higher Education Contributions Scheme and growing numbers of overseas fee paying students pressures are increasing for the delivery of a quality educational service.

4.6.5. Award restructuring

In recent years academic award restructuring impacts on the manner in which academic positions are filled within UWS Nepean. The expected behaviour of academics at the respective levels of appointment have been articulated. This has assisted in setting out a clear definition of expected skills and expertise and has served as a guide in the appointment of staff. UWS Nepean's promotion criteria for academic staff is consistent with the requirements of award restructuring and offer staff some flexibility in creating career paths while maintaining an emphasis on quality teaching and research output.

4.6.6. Customer service

In recent years customer service grows in importance especially in a time of diminishing resources and income. To ensure a steady customer base universities have been forced to examine a variety of factors *e.g.* demands from post graduates students for high quality teaching; examination of patterns of regional applicants enrolling at institutions outside the region, exploration of ways to retain strong relationships with alumni. A recognition that applicants in the Unified National System have a choice of institutions and that a variety of factors bear on institutional selection has increased awareness of the importance of customer service. University reviews now seek expressions of views from customers regarding the service provided at UWS Nepean.

4.7. Internal imperatives

There are two major internal imperatives at the member level bearing on the quality process; these include the University's federated structure and the academic leadership of the UWS Nepean's chief executive officer. Each imperative is examined below.

4.7.1. Federated structure

The federated structure of the University serves as an unexpected imperative for quality assurance. While competition for students, courses and staff affects all universities, the close relationship with network members at UWS amplifies the level of competition within the institution. This was particularly true where courses in similar discipline areas and levels of study are introduced. Competition for facilities, staff, resources, prestige and student is ever present. The proximity of the network members to each other helps to focus constantly on the competitiveness of the member.

4.7.2. Academic leadership

A forceful network imperative for quality assurance was the leadership of the recently retired chief executive officer. Her own professional field of expertise in evaluation well equipped her to serve on the Commonwealth Government Committee dealing with quality visits to university institutions. The CEO engendered in senior management at UWS Nepean and in senior appointments recruited in recent years a strong sense of purpose and achievement, -- a belief in the opportunity which exists to achieve something of quality. The leadership role of the Chief Executive Officer should not be underestimated in bringing the awareness of quality assurance processes to the forefront. Fortnightly meetings addressed the multiplicity of issues associated with quality assurance. Participation in these discussions and the persistence of the CEO in holding the sessions had an effect on even the least interest parties.

Prior to any national imperative for institutions to submit themselves for quality assurance audits the Chief Executive Officer moved to establish within UWS Nepean an information base which was seen as pivotal to quality assessment. A priority was placed on setting up reporting procedures which would in the first instance enable UWS Nepean to examine the series of performance indicators identified in Linke's report. This work was undertaken by the Development and Information Management Planning Services branch of the network member.

4.8. Quality issues

The external and internal quality imperatives discussed have influenced the quality directions and decisions at UWS Nepean. It would be impossible to indicate what level of influence each played in the management decisions taken, however the imperatives have assisted in articulating the quality issues faced by the newly established university. These are noted below:

- UWS Nepean as well as UWS faces the challenge of delivering quality university education in a region characterised by a mixture of nationalities, socio-economic levels and many and diverse expectations of higher education. UWS Nepean addresses this challenge by providing learning support initiatives through Student Services; by ensuring a wide range of community and employer input into course design and review processes; and by ongoing liaison with groups/individuals having special needs.
- The new university's expanded role to include not only a defined focus on quality teaching and learning but also on quality research results in extensive effort being devoted to this end. Initiating a research culture and infrastructure was established. The Research Management Working Party assumes a leadership role in this area; it involves the academic research staff across the faculties. Massive resources support these initiatives and the work of promoting experienced researchers.
- The need to establish university bench marks and standards in academic areas underpins initiatives to identify the appropriate management structure to deal with these issues. Currently UWS's Academic Board and member Academic Committees are under review. Ongoing research is underway to identify best practice approaches to academic and administrative bench marking.
- Creating a culture where quality assurance is embedded in institutional operations is an ongoing task.
- The growing demand by faculties for accurate information on retention and failure rates, course completion times, student progression, pass rates, etc., characterises the heightened awareness of academic staff for research on teaching and learning. The quality debate underpins these requests and UWS and UWS Nepean is repositioning information resources to address these concerns through its management information units.
- The current debate on levels of centralisation and decentralisation within the federated structure examines feasible alternatives for quality monitoring and management of academic activities and administrative supporting functions. At the present time faculties are charged with the responsibility of drawing together at department and faculty level the pivotal quality issues of concern. In support of such initiatives the member academic committee receives regular information on the reviews of courses and the direction proposed by various member committees. In addition the member CEO and the Pro Vice-Chancellors, Academic and Research are charged with the overall responsibility of dealing with related quality issues. These structures are being examined as part of the overall review taking place within the University.

