

**REPORT
FROM THE
INSPECTORATE**

Community Colleges in the USA

International Report

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PREFACE

This is the fifth in a series of publications by the Further Education Funding Council's inspectorate on post-16 vocational education and training systems in other countries. The purpose of these publications is to highlight aspects of those systems which might inform thinking in England in particular and the United Kingdom in general.

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COMMENTARY

1 In addition to eight community colleges, the team visited five universities and certain government and state departments and other institutions. Many of the issues raised by American colleagues and many of the circumstances they are facing are familiar to members of the team from their own experience in England. For example:

- the importance to the nation of preparing young people more thoroughly for working life
- the need to reach out to and retain a broader population in the colleges
- the growing emphasis on core skills
- the pressure to reduce budgets and still meet increasing student demand
- the search for productive links between study and work, colleges and employers
- the advocacy of lifelong learning.

2 Features common to all the colleges visited are:

- the emphasis on lifelong access to learning
- a commitment to recruit and retain students from economically and socially disadvantaged backgrounds
- the drive to integrate new immigrant groups
- the recognition amongst those leading the colleges that the best possible teaching and the best facilities to support learning are at the heart of their mission and their work
- diagnostic assessment of all new students followed by counsellor assistance to enable students to be placed on the appropriate courses
- preparatory courses, known as developmental or advancement education, specifically designed to develop basic skills and thus enable students to advance to credit courses
- learning support or personal counselling for students, which is systematically provided by central services when assessments or attendance records indicate that help is needed
- clear, informative, introductory literature which contains detailed statistical information on colleges and courses
- good accommodation, usually fit for its purpose and well maintained
- extensive use of buildings throughout a three or four session day, often for seven days a week and usually all the year round
- extensive attempts to develop customised training for companies, sometimes in association with private industry councils
- an emphasis on general education, which is required in all courses leading to bachelor degrees

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- a credit accumulation system that allows students to choose the time and place of study as well as what they will study
 - the use in certain colleges of video-conferencing technology and cable television to provide for groups of students who cannot attend a course at the point of delivery
 - fully-computerised systems for placement testing and marking
 - college administrative systems that match federal and state grant aid to students with proven need
 - the development of college self-evaluation procedures, in part to meet accreditation requirements
 - the training of trustees (governors) through their professional association.

3 The missions in all the community colleges visited are being pursued with energy and commitment. These colleges believe in themselves. Substantial opportunities exist for their students, whatever their age, circumstances or origins. Nevertheless, there are aspects of the colleges which limit the full expression of their missions and of their undoubted ideals:

- by European (including United Kingdom) standards there is a surprising gulf between liberal and vocational education. Parity of esteem between them is for the most part seen as neither attainable nor necessary
- many colleges provide a true diversity of programmes but academic and vocational provision are disparate
- a downside of the credit system is that the breadth and choice it permits can be at the expense of coherence
- there can be problems with the transfer of credits both within states as well as across state boundaries
- it is frequently claimed that staff development is neither formalised nor systematic and, under some contracts, further training cannot be required of those teachers who have tenure. Hence, some colleges may be unable or unwilling to adapt effectively to changing needs or demands
- the system of financial control and the constraining terms and conditions of service of teachers create difficulties for the colleges as they compete with private providers
- performance indicators are not used extensively although, as in England, their use may well increase
- reduction in the public funding of colleges and the inevitable increase in fees coincide with raised expectations outside the colleges of improved standards of student recruitment and retention
- transfer arrangements, particularly for associate degrees in non-liberal arts subjects, are not agreed by all universities.

PURPOSE AND ORGANISATION OF THE VISIT

4 This report is based upon a visit lasting two weeks to the United States in March 1995 by a team of four inspectors from the Further Education Funding Council (FEFC), one member of the FEFC's quality assessment committee and two officials from the Department for Education, now the Department for Education and Employment. The purpose of the visit was twofold: to understand the place of community colleges in the American system of higher education; and to learn how such colleges provide vocational, continuing and general education for post-high school and mature students.

5 It was not the team's intention to report on the quality of education and training in the community colleges, nor would this have been possible during so short a visit.

6 The visit was conducted against a background of impending reductions in federal grants and state funding, of a concern in the United States over standards in the nation's high schools and of a perception, widely held throughout business and commerce, that the education system must do more to develop the skills needed to meet the competition from Japan and the Pacific Rim countries.

7 The arrangements for the visit were made by officials of the American Embassy in London, in consultation with the Department for Education, now the Department for Education and Employment, and the FEFC. The itinerary was sponsored by the United States Information Agency and co-ordinated in each locality by Delphi International.

8 The visiting team first held discussions in Washington with officials from several departments in the United States Department of Education, and with the American Association for Adult and Continuing Education, the Association of Community College Trustees, the Association of Community Colleges and the National Association of Private Industry Councils.

9 Subsequently, the team divided. One group visited community colleges and other institutions of higher education in the states of Virginia, New Jersey and North Carolina. The other group visited colleges and universities in the states of Maryland, Massachusetts and New York. Each group held discussions with representatives of the business community and state and district officials.

10 The institutions visited are listed in appendix 1. Pen portraits of the institutions are given in appendix 2.

ECONOMY AND GOVERNMENT

11 The United States has a federal democratic government based on the Constitution of 1787. Under the Constitution, the national government has authority in matters such as general taxation, foreign affairs, federal and interstate commerce, and crimes against the United States. It does not have a central role in education.

12 The union comprises 50 states. Each state has its own constitution and derives its authority not from Congress but from the people of the state. State legislatures deal with all matters not reserved for the federal government. States thus, for example, control all elections to public office, state taxes, manufacturing and trade, and education.

13 The main unit of local government is the county. In 1993, there were 2,994 such counties in the 50 states.

14 The population of the United States is approximately 264 million people, three-quarters of whom live in towns or cities. Pie charts showing the ethnic makeup and religious persuasion of the population can be found in appendix 3, figures 1 and 2. Unlike Western Europe, the United States is experiencing a rapid growth in population. This is a consequence of the immigration boom since the mid-1960s and especially since 1980. During the 1980s, it is estimated that 10 million immigrants (legal and illegal) settled in the country; more than in any other decade. The new immigrants are primarily from Asia and Latin America. More than two million come from Mexico alone.

15 The United States possesses: the world's largest economy, with a wealth of natural resources including energy, raw materials and food; a strong high-technology base and world-leading research and development; an advanced and competitive manufacturing industry including many world-class multinationals; a sophisticated service sector; global leadership in computer software; and an entrepreneurial business ethic. Pie charts indicating its main trading partners are contained in appendix 5, figures 1 and 2. Comparative statistical data for the United States can be found in table 1.

Table 1. Comparative economic statistics for the USA and other industrialised countries

	GDP \$ (billion)	Population (million)	Workforce (million)	GDP per capita (\$)
USA	7,200	264	117	27,400
Japan	4,700	125	64	37,600
Germany	2,100	81	36	26,000
France	1,400	58	22	23,600
UK	1,100	59	26	19,000
Italy	1,050	57	21	18,400

Source: The world in 1995: The Economist Intelligence Unit (1995)

16 There has been a dramatic fall in manufacturing employment over the last 20 years, although the sector has remained constant as a share of gross domestic product. The post-war economic boom was built on low-skill, high-wage employment in areas such as the car industry. There is increasing awareness of competition from Japan, the rest of Asia and the European Union, particularly in future leading-edge technologies. However, in the third annual *National Education Goals Report (1993)*, a survey found that 57 per cent of American workers believe that their skills will be adequate in the immediate years ahead, while only 13 per cent of Japanese workers take a similar view of their skills. A table showing the percentage distribution of the American civilian labour force is contained in appendix 5, figure 3.

EDUCATION AND TRAINING

National Issues

17 From the early 1980s, the United States became increasingly aware of a range of educational issues similar to those causing concern in the United Kingdom. These included:

- a widespread perception, particularly among employers, that the nation's education system was giving inadequate preparation and support to the nation's workforce
- concern that all children should have an equal opportunity to receive a high-quality education
- generally low expectations and hence low academic performance especially at high-school level
- unacceptably high drop-out rates especially from high school
- the high and increasing cost to students of higher education
- concern that the skills of workers were lagging behind technological changes in the workplace.

18 In 1981, the United States secretary of education created the National Commission on Excellence in Education to examine and report on the condition and the quality of education in the United States. The report, published in 1983 and entitled *A Nation at Risk*, declared at the outset 'our once unchallenged pre-eminence in commerce, industry, science and technological innovation is being overtaken by competitors throughout the world.' Data from the National Council for Educational Statistics suggest that since then there has been a modest increase in standards of achievement as measured by international comparisons in mathematics, science and literacy.

19 Another major report was published just over a decade later in July 1994. As the conclusion of three years' investigation, *The National Assessment of Vocational Education 1991-1994* from the Office of Research of the United States Department of Education was presented to Congress. The message was unequivocal: 'the nation's competitiveness remains an issue of critical importance'.

20 The analysis in the report showed how changes in the economy of the United States have, over a generation, altered the skills required from the workforce and focused attention on the way American education prepares young people for work. Three key factors were recognised.

21 Firstly, in the 1970s the United States' share of the world market began to shrink and its relative economic position continued to decline through the 1980s. Competitors included high-skilled manufacturing economies employing new technologies and new forms of work organisation, and nations with less well educated but highly disciplined workforces. They were able to perform the sort of semi-skilled work that had been the backbone of American manufacturing, but for lower wages. The report quotes from a 1990 study, *America's Choice: High Skills or Low Wages*: 'we will have to invest more in educating and training America's workforce to compete better with the high skill economies'.

22 Secondly, the view of worker as a cog in a machine is seen as outmoded. The report points out that the industrial model that was developed in Japan could often achieve higher levels of productivity, quality and customer satisfaction. It makes much greater use of the skills and abilities of front line workers. Layers of management are eliminated, and front line workers are assigned more responsibility for supervisory functions such as improving operations, for solving problems, and for assuring quality control. Teamwork and job rotation are often key elements in the model. Again, the implication for education is clear: 'this system requires more active thinking, communication and collaboration amongst workers than the old one. Hence it requires better educated, more flexible and more socially adept workers.'

