

REPORT
FROM THE
INSPECTORATE

Post-16 Vocational Education and Training in France

International Report

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THE
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PREFACE

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

COMMENTARY

1 This report is based on a visit to France in March 1995 by a team of three inspectors and other officials from the Further Education Funding Council and the Department for Education.

2 The purpose of the visit was to examine the roles of local, regional and national government in post-16 vocational education and training in France with particular reference to the governance, management and funding of institutions. The team also looked at curricula, qualifications, training programmes, student counselling, guidance and support, participation, progression, levels and standards achieved in post-16 education and training programmes, quality assurance, the arrangements for training teachers, the role of employers, inspection arrangements and physical resources.

3 It was not the team's intention to report on the quality of post-16 vocational education and training in France, nor would it have been possible to do so on the basis of such a short visit. Rather the intention was to examine reforms in French post-16 education and training and to highlight those aspects which might inform thinking in England.

4 The French education system is currently in the throes of great change as it moves towards greater decentralisation in the effort to achieve an ambitious target of 80 per cent of the relevant year group reaching baccalaureate level by the year 2000. The main features of the French education and training system are:

- clear national aims and objectives for all aspects of education and training including national qualification targets for post-16 year olds
- the commitment to and value placed on education and training by French society, reflected in the high proportion of gross domestic product (GDP) assigned to educational expenditure and the high levels of participation in both nursery and post-compulsory education
- government control of curricula, examinations and the award of qualifications which helps maintain consistent national standards and public confidence in them
- well-staffed and well-resourced *lycées*, which provide an effective working environment for both students and their teachers
- relevant vocational education and training curricula, which are developed in consultation with employers, unions and teachers
- broadly-based post-16 curricula in which competence, knowledge and understanding are given appropriate recognition

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- the flexible nature of French continuing vocational education and training provision, which allows adults to follow learning programmes tailored to their individual needs
 - attempts to create greater parity of esteem between vocational and other qualifications
 - the high priority given to careers education and guidance, which ensures that participation rates in post-compulsory education are high
 - the inclusion of a 16-week work experience element in full-time vocational programmes
 - the legal obligation on employers to contribute to the cost of vocational education and training.

5 France is moving slowly towards a more decentralised education and training system which allows greater institutional autonomy and encourages education and training institutions to become more active in the market place. It is also encouraging employers to become more involved in education as governors, as advisers on vocational curriculum development and as providers of work experience placements for young people. Obstacles to these reforms include the failure to involve governing bodies sufficiently in planning and decision-making; the practice of assigning teachers to institutions rather than allowing institutions to make appointments; and the limitation of college principals' responsibility to curriculum and timetabling matters.

6 The French inspectorate continues to play a key role in education policy developments and in controlling not only the school but also the vocational education system. At the regional level, subject inspectors assess the performance of individual teachers but do not report on, or advise, institutions. At the national level, inspectors report on general aspects of the education system and are key figures in curriculum development. Inspectors also have authority to inspect on-the-job training.

7 In France there are three main routes for post-16 students and these lead to general, technological or vocational baccalaureates. Notwithstanding efforts to improve the status of vocational qualifications, they do not usually have parity of esteem with academic qualifications. Unlike the intention for the General National Vocational Qualifications (GNVQs) in England and Wales, the vocational baccalaureate is not normally accepted as an entrance qualification to university. Many able young people who obtain the vocational baccalaureate or higher technician-type qualifications opt to continue their studies rather than enter working life. The consequences of this are twofold. Firstly, young people are often over-qualified for their first jobs. Secondly, career advancement is becoming increasingly competitive because more and more employees are so well qualified.

8 The team concluded that the standards achieved in French education and training programmes are comparable with those of their

English counterparts at National Vocational Qualification (NVQ) levels 2 and 3. The quality and quantity of equipment provided for vocational programmes in French *lycées* are similar to those found in English further education colleges.