There is no doubt that the issues and initiatives noted are influenced by the exposure to the institutional audits carried out by the federal government under the auspices of the Committee for Quality Assurance in Higher Education.

Following the 1995 audit of institutions the federal government set aside \$218 616 as the Research Quantum. UWS allocated \$400 000 to UWS Nepean as a reward/incentive for demonstrated performance. UWS Nepean has internally allocated this funding on the basis of rewarding performance and targeting two emerging areas of research with the Faculty of Engineering.

The audit by the Committee for Quality Assurance generally reinforced initiatives taken previously at Nepean to set up appropriate structures and information systems to provide a base for quality assessments in teaching, learning and research.

4.9. The impact of imperatives on the decision making process

The overall impact of imperatives on the quality assurance issues and processes can be summarised under the following eight headings which describes the actions taken with respect to quality related issues:

4.9.1. Appointment of professors and other senior academics

The policies established at the Academic Board of UWS in the appointment of professors have made a major impact on UWS Nepean. Since the establishment of the University in 1989 30 professors have been appointed across eight faculties. The larger faculties average between 5-7 appointments while the smaller faculties have a range of 2-4 appointments. In addition 17 associate professors have been appointed. The professorial appointments were, for the most part brought on line shortly after the establishment of the university and have assumed roles of leadership in scholarship, post graduate study, industry/research links and in organisational roles as chairs of the Committees and Working Parties related to Excellence in Scholarship and Teaching, the Research Management and Academic Committee. New organisational policies, procedures and practices have been set in place with the appointment of the professoriate.

At UWS Nepean, at the senior academic management level, the Deputy CEO position was abolished in favour of the establishment of the position of Pro Vice-Chancellor Academic and Pro Vice-Chancellor Research. With the establishment of these positions more concentrated effort has been shown in developing a research culture, and a Research Management Plan for Nepean which can be monitored in terms of stated outcomes. Similarly, a Teaching and Learning Plan is being set in place.

4.9.2. Ongoing development of institutional information management systems

The Chief Executive Officer of Nepean took action to enable the Development and Information Management Planning Services branch to expand its brief to focus on the delivery of information to support quality assurance initiatives.

One major development was the acquisition of a \$200 000 National Priority Reserve Fund Grant to implement a Performance Oriented Reporting System (PORT). This resulted in delivering a better management information system to underpin the member's quality initiatives.

Another development was the expansion of institutional research. Examples of such initiatives include the following:

Student intake survey

UWS Nepean carries out a Student Intake Survey whose purpose was to create a profile of the student body to better identify the type and mix of students in terms of modes of attendance, work status, disability, financial status and support, personal background (*e.g.* country of birth, language spoken, school attended, parental occupation, highest educational qualification obtained by parents, etc.). Profiling the student body creates a context for understanding the potential learning assistance needs which may need to be addressed.

Student feedback questionnaire (SFQ)

The Student Feedback Questionnaire gives feedback to faculties on the student's perception of the quality of the learning environment. It is administered at subject level and the results are processed centrally. All tenured and probationary staff receive a SFQ Resource kit for use with students.

Students are asked to evaluate teaching on a five point scale which covers such areas as the preparedness of the teacher, the communication and motivational impact of the teacher, the adequacy of class representation and feedback. Students are also asked to evaluate the subject in terms of objectives set and met, the weight given to assessments, the adequacy of feedback on progress, the suitability of the learning environment.

Course experience questionnaire

The questionnaire gives feedback to faculties on graduate perceptions of good teaching, clear goals and standards, appropriate assessment, appropriate workload, generic skills, and overall satisfaction with the course of study. It is nationally organised by the Graduate Council of Australia and administered individually by each University in terms of its current graduates. The questionnaire includes twenty five questions comprising six different scales that are used as performance indicators for the areas examined.

UWS and UWS Nepean results are compared with the national means and ranked against other institutions nationally. While pre-set standards are not identified comparisons with existing practice provide a feel for the level of satisfaction of students.

Graduate destination survey

The questionnaire addresses such issues as employment status of graduates, starting salaries, geographical areas of employment, and destinations of graduates. In considering these issues gender, faculty of study and other variables are taken into account. Since the capacity for employment is

considered as an important outcome of quality education, institutional/faculty underperformance in this area would be an important avenue for further investigation.