23 The third factor is technological change and particularly the proliferation of computers and telecommunications equipment. For example, the use of computer-aided design is quoted as increasing productivity in design at least sixfold in comparison with traditional methods and the demand for such high-level skills is surging upwards.

24 The results of these trends, indicating an increased demand for workers with post-secondary education, are reflected in data on earnings in the United States. In the 1980s, the earnings of college graduates increased by 10 per cent in real terms; those of high-school graduates fell by 9 per cent and those of high-school dropouts fell by 12 per cent. The growing advantage to the individual of post-secondary education was apparent. The increased risk of alienation from those who drop out of education was also recognised. The report concluded that 'the disadvantaged and minorities were especially hard hit by the change in the requirements of the labour market. Those without high-school diplomas increasingly moved to the margins of the economy.'

25 A significant step in translating national need into state and local policy was achieved in September 1989 when the president and all the state governors met for an unprecedented cross-party education summit. They laid the groundwork for the national education goals which were

published in 1993 and included in the Educate America Act submitted by President Clinton to congress in the same year. The goals are described as a 'rallying cry that focuses attention on how far we have to go to guarantee world class education for all'.

26 Most of the goals are directed at the high schools. However, goal five addresses the post-secondary stage and states: 'by the year 2000 every adult American will be literate and will possess the knowledge and the skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship'.

27 The community colleges, with approaching half of all students in post-secondary education, should be well placed to respond to this challenge. Despite decreasing budgets and increasing student fees, the colleges provide:

- a nationwide network
- deep roots in their localities and good potential for links with employers at local and state level
- a proven tradition of accessibility for all who wish to attend courses
- a strong emphasis on teaching and guidance
- commitment to occupational as well as academic goals.

Institutions

28 The structure of the education system is set out in appendix 6 in a chart provided by the United States Department of Education. Responsibility for providing education from pre-school to higher education rests with the state. Each state has a board of education which determines educational policy. Local boards in designated school districts are responsible for making sure that policy is put into practice.

29 At federal level, the Department of Education in Washington is concerned mainly with funding grants to institutions and students, and with legal issues such as equal opportunities and civil rights. The federal government also funds studies or commissions which examine and report to Congress on aspects of education and the quality of achievement in the country as a whole.

30 While the levels of education in the United States vary in organisation across and within states, a basic pattern prevails:

- primary school
- junior high/middle school (lower secondary school)
- senior high school (upper secondary school)
- lower undergraduate (lower division or associate level)
- upper undergraduate (upper division or bachelor's level)
- master's level
- doctoral level.

31 Elementary and secondary education is universal, free and compulsory although the number of years of compulsory education varies from state to state. It usually lasts 12 years: six years of elementary education plus three years of junior high school and three years of senior high school. The National Centre for Education Statistics estimates that about 12.5 million students will be enrolled in senior high schools in 1995-96.

32 The comprehensive high school is the norm in the United States, offering under one roof an academic programme for those going onto post-secondary education, a vocational programme for those preparing for work and a general studies programme for those still unsure about their goals.

Higher Education

33 Post-secondary institutions, where students are over 18 years of age, can be grouped in a variety of ways. The Carnegie Classification of Institutions of Higher Education is widely used for over 3,500 public and private institutions listed in 1994:

- research universities	122
- doctoral granting universities	108
- comprehensive institutions	532
- liberal arts colleges	634
- two-year institutions (mainly public community colleges)	1,480
- specialised institutions	691.

34 The United States system of higher education is renowned for its diversity and for the independence of its institutions. The concept of a vested right of access to higher education for all who complete secondary school continues to thrive.

35 The scale of the sector can be grasped from the following statistics for 1994:

- about 23 per cent of all Americans in a population of approximately 264 million are enrolled in some form of educational institution
- more than 2.7 million graduate from high school each year
- nearly 13 million attend over 3,500 post-secondary institutions
- approximately 450,000 associate degrees, 1 million bachelor's degrees, 300,000 master's degrees, 35,000 doctorates and 72,000 first professional degrees are awarded
- more than three-quarters of all adults over the age of 25 have completed, at minimum, four years at senior high school
- approximately 20 per cent of adults have completed at least four years of post-secondary education.

36 For an institution to call itself a university, it must offer graduate education, be staffed by teachers who conduct research and publish, and offer more than one undergraduate programme. Within a university, faculties exist as administrative units each offering undergraduate education in one branch of learning.

37 Higher education institutions, whether private or state supported, have traditionally been classified as two-year and four-year institutions, with a further subdivision between universities and other four-year institutions. A two-year community college normally offers the first two years (associate/lower division) of a standard four-year college degree curriculum, a two-year associate degree, and a range of developmental, continuing, professional and occupational programmes. Academic lower division courses completed at a two-year college enable transfer to universities so long as articulation agreements have been established. These agreements are similar to franchise agreements made between further and higher education institutions in England.

38 Despite their diversity and variety, most higher education institutions in the United States share a number of common features. These include:

- well-developed systems of governance
- strong faculty organisations
- financial support from several sources including alumni
- a wide range of work
- a concern to be involved beneficially with their community
- a commitment to general education which establishes a more broadly-based educational experience than is usual in England.

39 The community colleges share in all these features. They are an intrinsic part of the American higher education system. Most are modelled on university structures and have strong links with universities and other degree granting institutions in terms of their academic transfer role and their subject specific and general academic life. They are also involved in occupational and vocational training and retraining in an increasingly pressured and competitive national and international environment. Overall, their various roles compare more closely with further education colleges than higher education institutions in England.

40 Each college has to resolve for itself whether these roles combine or conflict and how best they can serve the interests of all their students and potential students.

COMMUNITY COLLEGES

41 Community colleges enrol 86 per cent of all students who study at two-year institutions. They offer both occupationally specific education and training and degree level programmes.

42 Their overall mission is diverse:

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- to provide the first two years of a bachelor degree
 - to provide an entire associate degree
 - to prepare students for work (a preparation which can range from initial training to professional qualifications for graduates)
 - to offer a second chance route including developmental (adult basic) education
 - to undertake re-skilling and training for the workforce in industry, often through contract arrangements with companies.

43 The emphasis that is given in individual colleges to these objectives varies substantially according to locality and leadership. Tradition also plays a part, because the colleges originated in two different ways:

- most grew out of junior colleges and their original function was to provide the first two years of university experience on a convenient local basis, originally for returning World War II or Korean veterans
- a much smaller number of colleges were founded as part of the technical college system with a focus principally on preparing students for employment.

44 A statement of one college's goals can be found in appendix 7.

45 Enrolment at community colleges increased from 2.6 million students in 1972 to 5.5 million in 1992 and their share of all students in higher education increased from 29 per cent in 1972 to 38 per cent in 1992 and continues to rise.

46 Up to first degree level there are few clear dividing lines between the colleges and traditional higher education institutions, not least because many community college students are preparing to go on to four-year institutions to pursue the upper division of a bachelor degree. However, the community colleges are essentially teaching establishments. They do not conduct research. Their contribution below the level of the bachelor degree, whilst it is substantial and varied, is not always easy to track. For example, in 1993 about 50 per cent of the American population aged between 25 and 49 reported they had attained a level of education beyond high school. About half of these had earned a bachelor or more advanced degree. The remaining half had attended 'some college' but had not gained a bachelor degree; they may have earned an associate degree, or pursued occupational or technical programmes, or dropped out of programmes leading to a bachelor or associate degree.

47 Programmes leading to an associate degree typically take a minimum of two years. Two out of every three students receiving an associate degree in 1990-91 specialised in technical and professional fields. The remainder pursued arts and sciences. The most popular technical and professional programmes were business and management; business administrative support; nursing, and engineering technologies. Of the many programmes that lead to certificates, licences and other awards at community colleges, some are as short as six weeks, others can take almost four years. A typical set of community college programmes is shown in appendix 8.

48 The cost to the individual of attending a community college is relatively low. Average tuition fees were just over \$1,000 in 1992-93 compared with \$2,600 at public universities and \$13,000 on average at private universities. Average tuition charges have risen more slowly at community colleges than at universities. Between 1980 and 1991 tuition charges, in constant prices, grew by 21 per cent at the colleges compared with 36 per cent at public universities and 53 per cent at private universities.

49 As for expenditure per student at community colleges and universities in 1990-91, public two-year colleges spent \$5,800 for each full-time equivalent student compared with \$12,000 at public universities and \$21,900 at private universities. Expenditure also grew more slowly at colleges, compared with universities, between 1980 and 1991: 8 per cent per full-time equivalent student at community colleges compared with 20 per cent at public universities and 37 per cent at private universities.

50 More teachers at community colleges are likely to be part time than their counterparts at universities. In the autumn of 1989, 61 per cent of teachers were on part-time contracts compared with 21 per cent at public universities and 26 per cent at private universities. Average salaries for teachers at community colleges are lower than for those in universities, particularly university teachers who have a high academic rank. In 1992, full-time professors at community colleges earned an average salary of \$48,100 compared with \$59,800 at public universities. However, full-time assistant professors earned an average salary of \$34,900 at community colleges compared with \$37,700 for those at public universities.

51 The characteristics of students in community colleges (see appendix 4, figures 1 and 2) differ from those of students in universities. Overall, the students are likely to be well over the age of 25, married or single parents, working full time or part time, living off campus and attending part time and 70 per cent of students attended part time in 1989-90. They are likely to be first generation higher education students and rightly believe that completion of a bachelor or associate degree or a certificate can lead to increased employment opportunities and income potential. In community colleges, it is unusual for either full-time or part-time students on degree or certificate courses to complete in the shortest time possible. The systems of open enrolment and credit transfer enable students to move in and out of college and then back again with relative ease. Until recently, there has been no pressure to complete within clearly prescribed periods of time. Hence retention, completion and recorded graduation rates can appear low by United Kingdom standards.

52 At one college, a recent survey showed that 50 per cent of the students enrolled in one year had dropped out of their course by the following year. However, approximately half of these had transferred elsewhere. The National Centre for Educational Statistics reveals that a large percentage of students pursuing associate degrees had not completed their programmes. By spring 1992, 12 per cent of students who had commenced their associate degrees in 1989-90 had completed, a further 19 per cent were continuously

enrolled, and 23 per cent had re-enrolled at least once (after an interruption). Nevertheless, nearly half (46 per cent) had left college without re-enrolling.