ORGANISATION OF THE VISIT

9 The arrangements for the visit were made by officials of the Department for Education in consultation with the French Ministry of Education. The vocational education and training institutes visited are shown in appendix 1. Brief descriptions of the institutions and organisations visited are given in appendix 2. Visits were confined to the Paris and Lyon areas. In each institution discussions were held with senior staff and students on issues such as institutional governance and management, funding arrangements, curricula, teaching and learning, assessment, links with employers and the local community, student support and achievement, standards and quality assurance. Discussions were also held with representatives of the French Ministry of Education, the Lyon Academy, Rhone Poulenc Silicone Corporation, the employers' federation for the plastics industry, and members of the French national and regional inspectorates.

ECONOMY AND GOVERNMENT

10 France has a population of about 57 million but is much less densely populated than England. It has an unemployment level of 12 per cent. Nearly 25 million people are in employment, of whom 64 per cent are employed in the service sector, 30 per cent in industry and 6 per cent in agriculture. In 1992, France had a GDP of about £870 billion, a GDP per capita of £15,000 and a small balance of trade surplus of about £2 billion. Fifty-six per cent of its exports are to countries of the European Union. Its main trading partners are Germany, Italy and the United Kingdom. Its main exports are machinery, chemical products and food. Its main imports are machinery, manufactured goods, chemicals, food and fuels. The public sector accounts for 48 per cent of GDP. Some comparative statistical data for France and the United Kingdom are shown in table 1.

Table 1: Statistical data for France and the United Kingdom (1992)

	<i>France</i>	<i>United Kingdom</i>
Population (million)	57	57
Workforce (million)	25	27
GDP (£ billion)	870	650
GDP per capita (£)	15,000	11,000
Unemployment	12%	8%
Expenditure on education (% GDP)	6.8%	5.3%
Annual education expenditure (£ billion)	60	35

Source: OECD Economic Surveys: France

NATIONAL EDUCATION SYSTEM

11 The main thrusts of French education and training since 1970 have been:

- promoting equality of opportunity
- raising standards and improving quality
- increasing the efficiency and effectiveness of education and training in a period of public expenditure restraint
- matching education and training to employment prospects
- promoting innovation in a period of rapid socio-economic change
- monitoring an increasingly decentralised system.

12 In recent years the French education and training system has faced the same challenges as its European counterparts. These include ensuring high-quality school education in which pupils achieve the standards demanded by an advanced technological society; the rising demand for post-school education; finding ways to fund expansion; coping with deteriorating employment prospects for young people; and the spread of social problems affecting young people, especially in major urban areas.

13 Rising unemployment caused by slower economic growth has not only raised total unemployment to 12 per cent but has also concentrated this unemployment amongst the 15 to 24 year-old age group in which there is an unemployment level of about 20 per cent. In 1992, the level of unemployment for those in this age group with a higher education qualification stood at 12 per cent; for those with an apprenticeship qualification it stood at 20 per cent; and for those with no qualifications it was 31 per cent. These figures underline the importance of qualifications for young people seeking their first job, and the French education service is alert to this.

National Framework

14 The French education system is administered by the Ministry of National Education. National criteria standardise its administration, finance and curricula; teaching staff are civil servants; and the state monopolises the award of diplomas. Ministerial control is exercised through 28 regional academies, each headed by a rector, assisted by permanent administrators, an inspectorate and a regional advisory council. Each academy is divided into geographical departments (2 to 6 in each academy) and into divisions responsible for initial and continuing education. The inspectorate operates at both national and local levels. The central inspectorate deals with national matters whilst the local inspectorate reports on matters at both department and academy levels. An inspector of the academy, responsible to the academy rector, directs both the compulsory and post-compulsory educational services, has delegated powers of financial control and wide powers of inspection, including the right of inspection of work

placements as well as college and training provision. The appraisal of teachers is carried out by inspectors and the principals of the *lycées* and the results of this appraisal determine pay and promotion. Teachers are assigned, often on the basis of seniority, to institutions which play little part in their appointment. A number of national agencies advise the Ministry of National Education on a range of educational matters. At the peak of the administrative pyramid, the Minister of Education and the Minister of Higher Education are supported by teams of administrators organised into directorates.

15 Since 1983, the French education system has been increasingly decentralised. Nursery and primary education are the responsibility of the *communes*; lower secondary education in the colleges rests with the departments; and upper secondary education in the *lycées* with the regions. The central government retains responsibility for all higher education.