Employer profile of Nepean graduates

This report is an adjunct to the Graduate Destination Survey. It provides essentially two types of information: a listing of UWS Nepean graduate employers and a listing of employers in Western Sydney, the region of the University's location.

Analysis of student grades

The analysis of subject grades creates a profile of student achievement. It is undertaken by the Academic Committee and carried out by a sophisticated decision support information system. Student performance is analysed subject, by course and faculty. The range of grades and the quantitative profile for satisfactory grades is examined.

Analysis of entry scores with student performance

The analysis identifies what relationship, if any exists between entry scores a university performance. Recent developments include the assessment for faculties of the tertiary entry score against the grades received to identify potential spots of underperformance as well as students at risk.

Performance indicator analysis

The analysis provides a context in which institutional indicators can be compared yearly. Individual performance indicators were selected for institutional reporting which include the student progress rate, programme completion rates, mean completion times, research higher degree productivity rate and graduate employment rate. The availability of such provides a wider scope of information available for course and faculty reviews.

Cross institutional analysis

The analysis presents a view of institutions on various variables. UWS Nepean has had a long history of leaning on its management information systems to assist it in understanding how it compares with other institutions in a variety of ways, *e.g.* staff student ratios, capacity to attract students into specific courses, cut off scores for course entry, etc. Such indicators are not considered in isolation to other contextual information. They enrich rather than replace processes supporting quality assurance.

4.9.3. Introduction of faculty level and academic division reviews

Faculty and division levels submit to a review every five years. The review lasts three days and is carried out by a three member committee. All committee members are external to the University. The Chair is at least the level of appointment of a Dean of a faculty or equivalent division; the second member must be an academic whose background complements that of the Chair (for faculty

reviews). The third member is drawn from other than academia and should be representative of practitioners. A report is produced for the CEO. In the case of faculties the report is forward to the academic committee. Divisional reports are forwarded to the senior managers. The faculty/division is expected to provide a response to the review report. To date every review has resulted in significant change in the respective faculty or division.

4.9.4. Strengthening of research infrastructure

The UWS Research office and the faculties position a number of resources to support the quality assurance process. These include the following:

Research management plan

A Research Management Plan is the key operational document in guiding the development of research activities. It contains key performance targets which are examined annually to assess research performance.

External review of research development

External examiners and consultants provide consultation on postgraduate and research development. The first review took place in 1993 and the report was considered at senior university forums. Several of the key recommendations of the report have been implemented.

Research databases

Research databases provide information to assess progress in areas related to research. Information is kept on funding sources, and reference materials on human ethics, publications, gender, non-traditional research recovery. As a consequence of these developments a draft index relating to research dissemination performance indicators has been developed, debated and disseminated in the national arena.

Another functional development of the research database is its incorporation into the Performance Oriented Reporting Tool strategy adopted by UWS Nepean with the introduction of a new enterprise and decision support system.

Research reporting systems

The research reporting systems assess the members research performance and thereby identify areas for special targeting. The quality of research performance is regularly assessed against national data in such areas as research output, success in achieving Australian research council grants, e.g. the performance of the newer universities in attracting competitive funding. No university established after 1987 could equal the average of the Unified National System average for external funding per Full time equivalent member of staff for publications output.

Establishment of research centres and research groups

The Research office sets out guidelines for the establishment of research centres to facilitate a focused approach to research. Several centres have been initiated to date. The university has also established less formal and smaller concentrations of shared research focus via its support of research groups.

4.9.5. *Establishment of incentives to encourage quality output*

As a result of its ongoing concern for quality assurance UWS Nepean has put in place a number of incentives to encourage quality output in teaching, research and related areas. Examples of such include the following:

Seed grants scheme

In 1995 a sum of \$190 000 was earmarked for the support of quality research initiatives from new researchers or researchers moving into a new area of investigation. Seed Grants up to \$10 000 are allocated on a competitive basis to staff. This scheme has been instrumental in developing researchers who are successful in gaining external grants.

Awards for excellence in teaching

Recognitions are awarded annually for demonstrations of excellence in teaching. The awards are determined by a process of nomination by students and peers granting a \$2 000 bonus for excellent practice. Several such awards have been awarded to date.

Performance based faculty funding

Following a commitment of senior managers in 1992 UWS Nepean is beginning to implement a funding model that distributes faculty funding on the basis of performance; the model addresses key areas of Nepean's mission including total student load, external research grants, publications/disseminations, as well as entrepreneurial activity.

Conference scholarships scheme

The scheme encourages excellence amongst researchers within UWS Nepean to develop a national and international reputation for outstanding scholarship. Scholarships are competitively rewarded following review by external referees.