GOVERNANCE

Boards of Trustees

53 Community colleges are governed by boards of trustees (or governors). Depending upon the policy of the state, there is either a state board of trustees overseeing all colleges in the state or a local board of trustees for each institution. There are state boards in 17 states, local boards in 27 states and a mixture in the remainder.

54 The prime responsibilities of the boards are to:

- appoint and appraise the president
- determine the broad strategy of the institution
- approve development plans and educational programmes
- maintain the financial soundness of the institution
- evaluate the overall performance of the college or colleges.

55 Boards of trustees are composed mainly of senior representatives from industry and commerce, together with staff and student representatives. Boards generally number between 10 and 20 members. They meet regularly and attendance is usually high. Of the local board members, 67 per cent are men; 33 per cent are women. Their backgrounds are 84 per cent Caucasian, 10 per cent African-American, 4 per cent Hispanic, 1 per cent Asian American and 1 per cent native American. The age distribution is 36 per cent 60 years or older, 31 per cent between 50 and 59, 21 per cent between 40 and 49 and 12 per cent are younger than 40.

56 Boards of community colleges are seen as representing the community. The appointment of trustees is often divided evenly between appointments by the state governor and the local mayor. All such appointments are seen as having a political element. In a number of states, trustees are elected by the general population. Terms of office range from three to six years. Limits are beginning to be set on the number of terms that an individual trustee may serve, for example up to a maximum of two six-year terms. The framework for governance is provided by enabling legislation in each state. The trustees' duties are set out in state law and vary from state to state. Curriculum decisions may be taken at varying levels, including that of the state. The trustees would generally have the power to appoint and dismiss the president but not teachers, who once they achieve tenure are protected by their conditions of service.

57 There is considerable variation in how the boards interpret their roles. Some see themselves as concerned mainly with strategic planning with a particular contribution to make in environmental scanning (for example, market surveys for planning purposes). Others become involved in the detail of day-to-day life. There is very little standardisation or regulation at federal level.

58 The different systems in two states illustrate the extent to which arrangements for governance can vary. Virginia has a strongly centralised system, with one board of trustees in Richmond for all the state's community colleges, and each of the colleges has a similar mission and structure. In Maryland, just to the north, each college has its own board of trustees and there is considerable variation between individual colleges.

Association of Community College Trustees (ACCT)

59 The ACCT represents over 6,000 elected and appointed board members. Its purpose is to strengthen the capacity of those members to realise their colleges' missions on behalf of their communities through the development of effective lay governance and leadership and through advocacy at local, state and national levels. The association is active in both training and advocacy. Association policy recognises that boards 'exist to represent the community and hence need to establish the community's needs'. The association is currently urging its members, through a series of nationwide workshops, to keep away from the day-to-day management of colleges and to concentrate on the strategic role that expresses and meets medium and long-term community needs. The annual association convention is a major event in the community college year. The association publishes a stream of topical and informative newsletters and video tapes, as well as a trustee quarterly.

FUNDING AND FEES

60 Traditionally, the funding of community colleges has been split fairly evenly between the state, the local county or city community taxpayer, and the tuition fees that are paid by the student. But, increasingly the local county and especially cities such as New York and Baltimore, which have suffered an erosion of their tax base and an increase in competing financial claims, have reduced their share so that more has fallen on the state. Fees have had to be increased. A significant proportion is met from federal and state student support programmes aimed, in particular, at extending access to disadvantaged groups.

Tuition Costs and Fees

61 Colleges strive to keep tuition costs affordable for all, despite the cost of teachers and support staff which absorbs up to 85 per cent of budgets. The emphasis on teaching and learning rather than research finds the colleges struggling, during the current round of budgetary reductions, to preserve staff/student ratios. Comparative figures for such ratios can be deceptive, but generally they seem to be higher than in the further education sector in England. At one college, the staff/student ratio was 1:21, at another 1:19 and a third college was doing all it could to hold developmental studies programmes to 1:18. The employment of part-time teachers can reduce establishment costs, hence the current debate on the split between full-time and part-time staff.

62 Part-time staff are usually appointed for the semester and most have contracts which include conditions attached to continuing such employment. The proportion of part-time to full-time staff varies from 50:50 to 70:30. There is, however, much concern amongst full-time staff in the colleges lest an imbalance is created that could undermine the quality of teaching and guidance and the attention that has traditionally been given to marking individual students' work and holding tutorials for individual students.

63 Tuition fees vary considerably across the sector. Since so many students are in their late 20s and self-supporting, only about 30 per cent of community college students receive financial aid. Obtaining maximum funds for such aid from federal and state sources, communicating all available aid opportunities to students and potential students, and ensuring that such aid is awarded with the maximum efficiency and probity are major administrative issues which colleges tackle with considerable thoroughness.

Federal and State Aid

64 Of all financial aid awarded to students, 80 per cent comes from federal and state programmes. Every year, the United States Department of Education publishes a free guide on federal aid. States are likely to have their own financial aid programmes and scholarships for students who are resident in the state. There are clear procedures and criteria for applying for federal and state grants and loans based on financial need according to a nationally-approved needs analysis. Need is assessed on the basis of the cost of the course compared with the expected family contribution. The contribution takes account of family income including a student's earnings.

65 Federal aid consists of grants, which do not have to be repaid, work-study earning opportunities, and loans which have to be repaid with interest after completing or leaving a course.

66 The largest non-repayable federal grant scheme is the Pell grant which is available to undergraduate students with proven financial need. It covers tuition fees and maintenance costs up to a maximum of approximately \$2,300 a year. The Department of Education guarantees that each participating institution will receive enough money to pay Pell grants to all eligible students. The grant is administered by the college, and students applying for financial aid must apply for a Pell grant. Such grants may be supplemented by Federal Supplemental Educational Opportunity Grants for those with exceptional financial need.

67 The federal work-study programme provides paid jobs for students either at the college or in a school or in non-profit-making or public agencies. The work must be in the public interest and related to the course of study. The college determines a work programme that is suited to the student's course, health and academic progress.

68 Federal loan programmes include the Perkins Loan Programmes and the Stafford Loan Programme. Perkins loan money is paid to the institution

and the students borrow from the college. They may borrow up to \$3,000 for each year of study and start repayment at a 5 per cent interest rate, generally nine months after leaving the course. They are allowed up to 10 years to repay the loan. Stafford loans are made through lenders such as banks or savings and loans associations and are insured by the guarantee agency in each state. There are other schemes which enable parents to borrow for dependent children who are studying, as well as a limited number of direct student loans.

69 There is, additionally, the Federal Direct Student Loan Programme. This allows students to borrow directly from the federal government, reducing loan processing time and allowing more flexible repayment options.

70 States offer their own aid opportunities which in many cases are similar in amount and intention to federal aid. The state of New York singles out part-time students and severely educationally and economically disadvantaged students for help, and also offers state scholarships to the children of deceased or disabled veterans, police officers, fire fighters and to those entering various medical professions.

71 Typically, a large college has a whole department handling financial aid. All students applying for such aid must have loan counselling and detailed information is issued by the college in leaflets, on noticeboards and on video about all available financial aid. Students are given advice on how to manage their budgets, and encouraged to take part in the college-based work-study programmes which are more closely monitored than part-time work with private employers. In one college, about 350 students worked for about 20 hours a week for between \$5.00 and \$5.50 an hour, generally in clerical and administrative jobs.

RESPONSIVENESS

72 Open access and accessibility are central to the mission of community colleges. The range of courses attracts a great mix of students who in all the colleges that were visited seemed well integrated and fully supported. In addition to being both large and welcoming, colleges are open six or even seven days a week and late into the evenings. Summer programmes mean that colleges are open throughout the year.

Admission

73 Many aspects of community colleges contribute to ease of access for students. Comprehensive information is given in college catalogues about college facilities and services, how to apply, tuition fees, financial aid and faculty staff, and there is a paragraph on every course describing entry criteria, course content, number of hours of study and the value of credits. Staff in central admission units give advice and counsel applicants who are undecided about what course to take.

74 Many of the colleges visited have fine greenfield sites. As a major contribution to responsiveness, some are also developing city-centre sites

to attract potential students who might well find aspects of the main campus alien or intimidating or just too far away. One college had purchased a complete floor of a building that had previously been a city department store. The centre provides one-stop guidance facilities, an extensive developmental programme, English as a second language courses, as well as a range of mainstream occupational and degree courses. The college has gone to considerable lengths to train staff and to provide access between the city centre and the main campus, so as to integrate all the services provided.

75 Students are admitted to the college rather than to a course. It is a regular practice to require all students to take a placement test (see also the section of the report on information technology at paragraph 89) and if they are not successful in achieving the required score for their chosen courses, they have to take a college preparation programme before they can proceed. Such programmes do not count as credits towards a degree or certificated course and students have to pay tuition fees.

76 The college preparation programme, which is also called developmental or advancement studies, recruits large numbers of students. In one college with a total of about 62,000 students, between 2,500 and 4,000 students enrol on the developmental programme each quarter. The programme generally includes English, reading, arithmetic, geometry, algebra and an introduction to the sciences. About one third to a half of students will either withdraw, or fail and repeat.

High School Diploma

77 In order to qualify for entry to the lower division of the bachelor degree or to an associate degree, an applicant must have obtained a high school diploma. The diploma, though much valued in the United States, only indicates that a student has completed the twelfth grade at the age of 18 and gives no indication of a student's actual level of attainment. Colleges often ask to see the transcript of a student's school records which do indicate the level of achievement. This enables them to make a more accurate placement of the student.

78 Given the drop-out rate from the high school and the emphasis on student choice, many people applying for associate degrees need to requalify and gain a high school diploma to qualify for their chosen course. Some return to high schools to qualify, others study at the community college in liaison with the high school.

General Education Diploma

79 It is also possible for people over 18 to take a nationally recognised equivalent to the high school diploma, the General Education Diploma. Each state establishes its own score for successful completion. Colleges provide pre-testing and preparatory courses in the five test areas of writing, social studies, science, literature and mathematics. Classes are held in the daytime, in the evening and at the weekend. A free four-hour practice test

is strongly recommended to all students intending to take the General Education Diploma test. This is said to be a good predictor of success in the actual test and is followed by feedback and counselling to the student. About a third of those taking this diploma fail. The General Education Diploma process is an example of the thoroughness with which the colleges seek to give maximum opportunity to students, whatever their level of registered achievement may be.

