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ABSTRACT

This paper examines the adjustment of Napier Polytechnic of Edinburgh (Scotland, United Kingdom) to educational change. Discussed are: the historical development of the school; Napier's role in today's higher education; the school's shift from external to internal quality control of Council for National Academic Awards courses; the school's adjustment in moving from external to internal quality control of Scottish National Vocational Education Council courses; and the development of internal and external quality control mechanisms. Further examined are the school's responses to market demand and the changes of demand by its customers--the students, the employers, and the professional bodies. Finally, the report traces the change in Napier's financial support and its response to that change as the school eventually shifted from being dependent solely on the government for financial support to receiving fee income and income generated through commercial activities channelled through its own company, Polyed. Appendices provide Napier's business school structure for the first-year, full time degree program prior to 1987; the school's common first-year examination/assessment procedures agreed to in 1987 and the exemption structure; an analysis, from 1984-1990, of Napier's examination performance in the three degrees of accounting, business studies, and commerce; and the overall ratings. (GLR)

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A SCOTTISH APPROACH TO THE CHALLENGE OF EDUCATIONAL CHANGE

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1. THE HISTORICAL DEVELOPMENT OF NAPIER POLYTECHNIC

1.1 Napier College

On 7 September 1964 Napier Technical College opened to 4,400 day-release students and 2,485 evening students. The staff consisted of the Principal, Depute Principal, 10 Heads of Department, 19 Senior Assistants, 94 Assistant Teachers, 300 part-time teachers and 17 Administrative staff. 73 courses were offered including Scottish Certificate of Education courses at 'O' and 'H' grade, City and Guilds and Higher National Certificate courses. The College was built around the former Merchiston Castle, home of John Napier, inventor of logarithms, who was born in the Tower of Merchiston, in 1550. The Tower, restored and refurbished remains the focal point of the Merchiston campus today. In April 1967 the change of name of the College to Napier College of Science and Technology was approved.

1.2 Merger with the College of Commerce

In September 1968 the Edinburgh College of Commerce officially opened at Sighthill Court in Edinburgh. A nucleus organisation for the College had been offering a number of courses in the old James Gillespie's High School for Girls since session 1966-67 with student enrolments totalling 1,306 day students and 2,682 evening students.

By 1970 both Napier College of Science and Technology and the Edinburgh College of Commerce were preparing proposals for Degree courses to be validated by the Council for National Academic Awards (CNAA) and the first of these proposals to be accepted was Napier College's BSc in Science with Industrial Studies which was offered for the first time in Session 1971-72.

Discussions began in 1973 on the amalgamation of the Edinburgh College of Commerce with Napier College of Science and Technology. This amalgamation took place on 1 October 1974 and the new Napier College of Commerce and Technology was born. A College Council was formed and the College adopted a five Faculty structure, namely of Science, Technology, Humanities, Industrial Resources and Management and Business and Professional Studies. This number of Faculties was reduced to four in 1977 with the amalgamation of Industrial Resources and Management and Business and Professional Studies to create the Faculty of Professional Studies.

1.3 Central Institution Status

As a result of the report published by the Scottish Council for Tertiary Education in 1982, which recommended that local authority colleges whose courses were mainly at an advanced level, which included Napier with over 90% of its courses at advanced level, it was proposed that Napier should transfer from Local Authority Control to the Central Institution sector. The Secretary of State for Scotland accepted this report in June 1983 and the change of status become effective from September 1985 with the establishment of a Governing Body fully responsible for the oversight of the institution. Some of the main benefits of this transfer to Central Institution status were the right to manage the College's affairs, its eligibility to receive funding under various Government initiatives and the ability to negotiate directly with the Scottish Office over funding and other issues.

1.4 Napier Polytechnic of Edinburgh

Napier's status as an Educational establishment has been recognised throughout its development in many ways, the most notable of which have been the official opening of the Queen's Library on 2 July 1984 by Her Majesty The Queen and The Duke of Edinburgh; the award of the OBE to Napier's Depute Principal, Dr K J Anderson in June 1987; the official opening of the Craiglockhart Campus on 3 September 1987 by the Prime Minister, Mrs Margaret Thatcher and the award of CBE to Principal W Turneau in June 1989. Its role and achievements in higher education were recognised when Parliament ratified the proposal that Napier College of Commerce and Technology should be designated Napier Polytechnic of Edinburgh with effect from 1 November 1988. The new title "Polytechnic" was seen to have international recognition and standing, which would benefit student recruitment and research both at home and overseas.

2. **NAPIER'S ROLE IN HIGHER EDUCATION TODAY**

2.1 Present Structure

As a Central Institution, Napier has developed to become the largest public sector institution of higher education in Scotland enrolling 5,744 full-time and 3,357 part-time students in 1991-92 and employing almost 500 academic staff and over 550 support staff organised across the 20 academic departments which make up the four faculties - one of which is the Business School. There is a central administration and educational and support units and teaching is ongoing on seven campuses, with the eighth and ninth campus newly purchased and under development.

Napier receives its income through the Scottish Office Education Department (SOED), recurrent grant, fees and commercial activities channelled via its own company Polyed.

In recognition of the level and type of courses offered by the Faculty of Professional Studies, and its standing in relation to industry, commerce and other educational establishments, the decision was taken, with effect from November 1990, that this Faculty should be re-titled The Napier Business School initially for external and marketing purposes but finally for all purposes following agreement reached by the Governing Body in December 1991.

In session 1991-92 The Business School enrolled 3,471 students (1661 Full-time and 1810 Part-time) out of a total Polytechnic enrolment of 9,101 thus accounting for 38% of the Polytechnic student enrolment.

2.2 Future Status

The publication in May 1991 of the Government's White Paper "Higher Education - A New Framework" marks the latest stage in the development of the Polytechnic. Under the terms of the resulting legislation - the Further and Higher Education (Scotland) Act, which received the Royal Assent on 16 March 1992 - Napier Polytechnic will be extended full degree-awarding powers and will be able to include the word "University" in its title with effect from 16 May 1992. In Session 1992-93, our students will be enrolling at Napier University - just 28 years after Napier Technical College first opened its doors to students.