Summer research awards scheme

The scheme aims to target potentially high achieving students early in their academic career to expose them to the research ethos. A supplementary aim of the programme is to enhance the reputation of UWS students as excellent potential employees.

Grants for initiatives in teaching and learning

The purpose of the Grant Scheme is to foster excellence in teaching and learning. The scheme involves a process that identifies and funds staff initiated projects that will maximise student skill development. The scheme has the potential to identify best practice.

4.9.6. *Development of new course structures*

The process of course design at UWS Nepean has always undergone an extensive process of consultation with professionals, employers, academics, students, etc. In recent years imperatives for greater relevance have influenced the quality debate by extending the parameters of professionals involved in course planing and construction. The result of such consultations is the introduction of the following innovative courses:

- bachelor of industrial technology, to be offered by the Faculties of humanities, science and technology, visual and performing arts and engineering;
- bachelor of technology to be offered by the University and the Department of technical and further education;
- combined bachelor degrees to link a degree in law with another professional areas of study, *e.g.* education, nursing, economics, dance, design, science;
- post graduate awards in nursing to be offered by the University in conjunction with the main teaching hospital.

These innovative approaches to course design will continue to be subjected to the stringent quality assessment procedures applicable at UWS Nepean.

4.9.7. *Encouragement and recognition of staff initiatives to obtain grants for quality related projects*

Management creates a culture where staff are attuned to applying for grant assistance to advance quality related initiatives. UWS staff have obtained numerous grants in three categories which are related to quality assurance. Examples of such include:

National teaching development projects:

- development of information literacy in the first year of undergraduate subjects;
- assessment and the case conference structure and process for health care workers;
- Vischem -development of multimedia resources in chemistry;
- use of computer assisted learning to improve feedback and learning in accounting finance.
- student Empowerment: A Problem Solving Approach to the Development of Research and Laboratory Competencies
- developing analytical skills for the work and learning environment;
- analytical skills and co-operative learning for engineering;
- support tools for electronic tutoring in digital media;

- writing in organisations -- a high tech high touch approach;
- teaching chemical instruments through interactive simulations.

National priority reserve fund grants:

- establishing a performance oriented reporting system for institutional assessment and appraisal;
- reviewing of classifications in DEET's higher education statistics collection;
- the articulation of nursing courses in TAFE and the health and university sector.

Evaluations and investigation programme:

- progression of TAFE transfer students in undergraduate programmes at UWS Nepean.
- evaluating higher education access and equity;
- an investigation of the use of open-learning strategies to develop life long learning competencies;
- achieving quality in low enrolment post graduate course limits offered to Australian remote area nurses.

4.9.8. *Strengthening of student support services*

The diversification of the student body in recent years has resulted in a wide range of unmet students needs some of which can effect quality output. UWS Nepean has moved to strengthen its student support services by establishing the Durali Aboriginal Centre and widening the range of services in the Learning Centre to include the development of critical thinking skills, writing, reading, analysis and comprehension skills and self advancement techniques.

4.9.9. *Articulation of the impact of research initiatives/activities on teaching*

While further study still needs to be undertaken to fully evaluate the ways in which research impacts on teaching several observations can be made to date on this issue at UWS Nepean:

- seed grants to Academics have resulted in the publication and use of printed materials identifying critical thinking skills and their development and use in UWS Faculties, *e.g.* commerce, visual and performing arts, humanities, etc.;
- a research group in open learning has moved to trial new techniques in course/content delivery of learning materials;
- a wide range of research initiatives under the national teaching development project scheme has resulted in UWS Nepean staff searching out new approaches to developing interactive simulations, problem solving skills, laboratory competencies, etc.;
- feedback to staff on their teaching/assessment and other teaching/learning skills from the student feedback questionnaire and the course experience questionnaires has resulted

in an ongoing demand for specialised staff development courses from university teaching staff.

5. A FINAL COMMENT

Internal and external imperatives has been pivotal to intensifying the focus on the quality assurance process within UWS Nepean. To date, no specific national directives have been provided to institutions from DEET as to the criteria to be used for the review or the weighting assigned (if any) to institutional initiatives, processes, outcomes or procedures for quality management. The federal approach is based predominantly on an assumption of common purpose and acknowledged expertise within institutions. While universities have been exposed to the quality assessment requirements of various external and state agencies, nevertheless a strong institutional level of autonomy exists. Within UWS Nepean authority is shared and devolved in various ways to committees, faculties and divisions. Financial incentives from the federal government have been ongoing motivators in escalating quality assurance processes at all these levels.