Job Training Partnership

80 Many nationally sponsored schemes also seek to draw students back into continuing education. One example, arising out of the *Job Training Partnership Act* (JTPA), was established in 1983 as a federally-funded programme to train or retrain unskilled, unemployed or underemployed adults for work. The scheme functions in the private sector as well as in most colleges.

81 One college had a JTPA centre with two members of staff appointed to support over 400 JTPA students. The support arrangements included administration concerned with finance, help with childcare and transport, and a support group in the form of a Friday morning club. In 1993, 10 per cent of the colleges' graduates were JTPA students and 80 per cent of JTPA students were successfully employed six months after the end of their course.

Management of Responsiveness

82 One hallmark of college management and administration is the capacity to meet the differing intentions and circumstances of all students. Flexible timetables and accessible guidance systems attract many students to part-time classes while in part-time or full-time employment. The credit accumulation system enables students to move in and out of education to suit their personal and financial circumstances. The culture is to work through college commencing and recommencing at the appropriate level. Students are more or less free to determine their own direction and choice. The disadvantages of such freedom may be that the staggered completion of the course lacks the momentum and the student choice lacks the cogency of a highly focused continuous programme.

Destinations

83 Colleges want to help their students to reach their chosen destinations. For students on the first two years of a four-year bachelor degree, this means ensuring that the transfer to universities for the upper division of the degree is fluently accomplished. Such transfer is achieved through articulation agreements with universities. In essence this is an agreement that a student who has taken the appropriate courses and reached agreed levels of attainment may progress to the third year of a bachelor degree course. For students to make this transfer, it is essential that they acquire the requisite credits which must include an acceptable grade or point average in the general educational core programme. Some articulation

agreements may include specified vocational subjects known as electives. In the community colleges visited, some 25 per cent of students moved through articulation agreements to universities.

84 Students gaining technical associate degrees or certificates at the community college mostly seek employment. Here, the networks created with employers, sometimes through trustees, assist, as does the work of the local advisory committees. These committees exist for every occupational subject. They include representatives from industry and commerce and meet at least twice a year. The committees not only advise on the relevance of the programme on offer, but also assist the college in identifying the needs of employers and the employment opportunities both within the state and nationwide.

Students with Learning Difficulties and/or Disabilities

85 More than half of all higher education students with disabilities attend public community colleges. The *American Disability Act* requires states to enhance their efforts to educate students with learning difficulties and/or disabilities. The diversity committees in colleges address issues relating to equality of opportunity. In one of the colleges visited, state funding provides assistants for students who use wheelchairs and interpreters for those with visual and hearing impediments. Almost all buildings are accessible. If any student who uses a wheelchair wishes to attend a class which is not accessible, the class is moved.

86 The number of students for whom English is a second language has increased in line with the increase in immigration over the last decade. In New York, for example, many students arrive at college speaking little or no English. In one college 106 different countries of origin are represented and provision has grown from one class for Vietnamese students in 1988 to 1,400 English as a second language students in 1995. Community colleges provide specific courses in English as a second language. There is additional support in workshops for students on mainstream courses. Here, attendance will be compulsory if the student has failed to reach a certain standard in English. Workshops have long opening hours and those seen were well used. They provide teaching support, computers with learning packages and help with writing and grammar. There is a strong culture of students providing peer support for each other (the 'study buddy' system). This means one experienced student acts as mentor to a new student. Students studying languages may be paired with native speakers, an arrangement which aims to be mutually beneficial.

INFORMATION TECHNOLOGY

Computing Equipment and Teaching Approaches

87 There is not so strong a requirement to use information technology to produce coursework as in the United Kingdom. Not all colleges have established resource centres which can provide flexible access to computing equipment for

students who are wanting to complete coursework in their own time. Where such centres do exist, they vary from extensive and impressive suites to a single room. Some are separated from libraries but all are linked to assessment or tutorial centres for overall supervision. Some programmes of study contain a compulsory element for computing or information technology. Practice varies considerably between colleges and states.

88 Colleges are upgrading and standardising hardware and software, but in many cases there are significant numbers of older machines unsuited to modern software. Twilight, evening and Saturday literacy programmes are widely available, but programmes of information technology familiarisation, where students can enrol at any time of year and attend college on a flexible basis, are rare.

Initial Assessment of Students

89 There is an initial assessment in mathematics, reading and writing for all full-time and part-time students intending to enrol for credit-based programmes. In a large college, this will involve many thousands of students. There is a growing use of computers in these initial assessments to improve standardisation in the administration and marking of the tests, with students able to gain an instant score and feedback on their performance.

Telecourses

90 The widespread adoption of cable television in the United States, and the extensive choice of public television channels have contributed to the popularity of telecourses. These are credit-based programmes of study based around distance-learning material and television programmes. The pattern of study is similar to that used by the Open University in the United Kingdom. Students can also borrow the course videotapes from college libraries, thereby gaining greater flexibility in terms of start dates. The most popular subject areas for telecourses are humanities, social sciences and mathematics. Telecourses are particularly successful where students are also studying a complementary course by the more traditional method. In Maryland, three colleges have worked together to provide a co-ordinated schedule of telecourses. Tuition fees for telecourses are normally identical to those for traditional study routes, giving an incentive to colleges to adopt the most efficient and effective form of delivery.

New Developments in Technology

91 The colleges which were visited are in the early stages of experimenting with new developments in technology. To assess their wider application, grants are available from a number of public and private sources to support developments in schools and community colleges. The state of Virginia is to issue a state bond to fund its technology plan, which seeks to improve levels of information technology equipment to develop local and wide area networks and to integrate library facilities. In the state of North Carolina there is a plan to create a North Carolina Information

Highway which will link universities, colleges, schools and private users through a broad band network.

Video Conferencing

92 Many colleges have installed a facility for video conferencing and some are considering installing a second facility. This can provide camera to screen links from a room at the main site to up to four annexes or campuses. Students on all sites can be addressed simultaneously and, as the system is interactive, all participants can respond and raise questions. The quality of the image does not meet television broadcasting standards, but this does not prevent the system being used for a number of purposes such as meetings between staff and the teaching of courses where enrolments at a single site would not be viable or where travel to the main centre would be difficult or uneconomic.

93 Colleges are in the early stages of evaluating the costs and benefits of video conferencing. Several issues have already been highlighted. These include:

- the need for staff training in the use of the system
- the limited ability of the technology to support group discussion
- the need to complement video conferencing with traditional tutorial support
- teachers' differing views on the optimum size for such learning groups.

94 Full-resolution video conferencing had been installed in two of the colleges visited using a fibroptic network for image transmission which improves the quality of the image and therefore the authenticity of the experience for students. In one college, full-resolution video conferencing was specifically used for links with high schools; the college delivered programmes to schools in subject areas where numbers would not otherwise have been viable.

Use of the Internet

95 The Internet is the most widely used international on-line information service connecting educational institutions, library and research centres, businesses and individuals. Services provided include electronic mail, home shopping and the provision of research and educational material. Estimates suggest that there are currently around 30 million users worldwide and that number is rapidly increasing.

96 It is possible to obtain Internet services using a personal computer and a telephone line at home. Many colleges in the United States are connected to the Internet, which is installed in libraries and individual staff offices. Increasingly, computing and teaching rooms are networked to provide access to the Internet.

97 The use made of the Internet varies but, as most colleges have been connected during 1995, the full impact of the system has not yet been felt.

At present, it is used by individual staff for electronic mail and research work. In one college, a significant programme of staff training was taking place, including training in the programming language HTML, to enable users to create their own series of information pages via the World Wide Web. Another college had created its own World Wide Web pages to advertise courses and was in the process of entering its full prospectus.

98 As the system develops and home ownership of higher capacity machines rises, colleges believe the Internet can provide a number of significant opportunities. These include: greater use of home study; academic tutorial support by electronic mail; direct access to information of library resources; and the ability to offer distance-learning programmes, up to degree level, over a wide geographical area. Delivery of training programmes to businesses via the Internet, as an alternative to releasing students for college attendance, is viewed as another opportunity to be explored. However, there are concerns that the cost of the system will disadvantage those on low incomes and sections of the population traditionally under represented in the higher education system.

99 Few colleges see the Internet as an exclusive medium for study, and its widespread use will depend upon reducing line rental costs, increasing home ownership of high-capacity machines, advancing the methods by which the available information is catalogued and indexed, and developing suitable high-quality material on the system to match the needs of college students. Security of information on the Internet remains a problem.

100 Some believe that the increasingly flexible arrangements for study will require colleges to adopt a caseload approach to the management of teaching and learning. One college intends to investigate whether part-time teachers should be paid on a caseload basis to mark coursework assignments and to respond to mailbox queries from students who are studying at home.

WORKFORCE PREPARATION

101 The 1994 report to Congress, *The National Assessment of Vocational Education*, emphasised the urgency and scale of the task of educating and training the nation's workforce for a more internationally competitive future. The recent Hudson Institute report entitled *Workforce 2000* predicted that there will be 21 million new jobs in the United States by the year 2000, the majority requiring some form of education beyond high school. Community colleges with their mission rooted in the needs of the local community would seem well placed to respond to this expressed national need for more advanced preparation of the workforce.

College Response

102 In responding to the 1994 report, colleges fall into one of two broad categories:

- a. colleges that have stayed close to their origins within the higher education sector tend to have teachers who primarily want to

prepare students for the first two years of the bachelor degree. This, together with work for associate degrees, is usually the main college commitment. The academic tradition and student choice dominate;

- b. colleges who see themselves as key players in training the workforce of the future. This involves a continuing commitment to the transfer programme, but an equal commitment to occupational, professional and vocational education and training. Such colleges recognise that, in the context of service, their role has as much in common with that of the community hospital and other community foundations as with the traditions of the university.