2.3 Articulation

In its wide range of courses Napier offers 28 Post Graduate courses, 36 Under Graduate Degree Courses and 47 Diploma, Certificate and Professional courses.

A high percentage of these courses have been designed and developed to articulate with each other and with courses offered elsewhere.

No longer are students restricted to entering year one of their chosen course, completing that course and then moving to year one of the next course on the next rung of the academic ladder. Now it is almost common place for a percentage of students to gain direct entry to a later year of a course because of their previous qualifications, proven ability or progress on an articulating course.

Where there are discrepancies in course content which would make transfer difficult, bridging courses are provided or self study packages prepared to ensure that students can progress by the shortest possible route to achieve their potential, and wherever possible, courses are designed to ensure that a student leaving before completing the course in its entirety, receives a qualification commensurate with their achievements.

In addition, the Business School is the only Faculty in the Polytechnic to operate a common first year across three of its full time degrees (McLachlan & Wood: March 1991/May 1991). This allows students to delay their final choice of course until the end of their first year of study and gives them the opportunity to transfer between the three degrees if they so wish. This "commonality" is presently being extended across the remaining undergraduate provision in the Business School as the school prepares for the modularisation of the Polytechnic's undergraduate courses in Session 1992-93.

2.4 Wider Access

Napier is committed to the tenets of wider access (McLachlan & Wood 1992) - its student intake, being drawn from all walks of life and covering a wide age range, includes school leavers aged 17 and 18 with traditional entry qualifications - Scottish Certificate of Education (SCE) Highers and Standard Grade, and General Certificate of Education (GCE) A Level passes; graduates looking for postgraduate qualifications; employees looking to improve their chances of promotion and gain professional qualifications; mature students, perhaps with no academic qualifications, hoping for a change of career or perhaps a return to work after a gap of several years raising a family.

2.5 Catchment Area

53% of Napier students are "local" students, coming from within Lothian Region; 40% come from the rest of Scotland and 7% are drawn from throughout the United Kingdom and overseas. An increasing number of students come from the Far East - Hong Kong students accounting for 50% of Napier's overseas student population. In fact Napier has its own very active Chinese Society organised and run by its Chinese students. In addition involvement in the Erasmus and Comett schemes has increased with many Erasmus students joining intermediate years of Napier courses and a number of Napier students undertaking part of their studies in Europe.

2.6 Credit Accumulation and Transfer Scheme (CATS)

Under the CAT scheme operated within Napier, students are given credit for previous qualifications and work experience where that has been relevant and can be assessed. They can then enter an appropriate course of their choice with advanced standing or, in consultation with advisers of studies and course leaders can undertake a course of study specifically designed for them using components from more than one course offered in the Polytechnic - the academic content and named qualification having been agreed beforehand. This "building block" approach will run in parallel with, and be made easier to administer with the advent of modularisation in Session 1992-93.

2.7 Franchising

A Government White Paper published in 1987 (HMSO: 1987) strongly recommended that Institutions of Higher Education should make every effort to widen access to and increase participation in higher education. In response to this rejoinder many such institutions - particularly the Polytechnics - have increased collaboration with further education colleges.

Napier had collaborated closely with local further education colleges for some years particularly in relation to ensuring that courses offered there articulated closely with Napier's provision thus allowing successful further education students to progress to higher education courses with minimum transitional arrangements being required.

However, Napier - along with other higher education institutions, is taking this collaboration a stage further and is actively involved in negotiations regarding the franchising of the first year, and perhaps the second year, of specific courses to FE Colleges. In essence this would mean that students would study for one or two years at an FE College and be guaranteed progression to the second or third year of specified courses within the higher education institution.

The benefits of franchising are many -

- access to higher education is widened with successful students on the franchised courses guaranteed access to specified higher education courses with advanced standing;

students enrolling on franchised courses can continue to study in their home environment thus avoiding the traumas and problems associated with studying in a strange town perhaps far from home - this is particularly beneficial to the less mature school leavers and to the mature students returning to education but with no wish to disrupt their family or social life. With the holding of student grants at a fixed level, with no cost of living increase, and the spread of the use of student loans or bank overdrafts as a means of supplementing student grants, living at home and attending a local college is cheaper thus more attractive to students and parents;

the college operating the franchised course becomes involved in higher level teaching which contributes towards staff development;

the franchising institution enjoys a release of resources in respect of accommodation, pressure on library and computing facilities and perhaps more importantly for staff time which will enable staff to become more involved in research, consultancy and self and course development.

However, any franchising agreement must pay particular attention to quality control issues with the franchising institution being able to ensure that students coming from the further education college will have had appropriate experience of information technology and research methodology and will have achieved the necessary academic standards, using appropriate learning techniques, to transfer successfully to the later years of higher education provision in the receiving institution.

Franchising for Napier is in the early stages of negotiation. However, it is being actively pursued with recent visits to Hong Kong Polytechnic by the Chairman of the Academic Standards Committee and to Dumfries and Galloway College of Technology by members of staff from the Business School exploring the possibility of franchising the Common First Year.

3. MOVE FROM EXTERNAL TO INTERNAL QUALITY CONTROL OF CNAACOURSES

3.1 The Establishment of CNAAC

In the past only universities had the power to award degrees. However, with the increasing need for industrially-related courses in the field of technology in the 1950s, the Government established a National Council for Technological Awards (NCTA) in 1955 with the power to award Honours Degrees to students who had successfully completed approved courses mainly at colleges of advanced technology. This development was expanded following the findings of the Robbins Committee on Higher Education in 1963 and the Council for National Academic Awards (CNAAC) was established in 1964 as a development of the NCTA, with a controlling Council of 32 members overseeing a range of committees responsible for specific subject areas or particular aspects of CNAAC's work, the committees in turn overseeing the workings of a number of Boards responsible for specific subject areas.