The case study of UWS Nepean and quality assurance is a profile of an institution characterised by a progressive and incremental development of a series of interrelated sets of quality assurance processes since 1989. UWS Nepean is the product of a culture which has embraced massive system change and role reconstruction.

This case study has focused on the impact of quality assessment upon institutional management and decision making and only more generally upon the educational process since linkages between educational change to structures, responsibilities, policies and procedures cannot be easily made.

The massive change and expansion of UWS and UWS Nepean in recent years has resulted in the need to concentrate quickly and intensively on setting in place quality assurance measures robust enough to carry the university through the initial decade of existence.

Evolving practices, structures and procedures are evidence that decisions are being made with respect to the role of institutional formative and summative assessment. The historical legacy of UWS Nepean as a college of advanced education and its long tradition of course accreditation has assisted it in addressing quality assurance issues related to teaching and learning. However, new structures have superseded older realities to accommodate changing needs and priorities.

The newly established practice at UWS Nepean to have regular faculty and administrative reviews has the benefit of common, articulated starting points. It enables internal staff to interact with external experts in a similar discipline base or area of work. External and internal professionals anticipate an interactive dialogue on Quality Assurance. Review committees also involve community representation drawn from employers and individuals sympathetic to the local mission and the university goals.

The acceptance of reformulated internal and external reference frameworks is indispensable to UWS Nepean's quality assessment. The stringent review of courses is firmly entrenched in university culture. In the future, there may be a need to reconsider the frequency and parameters of such reviews in the light of the growing number of courses offered and the demands on staff time.

Improvement rather than efficiency has characterised the modus operandi of staff; an appeal to professional pride and recognition of achievement rather than an exercise of managerial control has

been the impetus for advancement. Co-operative relations between academic and general staff have progressively motivated administrative units to seek affiliation with academic operations.

Recent moves to channel effort at UWS Nepean to examine the place of institutional research in the delivery of its teaching and research mission is a hopeful sign that the institution is coming of age and maturing in a quality assurance culture. It is actively seeking to cultivate its prestige in terms of competition, promoting distinctions in the application of its mission rather than in the changing of its identity.

In the wider federated structure, the move to restructure the University has required UWS Nepean to review the role of the member, its academic committees and advisory boards in relationship to central bodies such as the Academic Board and the Board of Governors. Hopefully this restructuring will result in greater accountability at lower levels of the organisation and an appropriate monitoring of quality control issues.

The development of cross member competition within the University of Western Sydney has contributed significantly to UWS Nepean's striving for recognition of best practice.

While UWS Nepean's quality procedures have emerged progressively in response to current imperatives, there is a growing awareness the quality assurance needs to be firmly imbedded in the new structure in terms of procedures, practices and intended outcomes. The operational and functional aspects need to be moulded into a functional whole at member level. UWS Nepean is moving towards a total quality approach which incorporates:

- systematic and continuous improvement of the quality related processes and practices;
- better management of evaluative processes to ascertain the relationship between quality assurance systems and educational outcomes;
- active participation of all organisational members in quality improvement;
- recognition of customer needs as an important bases for quality improvement;
- co-ordination and co-ordination within and across faculties and divisions;
- continuous design and review of processes to ensure adherence to university related values not just economic and functional imperatives;
- a view of quality assessment which facilitates the transfer of authority from government control to internal control.

The capacity to successfully move forward in quality assurance will be dependent upon the continuance of and commitment to the promotion of quality assurance processes within US Nepean irrespective of whether quality improvement is linked to substantial external funding bases. The capacity to provide the resources required for quality improvement is dependent upon a unit's capacity to influence institutional budget allocation decisions, the institution's capacity to relocate funds and the level of external funding to the University of Western Sydney.

It is suggested that variations in the strength of authority exercised at different levels of the system are important contextual factors in predicting internal funding allocations. These factors are themselves undergoing change. Whether quality assessment at UWS Nepean is helping to drive change or is itself a product of change is difficult to ascertain. The outcome of the university restructuring process should be pivotal to the future impact of quality assurance within the institution.

Considering the massive changes UWS Nepean has been exposed to at system and federated level, it is evident that the institution has not only survived but thrived in a market oriented system. It has demonstrated a tenacity in developing an identity in which evidence exists that quality assurance has made an impact on management and decision making. The ideals of the quality assurance processes are embedded in its culture; ample good will exists to address the challenge of building a comprehensive inter-related programme of quality assurance.

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The author is writing in a personal capacity, and the view expressed should not be taken as representative of the institution to which she belongs. The thinking embodied in this article has been influenced in discussion with a number of institutional colleagues in higher education, who cannot be held responsible for the views presented here. Every attempt has been made to ensure the accuracy of the information presented.

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