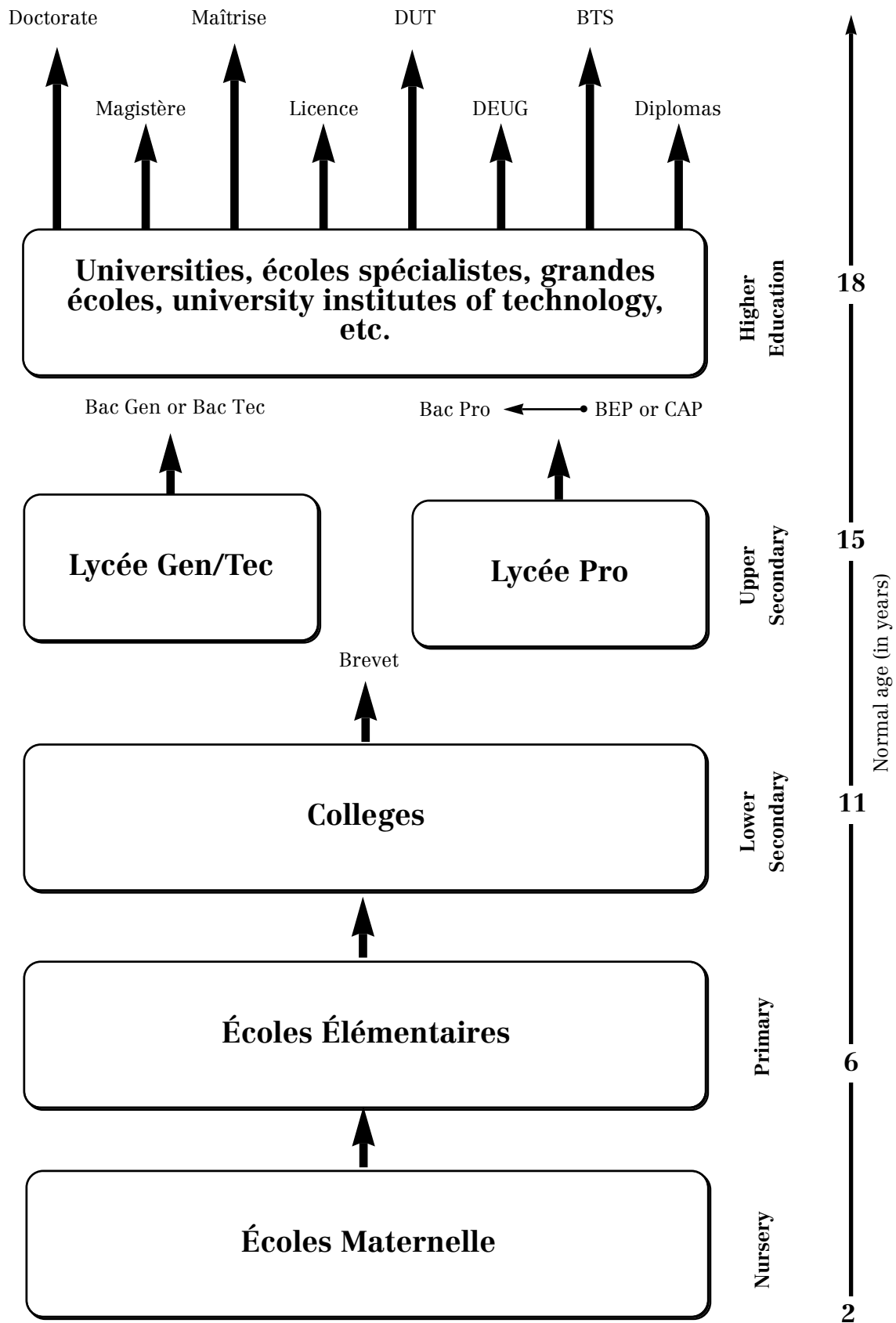
16 In 1993 the French education service provided for some 15.2 million pupils and students in 75,000 schools and colleges and 86 universities. It also employed 900,000 teachers, 300,000 non-teaching staff and 4,000 administrators and inspectors. The Lyon academy, with a population of 2.6 million, provided for 732,000 pupils/students in 3,350 establishments with a staff of 52,750 of whom 39,500 were teachers.