3.2 CNAAC Quality Control

Beginning with the development of Napier's first degree course the BSc Science with Industrial Studies, introduced in Session 1971-72, - Napier's undergraduate and postgraduate taught courses were developed and operated under the auspices of CNAAC.

For an institution to offer a CNAA validated course it had to convince CNAA that it could provide a suitable environment for degree level work, not only in an academic context but also in relation to the accommodation and facilities available. In order to achieve this approval the Institution had to progress through a defined set of procedures beginning with the preparation of the submission document by the course team and its submission, together with back-up material relating to the status of the Institution itself, to the relevant CNAA subject Board. If the proposal met with the initial approval of this Board, a panel of CNAA members would arrange to visit the institution to discuss the proposal with the senior management and the course team and to view for themselves the facilities available to the students, ie library, computing etc.

The proposal, if successful, would be approved by the visiting CNAA panel, perhaps with conditions attached. Before 1979 CNAA approval was given for a five year period at the end of which the course had to be submitted for revalidation. Following 1979 indefinite approval was given subject to periodic progress review visits, normally every five years, to ensure that the course continued to meet its objectives.

Over and above the validation and review of courses, CNAA carried out quinquennial institutional visits to ensure that the Institution as a whole continued to provide a suitable academic environment for students pursuing CNAA validated courses.

3.3 The Slackening of CNAA Control

Contrary to the predictions of the Robbins Committee, between 1964 and 1982 the number of first degree students in public sector colleges and polytechnics had increased ten times while those at universities, including the Open University, had merely increased 2½ times.

In April 1984 the Secretaries of State for Education and Science for England, for Scotland and for Wales appointed a Committee of Enquiry into Academic Validation in Public Sector Higher Education. The Committee was chaired by Sir Norman Lindop, Principal of the British School of Osteopathy and former Director of Hatfield Polytechnic. One of the members of the Committee was Dr Joseph Dunning, a former Principal at Napier College.

In the main the remit of this Committee was to investigate public sector degree standards and the procedures for their validation with a view to making recommendations that would ensure a uniform standard at Degree level and in Honours classifications throughout the public sector education system and an effective system for the maintenance of these standards. Part of the Committee's report centred on the workings of CNAA in relation to their system for approving and validating taught degree courses.

The Report of the Committee (Lindop 1985), published in April 1985, praised the achievements of CNAA but recommended radical changes in validation arrangements arguing that many institutions in the public sector were capable of taking responsibility for their own academic standards.

During this period CNAA itself had been carrying out a review of its procedures and had produced a number of proposals for reforming its validation procedures. While the Committee welcomed CNAA's proposals it believed that they should have been more far reaching and recommended that appropriate institutions should be given the power to award their own degrees while the remainder continued to be externally validated by CNAA under a new system of delegated authority and accreditation.

Following many months of deliberation the Government, in its response to the Lindop report, published on 17 March 1986, agreed with the Committee's view that the most effective safeguard of academic standards was the existence of a strong, self-critical academic community within an institution and approved CNAAs' proposals to allow accredited institutions to validate their own degrees (CNAAs 1986). However, at that time The Government deferred a final decision on the proposal that some public sector institutions should award their own degrees.

Finally, in 1987 (CNAAs 1987), CNAAs confirmed the procedures for awarding delegated authority and accredited status to approved institutions.

3.4 CNAAs Delegated Authority

In the first move towards greater internal quality control (McLachlan & Wood 1989) Napier applied for and was granted, with effect from 1 January 1987, delegated authority to validate and review taught courses leading to CNAAs awards. Under delegated authority, the Academic Board was ultimately responsible for the academic health of its CNAAs taught courses and of the Institution as a whole. The main shift in emphasis was that, whereas before, the validation procedures had been CNAAs driven, under delegated authority they became Institution driven. Napier utilised its revised Committee structure to devise its own procedures for the validation and review of its taught CNAAs courses with CNAAs representatives being invited to become members of the final validation panel. In addition the Courses Validation Unit, now called the Quality Assurance Unit, came into being. One of the first successful events conducted under the new delegated authority procedures was the review of the academic "health" of the Faculty of Professional Studies - now the Business School - and the validation of its courses requiring re-approval.

3.5 CNAAs Accredited Status

3.5.1 Taught Courses

Napier responded to CNAAs' agreed "Future Strategy" in relation to quality and validation and its relationship with institutions by applying for fully accredited status between August and December 1987. The application contained full details of Napier's revised procedures for validation, monitoring and review and a critical appraisal of the operation of the validation and review system since the award of delegated authority.

Following an official signing ceremony in London on 31 March 1988, Napier became the first non-university institution of higher education in Scotland to be given both the power to validate and award degrees in its own name and the responsibility for maintaining and improving the quality of its taught CNAAs courses.

3.5.2 Research Degrees

In addition to accredited status for its taught CNAAs courses Napier moved towards similar status for its research degrees with the establishment of a Research Degrees Committee in May 1991 following the successful CNAAs Research Degrees Accreditation Visit in February 1991.

4. MOVE FROM EXTERNAL TO INTERNAL QUALITY CONTROL OF SCOTVEC COURSES

4.1 Historical Role of SCOTVEC

In addition to CNAAs degree and postgraduate courses Napier offers a number of courses at Higher National Certificate (HNC - normally one year full time or equivalent) and Higher National Diploma (HND - normally two years full time or equivalent) level leading to qualifications awarded by the Scottish National Vocational Education Council (SCOTVEC). This Council was formed from the amalgamation of SCOTEC (Scottish Technical Education Council) and SCOTBEC (Scottish Business Education Council) in 1985.

Traditionally these courses and their syllabi were designed and developed by SCOTVEC. In addition the end of session subject examinations and Projects were set and marked by SCOTVEC assessors. The Institutions' involvement was restricted in the main to the teaching of the syllabi with little opportunity for input to the revision of existing syllabi or the development of new syllabi.