103 Colleges fully engaged on workforce preparation are likely to have the following features:

- postgraduate professional training for many occupations
- re-skilling courses provided under contract to national and international companies
- courses for people who are unemployed or have been made redundant
- the capacity to compete as well as co-operate with the private sector on training
- teachers keen to integrate academic and occupational study
- teachers prepared to gain industrial experience
- an entrepreneurial culture that includes outreach activities
- sustained co-operation with high schools including joint programmes
- developmental programmes that help students go forward to credit-based courses.

104 Several colleges that were visited possess all these features. They are striving to compete with private trainers and in-house company training schemes and to obtain substantial training contracts with private companies. Such objectives are often difficult to achieve. For example, one college with good resources, teachers with recent industrial experience, and well-developed marketing techniques offers courses in business, communication and computing. These are planned to be fully-customised services offered from the college centre for business and industry. There has been only a modest response. Another community college with its business centre based in an industrial park is seeking to develop a training relationship with surrounding businesses. It sent out a needs assessment questionnaire to 1,047 firms and received a 5 per cent return.

105 Another difficulty for colleges and their students is that qualifications that are obtained in one state for vocational or professional work may not be recognised in others. Training requirements differ significantly between states. Indeed, within a single state, confusion can arise from the many overlapping initiatives and systems for training. Some states are seeking

to simplify such systems by the establishment of 'human resource investment councils' and, especially for the unemployed, 'one-stop shops' where all the information and assistance needed is under one roof.

Links between Study and Work

106 Concern is frequently expressed about the limitations in both the scale and the quality of work experience or work-based learning for students at all levels. Some employers and parents regret that high-school students are able to drop essential subjects, receive only limited careers education and develop unrealistic expectations. This can impede the move from high school to post-secondary education whether the student is 18 or much older. Significant, if relatively small-scale, initiatives for co-operation between high schools, community colleges and employers exist. There is broad agreement among them, and indeed across the nation, on the core skills that industry requires. These core skills are similar to those identified by the Confederation of British Industry and include basic literacy and numeracy, cognitive skills, problem solving, communication and computing skills, and the capacity for teamwork.

107 Examples of such initiatives include co-operative education, tech-prep and the partnership for academic and careers education. Each is based on the last two years of the high school and a further two years at the community college.

Co-operative Education

108 The co-operative education scheme directly ties college to work by engaging students in both activities simultaneously. Work experience is structured in a way that promotes learning. The scheme involves between 5 and 10 per cent of all students in high schools and community colleges. Further expansion is limited by the college's ability to afford the time of co-ordinators who arrange appropriate job placements, help students, write training plans and monitor students' performance. It is also limited by employers' unwillingness to provide enough co-operative positions and to spend the extra time required to support students learning on the job.

Tech-prep

109 Tech-prep is another programme designed to strengthen the connection between study and work. It involves combining academic and vocational courses. Such work requires collaboration between academic and technical teachers; in several colleges such collaboration is difficult to achieve.

110 One community college has the following definition of its tech-prep programmes: 'beginning with the junior year in high school and continuing through the associate degree, tech-prep combines applied academics in mathematics, science and communication with the specifics of advanced-skill, technical education'.

111 At this college, tech-prep programmes are available in finance, technology, bio-science and health careers, engineering, accounting, food sciences, and auto-technology.

Partnership for Academic and Career Education (PACE)

112 In the PACE initiative, students learn academic concepts by using career-related examples from business, industrial engineering, technology, health and public services in the teaching of mathematics, English and science. A requisite of such courses is to locate teachers with the appropriate teaching skills and sufficiently up-to-date industrial experience who also have the time to identify and gain the support of employers in the locality.

Federal Initiatives

113 Federal assistance with workforce preparation is available to the enterprising college. The *Carl Perkins Act* (1990), for example, provides the principal legislative basis for federal funding of specific programmes. Expenditure of some \$1.3 billion a year has encouraged 20 states to reform their secondary vocational education systems. It has also helped schools and colleges to develop their work programmes.

Private Industry Councils (PICs)

114 PICs are non-profit-making corporations funded under the federal JTPA, whose membership is split between business, unions and education providers. There are 630 PICs in the United States. They do not make a profit or pay taxes and their terms of reference restrict their activities to work for the public good. They aspire to bring business into public education but their mission relates almost entirely to the improvement of education for people who are unemployed.

115 Community colleges provide some of the training that is paid for by PICs. Employers and trainees speak highly of its effectiveness but one officer of the National Association of Private Industry Councils commented that 'although the community colleges do a good job, they are too locked into the mind set of education and are not always well suited to the needs of adults'.

Project Pro-tech

116 Some PICs are now taking a broader perspective that seeks to bring cohesion to the currently fragmented process of workforce development. Project Pro-tech in Boston, Massachusetts is one example. The project is a partnership between the Boston PIC, Boston public schools and community colleges, and employers in the health care and financial services industries. It is based on a four-year youth apprenticeship programme that combines work-based classroom study, work rotation, mentorships and paid internships that operate part time after school and full time during the summer. Students start in the eleventh grade, and progress to an associate degree course. If all goes well, their studies culminate in a permanent placement with the employer.

National Skills Standards Board

117 The National Skills Standards Board, anticipated in the *Education 2000 Goals America Act*, is in the process of being established. It has the task of setting standards for all occupations and could clarify what is expected of trainers in colleges, as elsewhere. However, even before the board has been established, political changes in the composition of Congress have resulted in the original budget of \$4 million being cut to \$500,000 for the first year. The future of the board is uncertain.

QUALITY ISSUES

118 Quality issues in community colleges have two main sources. Firstly, there is the process whereby the college seeks accreditation from external and nationally recognised accrediting agencies. Secondly, in the powerful but no longer unquestioned American tradition of the autonomy of institutions in higher education, there is the process of self-regulatory review, where the college is answering to and assuring itself. These internal and external systems usually interact to the benefit of the college. However, there is mounting public criticism that they are not sufficiently rigorous.

National Accreditation Agencies

119 In most other countries, the establishment, maintenance and improvement of educational standards are mainly the responsibility of a department or bureau of Central Government. In the United States, however, where public authority in education is not centralised, accreditation agencies have a key role in promoting both local and national approaches to the determination of educational standards.

120 The Commission on Recognition of Post-secondary Education (CORPA) was incorporated in January 1994. It is the successor to the former Council on Post-secondary Accreditation (COPA) which itself had been established in 1974 as a result of the merger of the previous regional and national accrediting bodies. CORPA is a national organisation created within the community of higher education for the purposes of assuring the quality and sustaining the diversity of post-secondary education. CORPA achieves this by a process of voluntary non-governmental accreditation. It establishes criteria and provisions for the evaluation and recognition of accrediting agencies nationwide.

121 CORPA defines accreditation as 'a system for recognising educational institutions and professional programmes affiliated with those institutions for a level of performance, integrity and quality which entitles them to the confidence of the educational community and the public they serve'. Some see this as merely an external guarantee of minimum standards; others as a necessary spur to colleges to seek continuous improvement through internal quality systems. The voluntary agencies or professional associations that CORPA recognises and accredits are the bodies that work in the field with the higher education institutions, including community

colleges. The agencies establish the criteria for college accreditation, arrange site visits and evaluate those institutions that want accredited status. The overwhelming majority of institutions meet the criteria and are publicly designated as doing so.

122 Although the system is voluntary, accredited status is much sought after. A public college needs to be accredited if it wishes to be considered for grants by federal government funding agencies, by scholarship commissions and foundations, or if it wishes to be taken seriously by employers, councillors and potential students. CORPA and its approved accreditation agencies, therefore, have come to be viewed as quasi-public bodies with responsibilities to the many groups which interact with the educational community. The college or university which does not submit to agency review, or in submitting fails to achieve accredited status, is at a grave disadvantage in competing for federal and other funds, as well as for students.

123 The process of accreditation is intended to encourage the college in its own drive for continuous improvement. The institution is required by the accrediting agency to:

- examine goals, activities and achievements
- consider the expert criticism and suggestions of a visiting team
- determine internal procedures for action on the recommendations of the accrediting agency
- maintain continuous self-study and improvement mechanisms.

124 There are two types of accreditation for the college:

- a. institutional accreditation is granted by the regional accrediting agencies approved by CORPA;
- b. specialised accreditation of professional and occupational schools and programmes is granted by agencies set up by national, professional organisations in such fields as business, industry, engineering and law. Each of these groups has its distinctive definition of eligibility, criteria for accreditation and operational procedures, but all undertake accreditation activities, primarily to provide quality assurance for the education and training for those seeking entry to the various professions or occupations.

125 All the colleges that the team visited had received institutional accreditation. Within the colleges there were varying opinions on the value of the process, but all the colleges recognised that it was necessary to be an accredited institution. The visit from the accrediting agency may only last a few days, with accreditation granted for as long as 10 years, although the accrediting team has the right to return at any time to the college. On their visits, the agency teams are primarily concerned that the institution has adequate resources, internal governance and administrative structures to enable it to run itself and its programmes effectively. The detailed attention that would be given to resources, for example, would focus on the qualifications of teachers and the content of libraries. Attention would not be directed at

educational processes, at how much students are learning nor the quality of student life at the institution. That would be the business of the college.

126 It is essential for the college to convince the visiting accrediting agency that it has systems in place to review its educational as well as all its other activities. Self-evaluation occurs systematically in all the colleges visited. Substantial amounts of data are collected and published on course content, range and participation. This information often incorporates the views of teachers and students and, sometimes, of parents and employers. However, it is not used as a basis for making qualitative judgements nor, in most cases, for responding to pre-established performance indicators.

Changing Attitudes

127 The role of CORPA and its accrediting agencies, and the role of the college in reviewing and regulating its own performance, have their critics inside, but mainly outside the colleges. The American Association of Community Colleges is one of nine national higher education organisations underwriting the present system of accreditation. This body was recently outspokenly critical of the lack of rigour in the whole process.

128 Other indications of changing attitudes were noted. For example, one American participant in the growing national debate commented that 'meaningful self-regulation needs to be accountable against a set of external standards'. The same point was heard several times during the visit. A state resolution in Virginia directed the State Council of Higher Education to 'investigate means by which student achievement may be measured to assure the citizens of Virginia of the quality of higher education in the commonwealth'.