17 Most French young people continue their education beyond compulsory schooling, and 85 per cent of 17 year olds are engaged in some aspect of post-compulsory education and training. The comparable figure for England is 67 per cent. In 1992-93, there were 2.32 million students in upper secondary education: 1.6 million (69 per cent) in general and technological *lycées* and 0.72 million (31 per cent) in vocational *lycées*. In the same year, there were about 2 million in higher education: over 400,000 in short-cycle higher education and 1.5 million in long-cycle higher education in the universities (1.4 million) and *grandes écoles* (100,000).

18 Private educational institutions exist at all levels and receive state funding in return for some state control of salaries and staffing. Private institutions are organised and maintained by private citizens, associations, professional bodies and religious organisations. They exist to meet the needs of particular groups and where demand outstrips supply in certain areas of provision.

19 A diagrammatic representation of the French education system is shown in Figure 1.

Figure 1: The French education system and qualifications awarded



Compulsory Education

20 Education in France is compulsory between the ages of six and sixteen. Pre-school education is also provided in nursery schools for children aged between two and five years. Compulsory schooling comprises a primary education phase of five years' duration and a lower secondary phase of four years in the colleges. During the final two years of secondary education some pupils follow a curriculum which includes additional, optional technology subjects. All are prepared for entry to post-compulsory secondary education which is provided principally in the upper secondary *lycées*.

21 There are about 18,000 nursery, 38,000 primary and 7,500 secondary state schools in France which cater for about 9 million young people. A further 2 million pupils attend 400 nursery, 6,000 primary and 4,000 secondary schools which provide private education. The school year runs from mid-September to the end of June and the school week is 27 hours.

22 French policy is to keep students with learning difficulties and/or disabilities in mainstream school provision whenever this is possible. Special schools are provided for those with severe learning difficulties.

23 The Ministry of Education specifies the teaching times to be devoted to each subject and the academy specifies maximum and minimum class sizes in a region. Teachers are required to teach between 15 and 18 hours a week depending on their qualifications. Those with the *agrégation*, the higher-level teaching qualification, teach for 15 hours a week, those with a teaching certificate for 18 hours. The number of teachers in an institution is allocated on the basis of enrolments. When there is a fall in roll, teachers are transferred to another institution.

24 The primary school curriculum is common to all children. The first two years of secondary education in the colleges have a common core curriculum of 21 hours per week. For every subject of the curriculum there is a precise national programme which defines both the aims and content. In addition, pupils have three hours a week of sport and three hours to study optional subjects. The normal class size is 24, with a maximum of 30. In the third and fourth years, pupils continue to study a general education curriculum leading to the award of the school-leaving certificate, the *brevet de college*. Leaving college early to undertake vocational studies at a *lycée professionnel* is now being discouraged and most students move on to a *lycée* only after completion of the college curriculum. Acquiring the *brevet de college* is not essential to progress to a *lycée* and a substantial proportion of pupils leave college without acquiring this qualification.

Post-compulsory Education

25 There are three distinct qualification routes in post-compulsory education and training in France. These are the general, technological and vocational baccalaureate routes. After the first two years of secondary education, pupils are placed in one of two streams, a general

or a vocational stream. Those in the general stream are expected to proceed with a further two years of compulsory and three years of post-compulsory education in the *lycée* in preparation for higher education, to the general (Bac Gen) or technological (Bac Tec) baccalaureates. Those in the vocational stream progress to the *Certificat d'Aptitude Professionnelle* (CAP) or the *Brevet d'Études Professionnelles* (BEP), followed by a further two years' study leading to the vocational baccalaureate (Bac Pro).

26 In principle, movement between the three baccalaureate routes is possible. A student who has failed the general or technological baccalaureate can follow a course of study leading to the Bac Pro, and a student achieving the Bac Pro can move to the technological baccalaureate via a bridging course. However, movement between routes is not common and requires a change of institution and an additional year's study.