4.2 SCOTVEC Devolved Responsibility to Institutions

SCOTVEC published a Consultative Paper in 1987 (SCOTVEC 1987) which proposed a more flexible system of advanced provision and a number of strategies for achieving this flexibility while retaining the nationally recognised standards of its awards.

Following consideration of the numerous responses received from the fields of education, commerce, industry and professional bodies, SCOTVEC's policy paper was published in 1988 (SCOTVEC 1988) which laid down the criteria for the development of unit based advanced courses leading to the award of HNC and HND qualifications. In addition SCOTVEC proposed devolving responsibility to recognised institutions for the design and development of course structure, syllabi and assessment within a framework for maintaining nationally recognised standards.

SCOTVEC's proposals for unit based qualifications were complementary to developments UK wide to establish vocational unit based qualifications which would widen access to higher education and a credit accumulation and transfer approach to gaining qualifications.

4.3 SCOTVEC Phase 1 Pilot Courses

As a first step towards the development of SCOTVEC's new advanced courses a number of nationally recognised institutions were invited to design and operate pilot courses which would assist SCOTVEC in refining their new system and ensuring the adoption of best practice nation wide. It was agreed that the extent of devolved responsibility would depend on the individual Institution's experience and standing in relation to the quality control and maintenance of its academic standards.

Napier was one of the first institutions to offer Phase 1 Pilot courses in Session 1988-89. Those offered included HNC and HND in Office Studies and Business Studies in the Business School and courses in Electrical and Electronic Engineering, Software Engineering and Library and Information Services throughout the Polytechnic.

In addition Napier was granted the maximum extent of devolved responsibility with SCOTVEC's involvement being restricted to its representatives being present at the final validation of these courses.

4.4 Phase 2 Pilot Courses in Competency Terms

Experiences gained from the first year of operation of the Phase 1 courses led to improvements in the design of Phase 2 course and validation procedures and the adoption of a competency based approach to unit development and assessment. One of the first competency based courses to be designed and operated under the Phase 2 Pilot Course, guidelines was the HNC/HND Accounting course, operational from Session 1989-90 in the Business School, which was deliberately designed to be part of the portfolio of courses in accounting and to articulate with the degree and professional courses offered by the Department of Accounting and Law.

4.5 Scottish Office Education Department (SOED) Involvement in Course Development

Before any new course can be introduced or an existing course re-approved or restructured, SOED must confirm its continuing support, in terms of the recurrent grant allocation for the introduction or continuation of the course in question.

Course documentation is submitted to SOED after the Academic Planning stage in the Scrutiny/Validation procedures when SOED must be assured that the course in question meets the needs of industry/commerce in terms of employment prospects; is in line with Government policy on education and training; does not duplicate similar provision within the Institution's immediate catchment area and is of such a design and content that it will attract sufficient demand from students.

5. **QUALITY CONTROL MECHANISMS - INTERNAL AND EXTERNAL**

5.1 Scrutiny and Validation

To ensure and maintain the academic standards of its course provision Napier has adopted a system of interdisciplinary peer group review which draws on the expertise available in industry, commerce and education.

Existing courses falling due for review, and new courses being developed, are subject to a series of scrutiny events commencing at Faculty level and progressing via Academic Planning - responsible for assessing new or changed resource implications - to Academic Standards - responsible for the academic content and standard of the learning experience - culminating in a final validation or review event at which formal approval for the continuation or introduction of the course in question may or may not be granted. The involvement of external specialists, drawn from education or industry and commerce, in the Academic Standards and Validation/Review events helps to maintain comparable standards of courses throughout the United Kingdom.

5.2 Annual Course Monitoring

Napier operates a system of annual course monitoring which was originally developed and introduced by the Faculty of Professional Studies - now the Business School (McLachlan & Wood 1990) in response to the need to address issues of accountability and quality assurance and to develop a system that could effectively monitor the increasing number of courses being developed.

Each year course leaders, following consultation with their course team, produce a report on the progress of their course in the preceding session - looking at performance indicators such as students' entrance qualifications, pass rates, drop out rates and student progression, and a critical analysis which highlights particular achievements, innovations introduced, problems encountered and steps taken to resolve them and plans for the future.

These reports, together with copies of reports from external examiners where appropriate are submitted to the Annual Reports Sub-Committee established by the parent Faculty and each Course Leader is allocated a time slot of about 20 minutes, in which he can discuss his report with the members of the Sub-Committee. Reference is made to the Sub-Committee's comments recorded the previous year to ensure that any problems discussed at that time have been resolved.

If a major problem is identified during the annual reports cycle it is immediately referred to the Dean of Faculty for action. Following the completion of the series of Sub-Committee meetings a report is presented to the Faculty Board highlighting problems specific to individual courses and/or trends emerging across the Faculty as a whole.

Both action taken by the Dean of Faculty, and by the Faculty Board, helps to spread good practice from course to course where such a transfer is possible.

Finally the reports from the Sub-Committee and the Faculty Board are submitted with the Course Annual Reports to the Academic Standards Committee whose remit is to ensure that Faculties have carried out the annual monitoring and evaluation of their courses in a thorough and effective manner.

This system of peer review and consultation provides an effective quality control mechanism not only from the point of view of those carrying out the annual monitoring of courses but also from the Course Teams' point of view who see that their views will be taken on board, that advice based on expertise and practical experience can be sought and given, and that action will be taken at Faculty level where appropriate.

5.3 External Examiners/Verifiers

External Examiners are appointed by the Institution to take responsibility for ensuring that fair and appropriate assessment is applied to all final stage subjects/projects contributing to the award of a qualification. In the case of SCOTVEC these examiners are called verifiers

All such examiners have to be approved by the Academic Standards Committee and are involved in the moderation and marking of first and second diet examination papers, and the conduct of any viva voce examinations. They attend meetings of the examination board established for their particular course and contribute to discussion on the students' performance and the award of qualifications.

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The operation of an external examiner network facilitates the dissemination of best practice in relation to methods of assessment and standards of marking and ensures that comparable standards are maintained for comparable courses.