129 Moreover, CORPA radically reformed itself some 12 months ago. Its 1995 *Directory of Recognised Accrediting Agencies and Supporters* contains an observation that may prove significant: 'the accreditation process is continuously evolving, the trend has been from quantitative to qualitative criteria, from the early days of simple checklists to an increasing interest in, and emphasis on measuring the outcomes of educational experiences'.

130 Some of the community colleges visited are planning rigorously and strategically on quality issues and are beginning to experiment with self-imposed performance indicators.

131 One college serves as an example of what may become a significant trend. During the 1980s, this college had seen its student roll decline by 50 per cent with a retention rate for first-time, full-time students dropping to 24 per cent against a state-wide rate of 43 per cent. The college restated its mission and focused its resource on one overriding goal: the pursuit of excellence in teaching. Access remained central, but four outcomes became key targets: student success measures, transfer outcomes, employment outcomes and continuing education outcomes. Clear indicators of performance were developed and applied. In the four years to 1994, the performance of the college improved significantly, weaknesses were

systematically identified and overcome, and a clear relationship was established between the annual assessment of outcomes and plans for innovation and change.

132 There is, then, evidence that as budgets contract, politicians scrutinise and public attitudes toughen, the approach to quality issues is developing a sharper analytical edge. However, approaches to quality issues amongst the community colleges remain diverse and defy summary. One college writes on retention in its current strategic plan, 'historically retention has been a somewhat elusive subject. It is essential that the college obtain an accurate understanding of its scope since retention is inherent to our continued success.' Most colleges are not confronting retention issues so boldly. Links between funding and judgements on quality exist but at present they seem rare. In Illinois, for example, it is claimed that quality assurance systems are used to influence the resources that are allocated. However, in New York, where the issue of budget cuts is described by the city's university as 'catastrophic', the claim remains that 'access predominates over excellence as a mission'.

APPENDIX 1

INSTITUTIONS AND ORGANISATIONS VISITED

The United States Department of Education

 The Office of Vocational and Adult Education

 The Office of Educational Research and Improvement

 The National Centre of Education Statistics

The American Association of Adult and Continuing Education

The Association of Community College Trustees

The American Association of Community Colleges

The National Association of Private Industry Councils and the Boston
Private Industry Council

The New Jersey Commission on Higher Education

UNIVERSITIES

The City University of New York (CUNY)

The George Mason University, Virginia

The Graduate School of Education, Harvard University

Rutgers University, New Jersey

University College, University of Maryland

COMMUNITY COLLEGES

The Baltimore City Community College, Maryland

The Borough of Manhattan Community College, New York

Bunker Hill Community College, Boston, Massachusetts

Catonsville Community College, Maryland

Central Piedmont Community College, Charlotte, North Carolina

Monroe Community College, Rochester, New York State

Northern Virginia Community College

Suffolk Community College, Long Island, New York State

APPENDIX 2

PEN PORTRAITS OF INSTITUTIONS VISITED

All community colleges that were visited run full programmes for transfer, associate degrees and certificates. In addition, all aim to work closely with the business community, making provision for professional training for graduates as well as offering extensive occupational programmes. In addition to credit courses, non-credit courses are offered to individuals pursuing, for example, personal interests or GED levels.

COMMUNITY COLLEGES

Baltimore City Community College

The Baltimore City Community College was founded in 1947. There are 7,000 students evenly divided between part-time and full-time study. The college has two main campuses linked by a free shuttle bus, one to the west of the city and one downtown close to the redeveloped harbour area. There are a further 40 sites for instruction elsewhere in the city. The mission emphasises that the college reaches out to Baltimore residents, 'particularly first generation college students, to prepare them for the knowledge-based industries that define the future of the city'. It further emphasises that many such students are highly motivated but need special help in basic skills before advancing in their studies. The college is taking a lead in the development of performance indicators.

Bunker Hill Community College

Bunker Hill Community College was founded in 1973. It is an urban community college located in the Charlestown neighbourhood of Boston with a second campus in nearby Chelsea. There are 6,500 students of whom two-thirds are full time. The college has the largest English as a second language programme in New England, much of it taught in the context of the vocational or academic programme for which the student hopes to qualify. There is a focus on customised programmes offered in conjunction with local businesses. The mission states that the college seeks 'to become a national model for successfully incorporating the strength of many cultures, ethnic backgrounds, age groups and learning styles into the curricula and extra-curricular life of the institution'. The college's catchphrase is 'learning for the real world'.

Borough of Manhattan Community College

The Borough of Manhattan Community College was founded in 1963. It is part of the City University of New York which offers 'access to higher education as an avenue to economic advancement and personal fulfilment for the citizens of New York City and in particular to the economically and

socially disadvantaged among them'. The college, in the heart of Manhattan and with an extensive set of buildings completed in 1983, is sited six blocks north of the World Trade Centre. There are 17,000 students divided evenly between those studying part time and those full time. The mission seeks general and vocational education for all its students, as well as maintaining 'a governance structure which facilitates the participation of faculty, administrators and students in the life of the college and encourages contributions and involvement by alumni and advisory groups'.

Catonsville Community College

Catonsville Community College was founded in 1957 in the extensive grounds of a handsome nineteenth-century mansion. There are now two other main campuses. With a student body of 10,500, 25 per cent is postgraduate. As a college in the state of Maryland, it has its own governing board appointed by the governor. Key goals emerging from its mission are to enable students to benefit in their learning from the application of technology and to extend college ties with the business community whose training needs it seeks to serve. The college is well on the way to raising \$500,000 from alumni for a new building.

Central Piedmont Community College

Central Piedmont Community College in Charlotte, North Carolina, was established in 1963 as a technical institute, following the merger of Mecklenburg College and the Central Industrial Centre, to serve the needs of Mecklenburg County. It has a total of 62,000 students on a 35-acre campus close to the centre of Charlotte. There are three additional area centres and classes are offered at more than 200 sites. It is one of 58 colleges in the North Carolina Community College System. Its mission includes statements on its institutional values, the worth and the dignity of the individual, individual growth and development, accessibility, excellence, innovation, the community and accountability. The college is a member of the League of Innovation in Community Colleges and has been identified as one of the top five of the nation's two-year colleges for teaching excellence.

Monroe Community College

Monroe Community College was founded in 1961 in Rochester, the third largest city in New York State. It is one of 30 community colleges within the state and moved to a fine greenfield campus in 1968. In 1992 it opened Damon campus in the city centre. There are 14,000 full-time and part-time students. The college is a member of the League of Innovation in Community Colleges and its mission emphasises that it is 'primarily a teaching institution ... and has developed in response to a desire for extended educational opportunity'. The college is in the third year of a five-year plan to put quality assurance procedures in place.

Northern Virginia Community College

Northern Virginia Community College, established in 1964 as the Northern Virginia Technical College, opened in 1965. It has 64,000 students on credit courses and 124,000 students on non-credit courses. It has five campuses and an extended learning institute across four counties. The college is one of 23 two-year colleges that make up the State of Virginia Community College system. The mission of the system is to 'assure that all individuals in the diverse region ... are given a continuing opportunity for the development and extension of their skills and knowledge'. The college addresses not only the needs of the individual students but also 'the economic needs of the college's service areas'. The mission of the college includes statements on its values of opportunity with excellence, responsiveness, comprehensive educational programmes, a caring environment, and public trust and responsibility.

Suffolk Community College

Suffolk Community College was founded in 1959 as a unit of the State University of New York. The college is sited on Long Island and has three campuses in urban and semi-rural locations. There are 22,000 students who are evenly divided between full time and part time and a student to teacher ratio which seems unusually low at 16:1. In 1985, a satellite facility 'technicentre' to develop customised training and business links was established on the Hauppauge industrial park. The college emphasises its offer of summer study for students during June, July and August. The admissions guide, in addition to listing credit and non-credit courses, gives details of 80 college clubs ranging from the African-American student union, urban explorers and DISC (the Disabled Students Club) to Suffolk cheerleaders. Included in the mission is the wish 'to provide life long educational experiences for county residents related to their job development, leisure activities, civic responsibilities and physical well-being'.

UNIVERSITIES

City University of New York (CUNY)

The City University of New York is supported by the state and city and includes nine senior colleges and seven community colleges. There are over 200,000 students with a ratio of 10 undergraduates to one postgraduate. The university and its colleges play a key role in the economy of the city and the state. The chancellor in his recent report, *Investing in the Future*, drawn up with the prospect of severe budget cuts, calculates the total economic contribution of CUNY to the state at '\$12 billion, more than nine times the size of our annual budget'. The regional commissioner of the United States Bureau of Labour Statistics said recently it would be difficult to overestimate the importance of CUNY in supplying New York's most important ingredient: a skilled labour force. The university is deeply involved in the education of people who are disadvantaged or are recent immigrants. It has also produced 11 Nobel prize winners, more than any other public institution of higher education in the United States.

George Mason University

The visit was to the centre for professional development at George Mason, a major university in the state of Virginia founded in 1957. The university is on a suburban campus in Fairfax and has 21,000 students on almost 100 degree programmes at undergraduate and postgraduate levels. It has a particular commitment to the development of teaching staff and has established a unique doctoral programme for existing and prospective community college teachers which is based in its national centre for community college education. This is an individual programme which includes courses of instruction and a research project.

Graduate School of Education, Harvard University

The visit was to the adult education department within the school of education at Harvard. The university was founded in 1636 in Cambridge, Massachusetts. It stands pre-eminent in the national league tables. The data for such tables are based on the six attributes of academic reputation, student selectivity, faculty resources, financial resources, graduation rate and alumni satisfaction.

Rutgers University

Rutgers is the state university of New Jersey and one of the major state university systems in the United States. It dates back to 1766 when it was chartered as Queen's College and now has over 47,000 students on three campuses on a wide variety of undergraduate and postgraduate programmes. A summer programme offers over 1,000 courses on the campus, off campus and abroad. Its goals include 'the continued provision of the highest quality ... education along with increased support for outstanding research'.