27 In 1993, about 85 per cent of French 17 year olds were engaged in some aspect of post-compulsory education. This compares with the 67 per cent of 17 year olds in full or part-time education in England in 1993. About 50 per cent of French 17 year olds attended general/technological *lycées*, 25 per cent *lycées professionnels*, 10 per cent were following apprenticeships and about 3 per cent were following courses at specialist institutions, for example, for the performing arts. About two million students enrolled in the various higher education institutions in the same year.

Institutions

28 Because it is still common in French education for pupils to repeat a year, it is not appropriate to define school levels and attainment in terms of the age of pupils. The following descriptions assume the most common progression path for pupils and students.

29 France has a thriving nursery education provision attended by virtually all three to five year olds and about one third of two year olds. The first stage of compulsory schooling in France begins at the age of six, lasts for five years and is conducted in primary schools called *écoles élémentaires*. At the age of 11 all pupils transfer to the lower secondary schools called *colleges* for four years. At the age of 15 pupils transfer to the upper secondary schools or *lycées*, of which there are two types (general/technological and vocational) to study for one of the three baccalaureates described in paragraphs 36 to 40. Some pupils, after two years in *college*, transfer early to vocational *lycées* (the *lycée professionnel*).

30 All the pupils, whether in *lycées professionnels* or in *colleges*, prepare for the *brevet de college* which is normally taken at the age of 16. Those choosing to study for the *certificat d'aptitudes professionnelles* or *brevet d'études professionnelles* after the completion of compulsory schooling do so at a *lycée professionnel*.

31 *Groupements d'établissements* (GRETAs), of which there are 350 throughout France, are groups of *lycées* administered through the

academies by the regional *Délégué Académique à la Formation Continue* (DAFCO). They provide continuing vocational and professional development for adults, leading to national examinations. They are financed by grants from the regional government and through tuition fees received from students and employers. About 70 GREtas, the *centres permanents*, open 12 hours a day, six days a week for 11 months of the year. Some free tuition is provided for unemployed students. Employers pay the full cost of training for their employees. These centres provide individually-tailored programmes for adults. Students can start their programme at any time of the year, but most start in September or January. Students are prepared for national examinations.

32 The *centres de formation des apprentis* (CFAs), operated by local chambers of commerce or professional bodies, provide the off-the-job education and training of apprentices. The latter are considered employees, but are paid less. They receive 10 per cent of the national minimum wage at the start of the apprenticeship, rising to a maximum of 75 per cent. They attend for a minimum of 400 hours study each year based on a 39-week year. Both the CFA and on-the-job elements of apprentice training are subject to inspection by the national inspectorate.

33 France provides two types of higher education: short and long cycle. Short-cycle higher education is provided in the university institutes of technology; in the *lycées*, which offer advanced technician certificates; and in certain specialist paramedical and social welfare institutions. Long-cycle higher education is provided in the universities and, for a small minority, in the *grandes écoles*. Both the short-cycle higher education institutions and the *grandes écoles* are more selective than universities. Admission to the *grandes écoles* is through highly selective competitive examinations which usually require two or three years' preparation in classes offered by some *lycées*. The *grandes écoles* and short-cycle higher education institutions provided for around 0.5 million (25 per cent) of the students in higher education in 1992-93. The remainder attended universities.

Governance

34 Each school and *lycée* has a governing body of 24 to 30 members on which parents, teachers, pupils, the chamber of commerce and the local authority are represented. Since 1989, all have been required to produce a strategic plan and to submit an annual report on its implementation to the rector of the academy and the local authority. Although governing bodies advise on and approve strategic plans, they are generally used by college and *lycée* principals as advisory groups rather than as decision-makers.