On completion of each academic session every external examiner is required to submit a report to the Academic Standards Committee on his assessment of the standards being applied in the setting and marking of examination questions and of the academic standards being achieved by the students in comparison to those being achieved on similar courses elsewhere.

Any issues or concerns highlighted in these reports are brought to the attention of the appropriate Course Board of Studies and Dean of Faculty with a request that they be addressed and a report produced on proposed action to resolve the problem.

5.4 Professional Bodies

Many of Napier's courses are specifically designed to lead to the award of exemptions from examinations of Professional Bodies. Because of this these bodies are closely involved in the developmental stages of new courses and in the review and restructuring of existing courses to ensure that maximum exemptions are gained for the successful students. This can lead to extensive discussions between the academic staff and professional bodies leading to persuasion and compromise to ensure an appropriate academic base for the student and an acceptable academic profile for the body concerned (McLachlan & Wood March 1991/May 1991).

5.5 Employers

Napier is committed to providing vocationally orientated courses and enjoys a remarkable record with 94% of its successful students finding employment or progressing to further qualifications within six months of graduating. To maintain the employability of its students the staff of Napier have established close links with employers in the fields of industry and commerce who are involved in the debate leading to the development and re-structuring of courses.

Many courses include periods of work experience when employers are depended upon to provide placements for students and to become involved in the assessment of the students' performance during their period in the workplace. Thus employers too contribute to the maintenance of quality through their involvement in course design, their membership of scrutiny and validation panels and their assessment of students carrying out the work placement element of their courses.

5.6 Summary

Napier now operates effective quality control procedures based on the use of peer review and performance indicators, its Academic Board taking full responsibility for the academic health of the Institution and the academic standards of its courses.

There is only a minimal involvement of SCOTVEC in these procedures where a course leads to a SCOTVEC qualification and a similar approach is taken by Professional Bodies whose courses are run by Napier staff ie The Institute of Personnel Management (IPM); The Chartered Association of Certified Accountants (ACCA); the Institute of Chartered Secretaries and Administrators (ICSA).

This autonomy allows Napier to respond quickly to the needs of the marketplace and to Government initiatives in relation to course provision and to continue to update regularly the course content in line with, and in anticipation of, future needs of employers, all the while bearing in mind the necessity for continuing to meet the requirements of Professional Bodies for exemption purposes.

6. RESPONDING TO MARKET DEMAND

6.1 Foresight and Ingenuity

Being a vocationally-orientated Institution, Napier has always prided itself in its ability to respond to the changing demands of its customers - the students, the employers and the Professional Bodies - within available resources.

To meet these demands within a short timescale Napier needed to be in control of its own future development and appropriate forward planning was formalised to ensure that Napier was well prepared and in a strong position to take advantage of changing Governmental policy decisions as and when they arose. This is evidenced by Napier's rapid development in its 28-year history from a fairly small Technology College, teaching courses designed and assessed elsewhere and with no self control of finances, to a large University in full control of its finances and course development. This rapid expansion and development has been due in no small measure to the ability of its management and staff to anticipate future needs and to take action to meet those needs before they arise. A typical example of this foresight and ingenuity was the introduction of the common first year curriculum for the three full-time degrees in the then Faculty of Professional Studies.

6.2 Rationale for the Introduction of a Common First Year Curriculum

For some time the Polytechnic as a whole, and the Faculty in particular, had recognised the need to increase flexibility between courses to provide students with the maximum degree of choice and progression routes within the educational system.

In particular the needs of first year entrants, mainly progressing directly from the school to the Polytechnic environment, and many studying subjects and disciplines for the first time, were addressed. It had been recognised that many first year students were unsure of their aptitudes and abilities in relation to specific disciplines and were unclear as to the appropriate course for them. Only once they were enrolled on a course and actually involved in the study of its subjects did they begin to realise whether or not the course was right for them.

It was argued that, by introducing a common first year, students would be allowed to sample a variety of subjects in business education, in the widest sense, which would enable them to decide whether or not their original interest in a specific course had been borne out and whether or not they had an aptitude for that particular discipline. The common curriculum would then give students, who believed that their first choice of course had been a wrong choice, the option of transferring to a different degree, on completion of the first year, without loss of time and with no need for access or bridging courses in any specific subjects.

In addition to increased flexibility it was suggested that additional benefits of this proposal would be the opportunity to provide a broader base for each of the degrees; the possibility of introducing common assessment regulations, with the attendant benefits for examination administration; the opportunity to revise and develop teaching methods and extend the use of student-centred learning; and the opportunity for students to integrate socially across the three degrees. It was recognised that there was also the opportunity for common lectures although the question of appropriate lecture accommodation was raised.

It was likely that there would be some resource saving but this could not be quantified at this stage as the numbers were uncertain, as was the available accommodation. This was, properly, regarded as a peripheral issue in the discussions.

6.3 Development Procedures

6.3.1 Policy Paper

In September 1985 the Dean of the Faculty of Professional Studies, following discussion with the Course Leaders of the Faculty's three full-time degrees in Accounting, Business Studies and Commerce, submitted a discussion document to the Faculty Board proposing the development of a common first year for the three degrees.

It was underlined that any first year structure must underpin the later years of the individual degrees and allow the students to make an informed decision regarding their course choice at the end of their first year of study.

It was recognised that the introduction of a common first year would have implications for the later years of the Degrees, with the added complication that the degrees varied in length and structure:

BA Accounting	3 years Degree
BA Business Studies	4 years Degree/5 years Honours with 1 year Industrial Placement
BA Commerce	4 years Degree and Honours with short one-term Industrial Placement.

It was stressed that individual course identity must be maintained, as each course had established a distinct market, in terms of students and employers, and to maintain the sense of commitment felt by staff to an individual course.