University College, University of Maryland

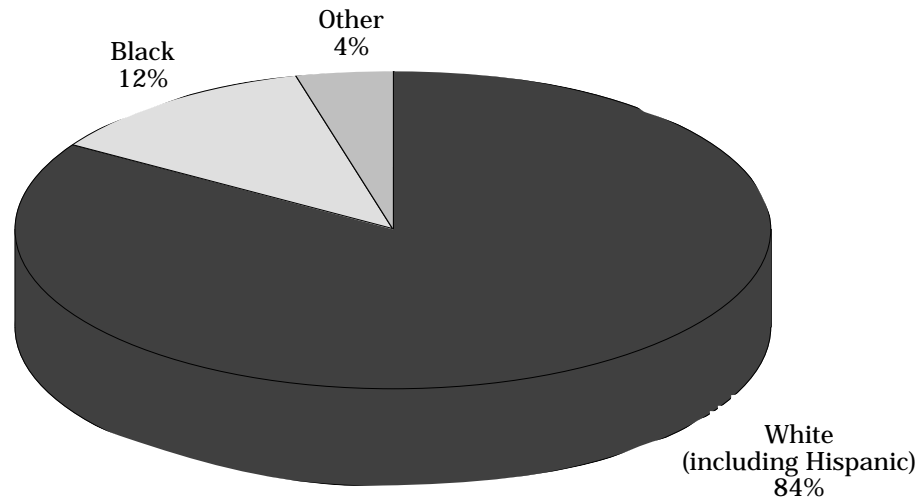
The college is one of 11 degree-granting institutions that make up the University of Maryland and is the only one that specialises in providing educational opportunity for the state's current workforce. This university college covers a wide range of undergraduate disciplines and postgraduate programmes in management and technology. There are 36,000 students, 60 per cent of whom are part time. The entire teaching force, all of whom have recent industrial experience, is part time. The college offers both traditional classroom instruction and non-traditional programme delivery through distance learning technologies and independent study. It serves three geographic areas: state-wide programmes at more than 25 locations and in Washington DC; also European and Asian divisions for United States military forces. In addition to bachelor's and master's degrees, there are professional development programmes that include leadership development, critical management skills, total quality management, computer technology and team building.

APPENDIX 3

POPULATION BY RACE AND RELIGIOUS PERSUASION

Figure 1

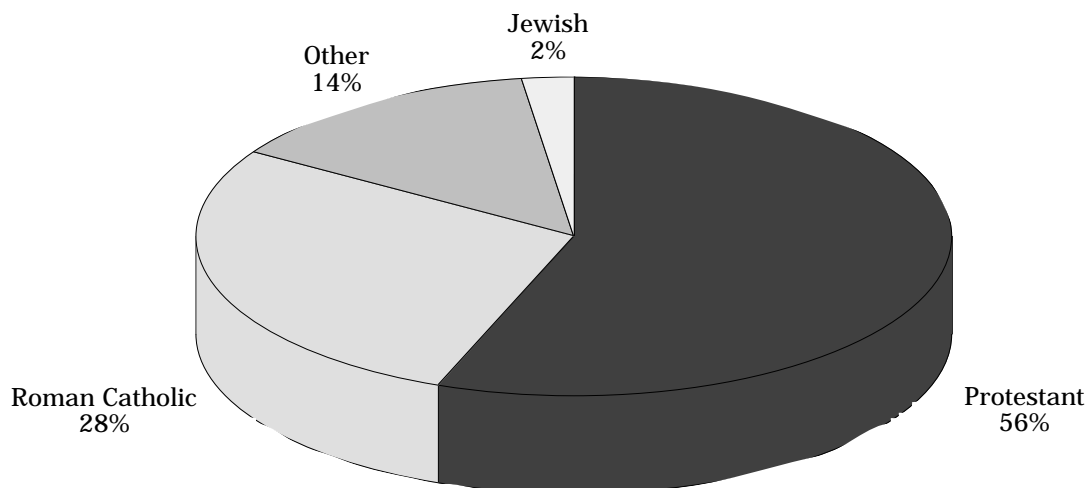
Population by Race



Source: US Department of Education

Figure 2

Population by Religious Persuasion



Source: US Department of Education

APPENDIX 4

COMMUNITY COLLEGE STUDENTS BY RACE AND AGE

Figure 1

Community College Students by Race

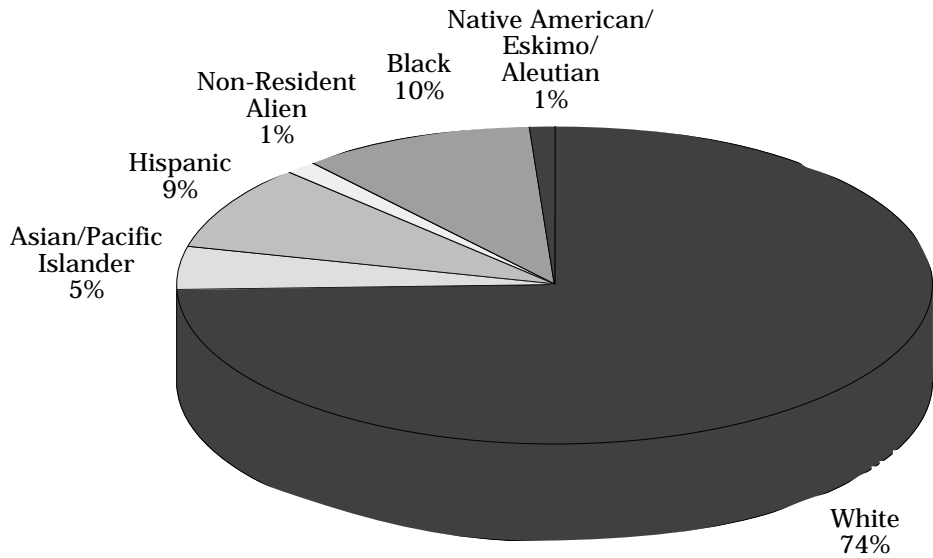
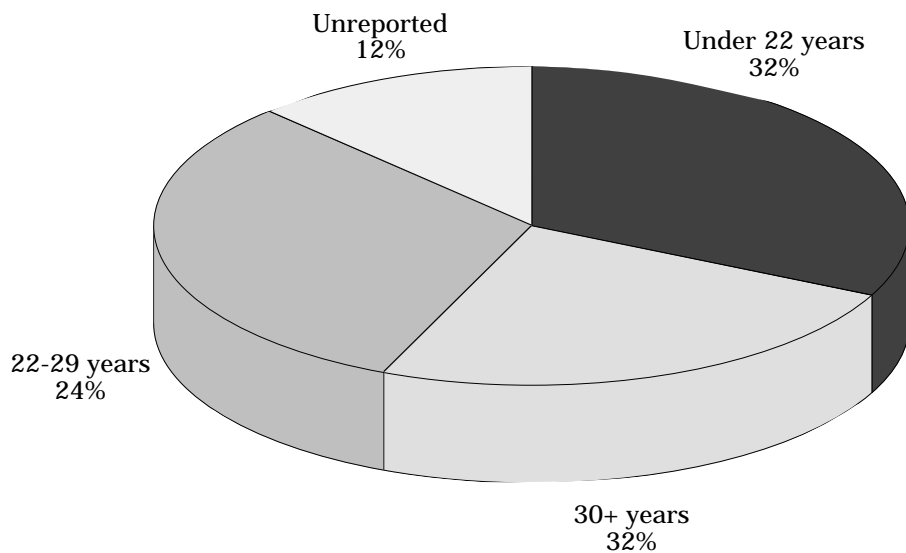


Figure 2

Community College Students by Age



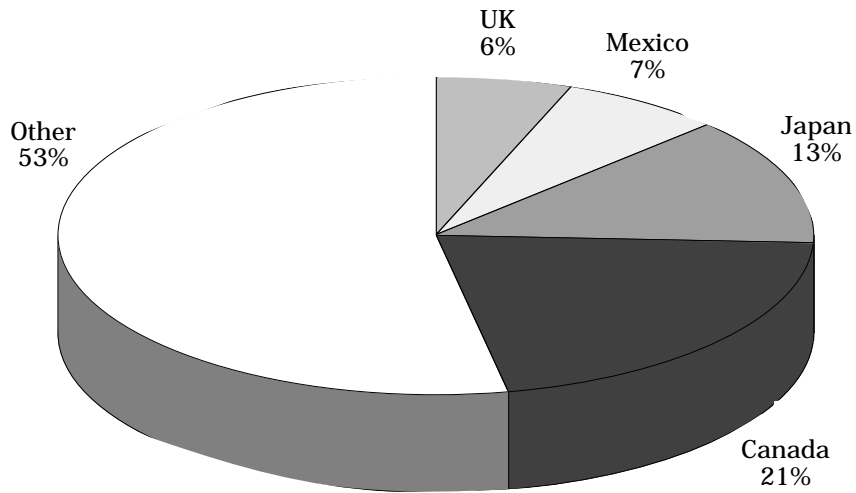
Source: US Department of Education, 1993