Qualifications

35 The principal national qualifications awarded within the French education and training system are:

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- the *brevet de college*, the school-leaving certificate, awarded on leaving college after the completion of compulsory education
 - the *certificat d'aptitudes professionnelles* (CAP), for apprentices in skilled manual occupations – this is being phased out in some occupational areas
 - the *brevet d'études professionnelles* (BEP), more broadly based than the CAP and normally taken two years after the end of compulsory schooling
 - the baccalaureate (general, technological or vocational), commonly known as the Bac Gen, Bac Tec and Bac Pro, respectively
 - the university diploma in technology (DUT), awarded after two years' study at a university of technology
 - the advanced technician's certificate (BTS), awarded after two years' study in a *lycée*
 - the diploma of general university studies (DEUG), awarded after two years of university education (Bac+2, that is 2 years study after the baccalaureate)
 - the *licence*, awarded after three years of university education (Bac+3)
 - the *maîtrise*, awarded after four years of university education (Bac+4)
 - the specialist post-graduate diploma, awarded after five years of higher education (Bac+5)
 - vocational diplomas, the magistères (Bac+5) or the engineering master diplomas (Bac+4)
 - the doctorate, in the medical and paramedical professions, (Bac+4 to 10).

Baccalaureates

36 During their first two years of post-compulsory education, pupils studying for the general and technological baccalaureates take a common core of compulsory subjects, two options and a practical project at a *lycée*. Those taking the general baccalaureate specialise in the final year in economics and social sciences, liberal arts, or sciences.

37 Those studying for the technological baccalaureates can specialise in medicine and social welfare, industrial science and technology, laboratory science and technology, or tertiary science and technology.

38 In the final year of both the general and technological baccalaureate programmes there are again compulsory and optional subjects as well as a practical project. The two baccalaureates have the primary aim of preparing people for entry to higher education. About 35 per cent of the 18-year-old age group gain the Bac Gen and 14 per cent the Bac Tec.

This compares with 39 per cent of this age group in England gaining an NVQ level 3 qualification or equivalent.

39 The *baccalauréat professionnel*, known as the Bac Pro, is a vocational qualification. The Bac Pro is normally taken over two years and is a broader and higher level of qualification than a CAP or BEP in the same vocational area. Students studying for the Bac Pro attend a vocational *lycée*, as part of their employment contract, or in continuing education and they will have successfully completed a CAP or BEP programme.

40 The Bac Pro was introduced in part to help raise the status of vocational education. This is an issue of concern in France as it is in England. It was clear from the visits to institutions, and from discussions with colleagues in the Ministry of Education and in the Lyon Academy, that the Bac Pro had not succeeded in fostering parity of esteem with the Bac Gen or Bac Tec. For example, it was not regarded as a suitable qualification for entry to higher education. In recent years enrolments for the Bac Pro have been declining largely because of the qualification's low status in the eyes of potential students and their social contacts.

Curricula

41 Curricula in programmes leading to the general, technological and vocational baccalaureates, the CAP and BEP are defined nationally. Two related features are worth commenting on. The teaching week of about 30 hours is long by English standards. However, this relatively long teaching week allows the French to offer much broader curricula whilst at the same time allowing in-depth study of specialist subjects typical of General Certificate of Education advanced level and vocational education programmes.

42 Students following general and technological baccalaureate programmes study a common curriculum in the first year. This comprises: a compulsory common core (16 hours) embracing French, mathematics, physics, chemistry, life and earth sciences, a foreign language, history, geography, physical education and sport; two options (6 to 8 hours) chosen from a list of about 14 subjects; and two projects (6 hours) which enable students to apply what they have learnt.

43 In the last two years of the general baccalaureate, students choose to study one of three specialist areas: economics and social sciences; liberal arts or sciences. Again, compulsory subjects dominate the curriculum and there is a choice of options and projects.

44 The final two years of the technological baccalaureate are open to students who have completed the first year of the general and technological baccalaureate programmes and those with either a CAP or BEP, who have taken a bridging course, or those who have obtained a Bac Pro. Four areas of specialist study are available: medicine and social welfare; industrial science and technology; laboratory science and

technology; and tertiary science and technology. As in the general stream, there are compulsory subjects, optional subjects and workshop projects, with compulsory subjects again dominating the curriculum.

45 The Bac Pro curriculum embraces: vocational, scientific and technical subjects (16 to 18 hours a week); French, a foreign language, history, geography and civics (7 to 8 hours a week); and art and music, physical education and sport (2 hours each a week). An average of 16 weeks' work experience alternates with college-based study. On the successful completion of a Bac Pro programme, students are expected to enter employment. However, a small proportion take bridging courses to enable them to enter technological baccalaureate programmes and thus proceed to higher education.