6.3.2 Outline Course Structure

A shift away from the traditional five or six first-year subjects (Appendix I) was proposed and in the first instance the Course Boards were asked to consider the adoption of the following three subject areas:

- (a) The Economic and Financial Framework of Business
(Financial Accounting and Economics)

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- (b) Business Organisation and Society (Organisational Aspects of Business; Behavioural Science and the Legal Framework)
- (c) Information Systems and Quantitative Methods (Computerised Information Systems and Mathematical and Statistical Concepts)

In addition it was proposed that there should be weekly seminars on study and learning methods and course and career choices.

There were many obstacles to be overcome before a common structure could be agreed that met the requirements of the three degrees without distorting their aims and objectives in relation to the perceived needs of the students and of the employers.

In particular the needs of the Accounting Degree in relation to maintaining exemptions from the Professional Accounting Bodies was a constraining factor on the structure and mix of subjects that could be adopted.

Each Board rejected the initial proposal to adopt three subject areas on the grounds that there would be insufficient time available to each 'subject' within an area to allow a meaningful syllabus to be devised.

The possibility of awarding exemptions from end of year examinations to students who had performed particularly well in coursework was discussed at some length.

Following ten months of extensive discussion at Faculty and Board of Studies level, involving the establishment of a special Faculty Committee and discussion with staff, students, External Examiners and relevant Professional Bodies, through goodwill and compromise, a Common First Year Structure (Table 1); Assessment Procedures (Appendix II) and Exemption Policy (Appendix III), were agreed by the Faculty and the Course Boards for the full-time Degrees:

Table 1: Common First Year Structure: 1987

<u>Subject</u>	<u>Timetabled Work Hours per Week</u>	<u>No of Weeks</u>	<u>Total Hours per Session</u>
Accounting	3.5	30	105
Behavioural Studies	2.5	30	75
Business Organisation	2.5	30	75
Economics I	2.5	30	75
Information Systems and Quantitative Methods I	5.0	30	150
Seminar	1.0	30	30
	17.0		510

To a lesser extent a degree of commonality between optional/elective subjects in the final years of the Degree programme was adopted by the BA Commerce and BA Business Studies Degrees.

6.4 Quality Control Procedures

In 1987 Napier had been granted Delegated Authority by CNAAC with the Academic Board ultimately responsible for the academic standards of its taught CNAAC courses.

At the same time CNAAC had agreed that the dates for the review of the Faculty's CNAAC courses should be rationalised and that all such courses should be considered during a review of the Faculty as a whole.

Individual course documentation was prepared by the Course Working Parties and agreed by the respective Course Board. In addition a Faculty document, prepared by the Dean of Faculty and agreed by the Faculty Board, covered areas of common interest to each of the CNAAC courses under review - an overview of the work of the Faculty and its course provision; statements on research and consultancy, teaching and learning methods and information technology support.

In 1987, the entire documentation was scrutinised by a Faculty Sub-Committee (26 February), an Academic Standards Scrutiny Panel (18 March) and the Chairman of the Academic Planning Committee - responsible for resources - before being submitted to the Scottish Office Education Department for confirmation of that Department's continued support for the courses under review in their revised format.

The final review event, under the new delegated authority procedures, took place over 6-7 May 1987 with four representatives from CNAAC on the Validation Panel.

Despite a number of setbacks during the two-day event and the very real concerns expressed by the Validation Panel (which echoed those stated by the Polytechnic's Academic Standards Committee), regarding whether or not students would benefit from a common first year; whether or not progression rates would be affected; whether or not the subject content would be appropriate for successful completion of the later years of each degree and over the complexity of administering the common curriculum and its attendant resource implications, particularly in relation to computing facilities, the panel was impressed by the commitment and enthusiasm of the staff and by the supportive comments of the students and of the External Examiners.

The Panel approved the introduction of the common first year in Session 1987-88, subject to the appointment of a Common First Year Co-ordinator, to oversee the administrative aspects of the year, and the establishment of regular meetings of the three Course Leaders to monitor student performance and progression.

6.5 Critical Appraisal of the Operation of the Common First Year

The social integration of the students has not been as great as might have been hoped and the problem of large enough lecture theatres to accommodate the whole first year is only now being addressed with the construction of a new lecture block about to commence.

The administrative implications of the change have increased the workload for the Course Leaders who have been responsible for the administration of the Common First Year so far, but their enthusiasm and dedication has ensured that any problems have been resolved.

The computing facilities have kept pace with demand and this has been a major benefit to the students. The Department of Business Information Management has provided a broad-based introduction to Information Technology in the First Year Programme laying the foundation for the later years of each degree.

Some teaching resources have been saved and this has been of benefit to the participating departments.

Only seven students have transferred between degrees with the majority choosing to remain on the course of their original choice.

The possibility of exemptions from first year degree examinations has been a particular incentive to perform well throughout the year and has eased the pressure on students during the examination period.

The commonality of the assessment regulations has meant a rational structure between the three degrees, and has removed a source of annoyance for the students.

An analysis of the results achieved before and after the introduction of the Common First Year has been carried out comparing the three years before and after the introduction of the Common First Year (McLachlan & Wood 1992) (Appendix IV). The analysis showed a Z statistic ranging from - 0.49 to 1.18 and an overall figure of 0.86, which means that there is no statistically significant difference between pass rates in the three years prior to and the three years after the introduction of the Common First Year.

This supports the expectation of the course teams that students would not be disadvantaged by the introduction of a Common First Year.

By any standards it can only be seen to have been an unqualified success. The gloomy forecasts of the problems which might have raised their heads have not been realised, partly at least due to the enthusiasm of the staff, recognised by the Scrutiny Panel, and to the supportive attitude of the students.

This would seem to be a model which could be followed in many institutions as it rationalises staff resources, the provision offered to students and the base level of course introduction to a range of degrees, postponing a final choice by the student until a further year's maturity has been gained, with a valuable experience of conditions in the institution. It also serves as a useful mechanism for persuading staff in different departments and disciplines to work together in the educational and administrative areas.

The successful conclusion of such a proposal requires commitment in those leading the move, and co-operation from the staff and students involved.