APPENDIX 5

MAIN TRADING PARTNERS OF THE UNITED STATES

Figure 1

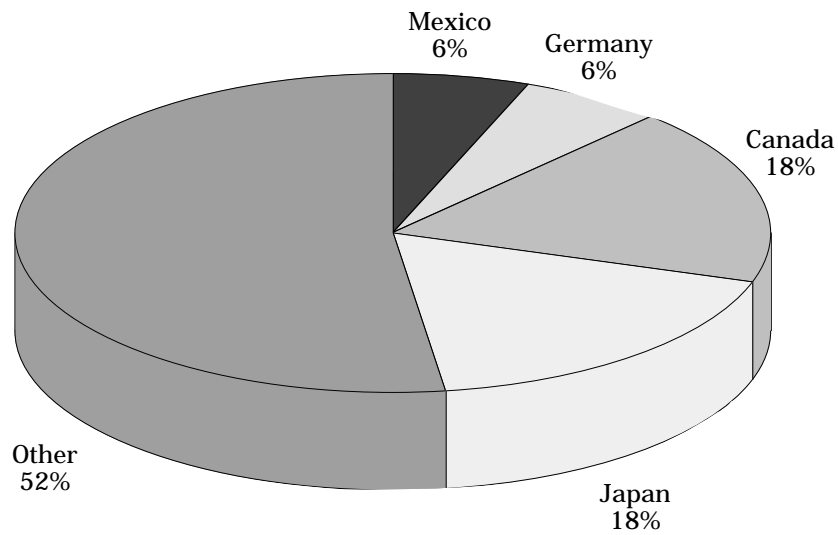
Exports



Source: *The Statesman's Yearbook, 1994-95*

Figure 2

Imports



Source: *The Statesman's Yearbook, 1994-95*

Figure 3

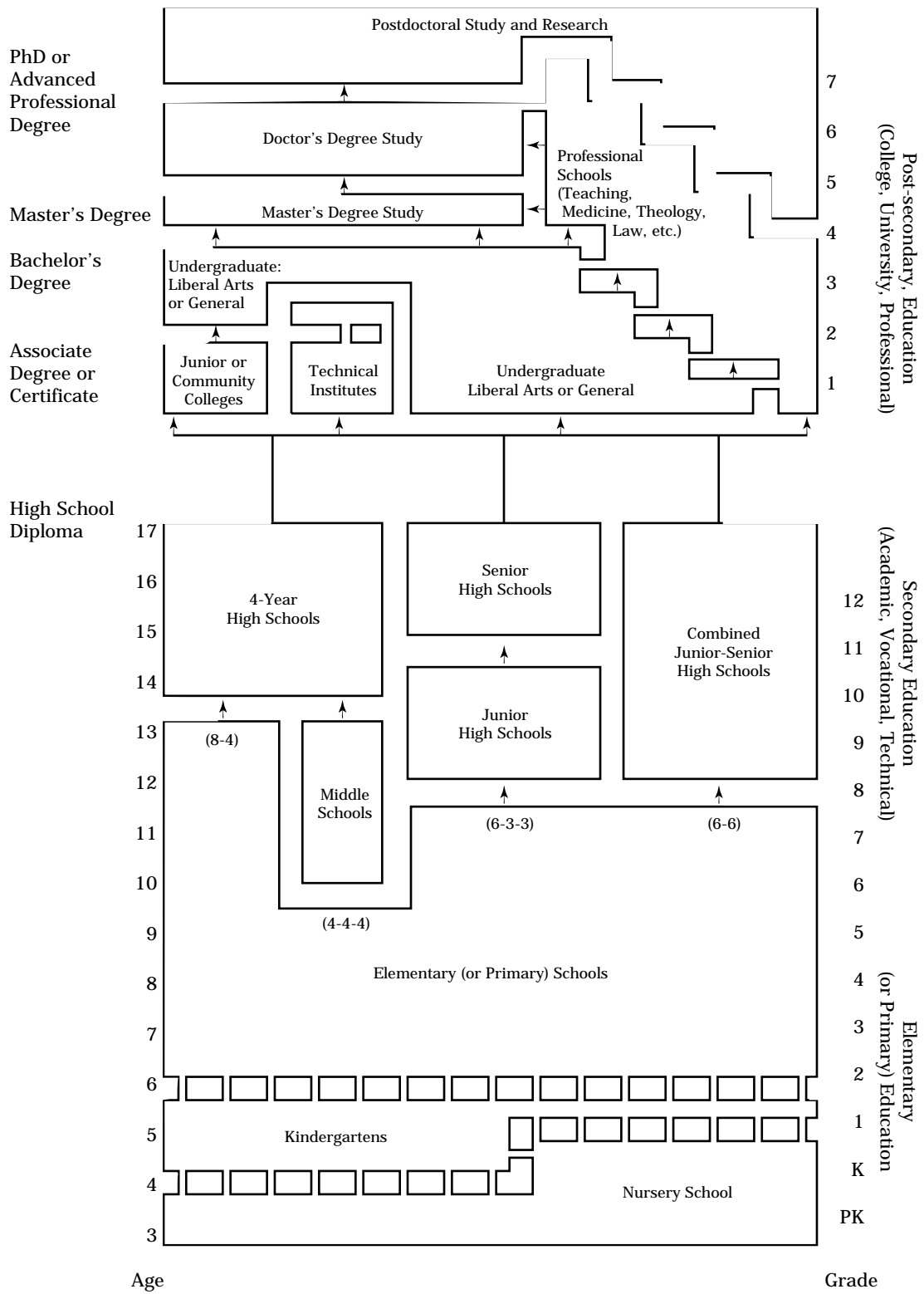
Distribution of Civilian Labour Force

<i>Industry group</i>	<i>Percentage distribution</i>
Employed	100.0
Agriculture, forestry and fisheries	2.9
Mining	0.6
Construction	6.1
Manufacturing:	
Durable goods	10.2
Non-durable goods (including non-specified)	7.3
Transportation, communication and other public utilities	7.0
Wholesale and retail trade	20.6
Finance, insurance and real estate	6.7
Services	
Private household	0.9
Professional services	10.8
Other services	22.1
Public administration	4.8

Source: The Stateman's Yearbook, 1994-95

APPENDIX 6

STRUCTURE OF EDUCATION IN THE UNITED STATES



Source: US Department of Education

APPENDIX 7

A STATEMENT OF ONE COLLEGE'S GOALS

Bunker Hill College's statement of goals is characteristic of an enterprising community college.

Bunker Hill Community College will:

- seek encouragement and financial support for the college's mission from the public sector, business and industry, philanthropic organisations and community-based agencies
- assure that graduates have acquired critical thinking skills and the ability to formulate effectively reasoned conclusions
- equip students to participate fully in a global economic, multi-cultural and political environment
- design programmes in collaboration with employers which reflect the emerging skills and training needs of the local economy
- recognise and respond to a variety of preferred learning styles among students and provide programmes and services which reflect the needs of individual students
- develop an organisational culture which recognises, values and strives for excellence in scholarship in the arts, sciences and areas of occupational specialisation
- reach out to the public schools, the community, and business and industry in order to establish collaborative ventures which encourage individuals in the urban community to continue formal education at the post-secondary level
- collaborate with post-secondary institutions, nationally and internationally, in order to facilitate reciprocal educational relationships
- expand and maintain the college's physical environment in order to adequately support educational programmes and services
- ensure the continuing commitment to excellence on the part of faculty and staff through a variety of professional and career enrichment programmes and activities.

APPENDIX 8

SET OF COMMUNITY COLLEGE PROGRAMMES

The details of academic programmes listed below are taken from the initial handout document of the Baltimore City Community College. It is typical of many such statements while shaped for a particular city environment.

What you'll earn. You can: earn an Associate degree or a programme certificate; transfer the credits you earn in specific transfer programmes to any four-year college or university in Maryland; prepare for career certification or licensure; or complete courses to prepare for the job market or advance your career.

BCCC offers a wide range of academic programmes leading to an Associate degree or a Certificate.

Associate Degree Programmes	Credit Hours	Associate Degree Programmes	Credit Hours	Associate Degree Programmes	Credit Hours
Accounting	65-66	Early Childhood Education	67-68	Accounting	34
Allied Human Services		Emergency Medical Services	65-66	Addiction Counselling	21
Addiction Counselling	65-67	Engineering	63	Banking and Finance	31
Allied Human Services		Fashion Design	65-66	Coding Specialist (Medical Records)	23
Transfer Option	69	Fashion Illustration	62-63	Computer Information Systems	32
Developmental Disabilities and Human Development	70	Fashion Merchandising	62-63	Computer Operations	29
Gerontology	66-67	General Studies	63-64	Computer Repair Technicians	32-35
Human Services Assistant	66-68	Health Information Technology	68-69	Cross-Cultural Services to the Elderly	28
Mental Health Technology	63-65	Law Enforcement	62	Dietary Manager	16
Public Assistance Staff Training	66	Legal Assistant	66-68	Drafting Technology	32
Arts and Sciences		Microcomputer Specialists	69	Early Childhood Administration	30-33
General Art	62-63	Nursing	69-70	Emergency Medical Services	34-35
Humanities	66	Office Technology	69-70	Fashion Design	30
Mathematics/Pre-Engineering	66	Executive Secretary/Administrative Assistant	69-70	Gerontology	18
Science/Health Careers	67	Legal Secretary	69-70	Human Services Aide	16
Social & Behavioural Sciences	66-67	Medical Secretary	67-68	Legal Assistant	36
Business Administration	66	Medical Transcriptionist	70	Microcomputer Applications	32
Business Management	68-69	Word and Information Processing	69	Operating Room Technology	41
Business Marketing	67-68	Physical Therapy Assistant	70	Personal/Community Care Provider	21
Computer Electronics	69-70	Respiratory Therapy	68	Special Education Assistant	37
Computer Information Systems	69-70	Science Technology		Teacher Education - Substitute Teacher	30
Computer Science	63-64	Biotechnology	62	Telecommunications Technology	41-42
Correctional Administration	62	Physical Science Technology	65	Word and Information Processing	33
Dental Hygiene	70	Teacher Education Transfer	64		
Dietetic Technician	67	Telecommunications Technology	69-70		
Drafting Technology	69				

The Business and Continuing Education Centre (BCEC) works with government agencies, community groups, and business and industry to create opportunities for personal growth and professional development. Both non-credit and credit courses are offered.

Adult Basic Education	- Medical Terminology	- Dietary Technology
GED Preparation (high-school equivalency diploma)	- Monitor Technician Training	- Legal Assistant
English as a Second Language Programs	- Nurse Extender	- Pre-Hospital Care
- English Language Institute	- Oral Radiology for Dental Assistants	Customized Training Programs
- Refugee Assistance Program	- Phlebotomy Technician Training	- Management Development and Supervisory Training
- English for Special Purposes (Childcare Providers, Medical Professions, Office Communications)	- Unit Secretary/Ward Clerk Training	- Total Quality Management
Allied Health Programs	Continuing Professional Education	- Business Success Skills
- Activities Coordinator Training	- Certification Courses for Allied Health Professionals	- Computer Software Training
- Cardiopulmonary Resuscitation (CPR)	- Child Care Institute	- Business and Technical Writing
- Emergency Medical Technician Ambulance (EMT-A) Refresher	- Hospitality Institute	- Workplace Literacy and Work Force Basic Skills Enhancement
- Geriatric Nursing Assistant	- Insurance Institute	- Managing Cultural Diversity
- Medicine Aide	- Microcomputer Training Program	- Global Culture and Foreign Languages
- Medicine Aide Update	- Real Estate Institute	
	- Small Business Management and Development	
	- Travel and Tourism Institute	

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