Assessment and Examinations

46 A combination of examinations, set and marked nationally, continuous assessments and oral examinations is used to assess students taking the general, technological or vocational baccalaureates. To obtain a pass in the baccalaureates, students must obtain a mark of 10 out of 20; a mark of 11 to 14 gains a credit rating; a mark of 15 or 16 gains a good rating; and one of over 16, very good. A mark of 8 or 9 entitles the student to a further limited assessment in the form of an oral examination; if the mark is still 8 or 9 the student is awarded a certificate of achievement. Those receiving less than 8 receive a summary record of achievement.

47 Similar marking schemes are used throughout French education. For instance, examination papers for the Bac Pro are set nationally but are marked by a committee of teachers appointed by the academy. In addition, Bac Pro students will take practical tests which are devised by the teachers in the *lycées*. Within a region or academy, the teachers marking the papers exchange them between each other with the aim of achieving consistent standards. Bac Pro students are also required to maintain a dossier of work upon which they are examined orally by teachers from another *lycée*. CAP students or apprentices, like their NVQ counterparts in England, may take the CAP when they are ready to have their skills and abilities tested.

48 The CAP tests of students are administered by teachers from a different *lycée* or *centre de formation*. CAP students have to maintain a dossier of work which is also assessed and the marks awarded for it count towards the final qualification. The dossier reflects, in part, the quality of the student's achievement in the general education components which are an integral part of the CAP syllabus.

Quality and Standards

49 France uses a number of instruments to assure the quality of its education provision. These include: central control of the curriculum, examinations and awards; inspections; inspectorate oversight of the training, certification, recruitment, appraisal and promotion of teachers; and both local and national advisory bodies. The increasing involvement

of local communities and businesses on governing bodies, as part of the process of decentralisation, and the growing involvement of local and regional authorities in education and training decision-making are also having an impact on standards as educational institutions strive to meet the expectations of their local and regional communities.

50 The *lycées* are under the authority of the rector of the academy. Regional inspectors, who are subject specialists, work within the academy. Inspectors inspect teachers and the standards of work within an institution. The inspectors and the principals of the *lycées* give teachers marks which determine their promotion and progress. Working to the minister are general inspectors: one group is responsible for the inspection of teaching and standards, the other group has an audit function and is responsible for the inspection of management. Regional and national inspectors work closely together. Inspection in France differs from that in England in that there are no full inspections of individual colleges. Inspection is principally aimed at specific issues. *Lycées* do not have their own quality control systems as do English colleges.

51 There are about 100 general inspectors based in Paris, whose reports for the minister are published. Their reports cover all aspects of the work and are in the nature of national surveys on, for example, developments within the *lycées professionnels* or in the general/technological *lycées*.

52 The regional inspectors report on institutions and on standards of work. Their reports are to the rector of the academy and are not published. The rector can commission a specific investigation or a local survey if there is a problem, or can request a report on an individual teacher if there is the possibility of a disciplinary offence. Inspectors also have authority to inspect on-the-job training.

53 The visiting team examined syllabuses, students' work, examination papers and examples of continuously-assessed work to gain some insight into how the standards expected in vocational programmes compare with comparable programmes offered in English further education colleges. The team concluded that at all levels both the vocational and academic programmes in France provided a broader educational experience for students than their English equivalents. French students also reached approximately the same standards in specialist vocational and academic subjects as their English counterparts.

54 Compared with their English counterparts, French students receive far more hours of teaching each week. For instance, the timetables for many of the courses visited required between 27 and 30 hours of teaching a week whereas comparable courses in England would be timetabled for 20 to 22 hours a week. To some extent, this comparatively generous allocation of teaching time may reflect the proportion of GDP assigned to educational expenditure. In England, on the other hand, the hours of actual teaching on some courses have been reduced in recent years without any consequent drop in standards.

Furthermore, on many courses in England, students now spend more time on private study in learning resource centres equipped with information technology than do French students on comparable courses.