7. FUNDING

Between 1964 and 1985 Napier was under the control of the Local Authority and had to compete for funding with local primary and secondary schools and other further education colleges. There was little opportunity for bringing pressure to bear for increased funding and Napier, in common with all local authority education establishments, was affected by the policies of whichever political party held the power at local level, regardless of the policy of Central Government. In those years Napier depended solely on the Local Authority Education Department for finance. Staff were appointed/dismissed by the Department of Education with staff appointments being made subject to the approval of the Local Authority Education Committee. Often this meant that good staff, who did not wish to wait for several weeks after interview to hear whether or not they had been successful, were lost to the Institution. The Local Authority also controlled payroll and the purchasing and supply of consumables and capital equipment.

In 1985, Napier transferred out of Local Authority control to Central Institution (CI) status and Central Government control, competing with the remaining Scottish CIs for funding. Napier gained control of its finances with its management team being able to take decisions regarding the breakout of the annual budget (recurrent grant) to Faculties and Units. In addition Napier receives periodic cash allocations for the purchase of capital equipment and has benefitted from a number of Government initiatives where additional funding was made available - ie the "Switch to Technology" initiative which provided additional funding for attracting more students to technology based courses.

Napier is now the direct employer of its academic and support staff and can benefit from the competitive market when ordering capital equipment and consumables.

No longer is Napier dependant solely on the Government for finance, now receiving fee income and income generated through commercial activities channelled through its own company Polyed.

The Scottish Office of Education Department has treated Napier fairly and generously in the past recognising its need for additional teaching accommodation - with the purchase of the Craiglockhart Campus. In addition, as an independent organisation, Napier is able to raise capital for the purchase of other buildings when required, using such property as security.

However, the scenario is changing again with the advent of the Further and Higher Education (Scotland) Act and Napier will have to compete with the "old" Scottish Universities, the Polytechnics and Colleges of Higher Education for funding which will be controlled by a Scottish Higher Education Funding Council (SHEFC) expected to be fully operational by 31 March 1993.

The Council will control research funding and extensive discussion is expected to ensure that the allocation system adopted does not disadvantage the "new" Universities whose approach to research differs quite considerably from the traditional research carried out in the "old" Universities. To this end a UK-wide Research Assessment Exercise is currently being undertaken.

The new SHEFC will appoint a Quality Assessment Committee to take responsibility for the maintenance of academic standards across the higher education sector and it is expected that this will involve visits to assess quality in individual institutions on a periodic basis - somewhat similar to visits carried out at present by Her Majesty's Inspectors appointed to assess the quality of educational provision in the Polytechnics and HE Institutions.

This will be yet another Quality Control mechanism to ensure the continuing maintenance of academic standards across the higher education sector in Scotland.

8. THE WAY FORWARD

With wider access, more 'bridging' or 'specific catch-up courses' will be needed, based on self-tuition and CAL styles.

Franchising may lead to the shedding of first year intakes to a large extent and eventually there may be a split in course delivery with Years I and II being delivered in FE colleges (comparable to US Community Colleges) and final years being delivered at institutions such as Napier.

Space and equipment shortages may soon drive students to own personal notebook-style computers with instruction and tests being issued to them on disk.

Pressure to raise income will lead to a wide increase in commercial activities to generate extra funds and in provision of in-house courses for industry which, in turn, will be a less expensive option for training of employees.

International links will multiply and franchising across national boundaries, with student/staff exchanges will lead to pressure on students and staff to develop language skills.

So far as the new Funding Council in Scotland is concerned, there is no information as yet as to the future development of this Higher Education area. However, it seems that there will be a division of funding between teaching and research. Whether this is carried out on a whole institution basis, or on a departmental basis within institutions, is not clear. The 'new' universities (former polytechnics) may expect to be regarded as mainly teaching institutions, although they do have highly regarded research and some of the 'old' universities have departments with very little research.

The whole area of funding and allocation of funds according to teaching or research will link with the SHEFC quality assessment of teaching referred to above, on a Scottish basis and to Research Assessment which will be UK-based - a further complication.

It seems that departments will have to choose to have a research or a teaching thrust as to endeavour to maintain both strengths will be difficult.

A possible scenario is that the new funding council may decide to encourage promising departments, with no research track record but clear potential within the research area (and conversely to discourage unpromising departments which have failed to deliver research despite previous funding and opportunities).

The expansion of recruitment into higher education courses is a further complication which will lead to increased pressure on institutions to make fuller use of buildings which are often empty between June and September and for several weeks over Easter, Christmas and the New Year. This is an area where we can learn from the US experience.

So far as quality control is concerned the 'new' universities will be in a stronger position than the 'old' having been subjected to the rigours of scrutiny by CNAAB (in the past) and by Her Majesty's Inspectorate. These institutions are comfortable with the precepts of External Quality Control and have well established quality control mechanisms of their own and are seen by the public at large to be accountable for the standards of their courses and the quality of their graduate output.

However, the 'old' universities have always insisted on being the only arbiters of their own academic standards, there being no obligation for them to allow external academics, industrialist or education department inspectors to observe and comment on the quality of their courses. They do have an Academic Audit Unit established in 1990, whose aim is to audit each university once every three years. However, the auditors audit the structures established by the university for assessing and maintaining their own academic standards and they do not examine or comment upon the academic standards per se. The Unit's final report on the university's procedures becomes the property of the university in question which can, if it wishes, keep the content of the report private.

The 'old' universities may find it difficult to come to terms with 'quality' visits carried out by the new SHEFC Quality Assessment Committee and may have to seriously consider the re-structuring of their internal quality control mechanisms.

9. REFERENCES

Her Majesty's Stationery Office (HMSO) (April 1985): The Lindop Report

CNAAC (October 1986): Quality of Validation, Future Relationships with Institutions - A Consultative Document

CNAAC (February 1987): Future Strategy: Principles and Operation

Her Majesty's Stationery Office (HMSO) (1987): Higher Education - Meeting the Challenge

SCOTVEC (1987): Consultative Paper on SCOTVEC Higher Education Provision

SCOTVEC (March 1988): Advanced Courses Development Programme - Policy Paper (Revised and Updated January 1990)

McLachlan, J & Wood, V (August 1989): External to Internal Validation - A Scottish Experience: In Resources in Education (RIE), March 1990

McLachlan, J & Wood, V (September 1990): Communicate to Evaluate - A Scottish Polytechnic Approach: In Resources in Education (RIE), February 1991

McLachlan, J & Wood, V (March 1991): The Introduction of A Common First Year and Its Effects on Student Pass Rates

McLachlan, J & Wood, V (May 1991): Three Into One Did Go - Development of A Common First Year Curriculum: In Resources in Education (RIE), February 1992

McLachlan, J & Wood, V (March 1992): Selecting and Monitoring Performance of Students with Non-Standard Entry Qualifications

APPENDIX I

NAPIER POLYTECHNIC

FACULTY OF PROFESSIONAL STUDIES/Napier Business School

Structure of the First Year in each of the Faculty's

Full Time Degrees Prior to 1987

<u>BA ACCOUNTING</u>	<u>Total Hours Per Week (Student Hours)</u>
Financial Accounting	3
Management Accounting	2
Economics	3
Law	2
Info Systems & Quants	3
Behavioural Science	<u>3</u>
TOTAL	<u>16</u>
 <u>BA/BA(HONS) BUSINESS STUDIES</u>	
Accounting I	3
Business Law	3
Business Maths	3
Business Organisation	3
Economics	3
Seminar	<u>1</u>
TOTAL	<u>16</u>
 <u>BA/BA(HONS) COMMERCE</u>	
Behavioural Science	3
Business Organisation	3
Law	3.5
Quantitative Methods	3
Office Services/Admin	<u>4.5</u>
TOTAL	<u>17</u>

NAPIER POLYTECHNIC

FACULTY OF PROFESSIONAL STUDIES

Common First Year - Examination/Assessment Procedures

Agreed in 1987

1. General

Performance in each of four subjects in the foundation year(s) of each degree will be measured using coursework and examination marks.

In the case of ISQM performance will be assessed 100% by coursework set throughout the year.

2. Coursework

The student is required to complete satisfactorily the programme of work set, achieving an average mark of at least 40% in each subject of the course. Satisfactory completion of the coursework is a pre-requisite for entry to the end of session examinations. Exceptionally, at the discretion of the Board of Studies, a student, after further work and, having satisfactorily completed the coursework, may be permitted to enter the second diet examination for that subject.

During the year, after counselling, the student may be allowed to re-submit a piece of coursework which is unsatisfactory or alternatively to satisfactorily complete an alternative piece of coursework. The maximum mark which may be awarded for such work will be 40%.

3. Examination

Candidates will normally be expected to achieve a mark of at least 40% in each subject, this mark being calculated as $0.7 \times$ the end of session examination mark plus $0.3 \times$ the coursework mark. However, students gaining a mark of less than 35% in the end of session examination will normally be required to resit the examination. Students resitting the examination will normally be expected to obtain a minimum mark of 40% in the examination.

NAPIER POLYTECHNIC

FACULTY OF PROFESSIONAL STUDIES

Common First Year - Exemption Structure Agreed in 1987

Any student displaying exceptional merit in any subject area during the first two terms of the Foundation Stage may not gain any significant benefit from completing the end of session examination in that subject. Therefore those students who do display exceptional merit may be exempted from a maximum of two sessional examinations at the end of the foundation year. Such a decision will be made by the Board of Studies at the commencement of the third term.

The student's performance in coursework, including the presentation of tutorial papers and mid-session examinations, will be considered and any student achieving an average mark of 65%, with no single mark below 60% will normally be recognised as having displayed exceptional merit. At the discretion of the Board of Studies such a student may be offered the option of exemption from the end of session examination in the relevant subject, to a maximum of two exemptions.

Any student may decline such an invitation opting to undertake the end of session examination. For those students who do accept exemption the average of their coursework marks will be taken for Examination Board purposes.

APPENDIX IV

NAPIER POLYTECHNIC

ANALYSIS OF EXAMINATION PERFORMANCE IN THE THREE DEGREES 1984-1990

YEAR	ACCOUNTING			BUSINESS STDS			COMMERCE			OVERALL			
	T S	T P	Z	T S	T P	Z	T S	T P	Z	T S	T P	Z	
	O T	O A	P R	O T	O A	P R	O T	O A	P R	O T	O A	P R	
	T U	T S	A A	T U	T S	A A	T U	T S	A A	T U	T S	A A	
	A D	A S	S T	A D	A S	S T	A D	A S	S T	A D	A S	S T	
	L E	L E	S E	L E	L E	S R	L E	L E	S E	L E	L E	S E	
	N	D		N	D		N	D		N	D		
	N T			N T			N T			N T			
	O S			O S			O S			O S			
Pre Common First Year	84/85	34	30	88	63	45	71	57	47	82	154	122	79
	85/86	45	41	91	66	59	89	70	56	80	181	156	86
	86/87	57	53	93	79	73	92	76	70	92	212	196	92
Three Year Figure	84/87	126	124	91	208	177	85	203	173	85	547	474	87
Post Common First Year	87/88	60	52	87	81	74	91	78	66	85	219	192	88
	88/89	56	54	96	83	70	84	83	70	84	222	194	87
	89/90	68	54	79	114	97	85	91	70	77	273	221	81
Three-Year Figur	87/90	184	160	87	278	241	87	252	206	82	714	607	85

Significance
of Proportions
comparing
Pre/Post Common
First Year

Z Statistic 1.18 -0.49 1.00 0.86

Significant
at 5% level No No No No

Conclusion: There is no statistically significant difference in any of the three degrees, or in total, at the 5% level, between results in the three years prior to, and the three years after the introduction of the Common First Year. These conclusions support the expectation of the course teams that students would not be disadvantaged by the introduction of a Common First Year.