Resources

55 The college and six *lycées* visited by the team were all well equipped, appropriately staffed and generously accommodated. Pupil-teacher ratios in the six lycées varied between 8:1 and 11:1, with the lowest ratios in the *lycées professionnels*. This compares with the average student-to-staff ratio of about 15:1 in English further education colleges. French teachers are required to teach for between 15 and 18 hours each week. This schedule enables some teachers to double their salaries by undertaking paid, part-time teaching on vocational continuing education programmes. Only rarely were class sizes of over 12 observed by the team and this was usually in a *lycée général*. Equipment in the *lycées professionnels* was generally up to date and well maintained; consequences of the benefits stemming from the apprenticeship tax and the willingness of local companies to donate modern equipment to the *lycée* of their choice. However, many engineering workshops also have a large stock of obsolete machine tools reminiscent of many older engineering workshops in English further education colleges. The wide corridors, generous space standards for workshops and laboratories, and the high levels of maintenance and cleanliness provide a good working environment for both *lycée* students and their teachers. Library provision in the *lycées* visited was poor by English standards and reflected the dominance of lectures and the use of handouts in most of the institutions visited.

Funding

56 In 1992, total spending on all aspects of French education was FF460 billion (approximately £60 billion) of which central government contributed two thirds, private individuals one tenth, local authorities about one fifth and businesses about 6 per cent. Educational expenditure accounted for about 6.8 per cent of GDP. This compares with the 5.3 per cent of GDP spent on education by the United Kingdom in the same year.

57 The French Ministry of Education provides 60 per cent of the education expenditure of *colleges* and *lycées*. The remainder is provided by local government: the *communes* equip and run the *colleges*; the regions equip and run the *lycées*.

58 Tuition is generally free in public educational establishments, although nominal fees are levied in universities and *grandes écoles*. Fees are also charged to individuals or employers for continuing professional development courses. Students attending the latter institutions and who can prove financial need are eligible for grants or scholarships.

VOCATIONAL EDUCATION AND TRAINING

59 In recent years, France has striven to broaden its vocational education provision and to allow easier interchange between academic and vocational education streams. In doing this it has pursued five objectives:

- reconciling the preparation for immediate employment with the possibility of continuing education at a higher level
- ensuring an appropriate level of specialisation at the various qualification levels
- providing opportunities for students/trainees to engage in work-based training
- simplifying the qualification structure to make it more understandable to students, parents, employers and the public at large
- increasing the effectiveness of teaching, assessment and examinations.

France has set out to achieve these objectives by:

- broadening the CAP and BEP curricula
- reducing the number of occupational areas in the BEP and emphasising the need for adaptability, utility, responsibility and autonomy
- designing curricula so that the job-specific CAP may be pursued at the same time as the broader BEP
- developing bridging courses to allow students/trainees to transfer to technological baccalaureate programmes during or on successful completion of a Bac Pro.

60 At the end of the final year of lower secondary education about 12 per cent of young people choose to take the three-year CAP programme offered by the vocational *lycées* and the apprentice training centres. There are 240 CAP programmes which prepare young people for a particular occupation. However, demand for CAP programmes has declined dramatically and they are gradually being phased out, although they are still being retained in those occupational areas in which they are valued and in apprenticeship training.

61 The BEP has been growing in popularity. There are around 40 programmes, 10 of which attract 80 per cent of the students. The BEP is at the same qualification level as the CAP but provides an introduction to a broader range of vocational skills. It is possible to prepare for both a CAP and BEP at the same time when appropriate modules are available to satisfy the demands of both qualifications.

62 The CAP is comparable to the English NVQs because it attests specific work-related competences. However, the CAP is taken mainly by young people and unlike NVQs, it includes a significant element of

general education. The BEP and the Bac Pro are comparable with our GNVQs. Nevertheless, whereas many of our students see GNVQs as a possible route to higher education, the majority of BEP and Bac Pro students are aiming, primarily, for employment.

63 The advanced technician's certificate (BTS) and the university diploma in technology (DUT) are obtained after two years' study beyond the baccalaureate. The BTS is offered by the technological *lycées* and the DUT by the university institutes of technology. These qualifications prepare students for posts as senior technicians; they compare in standard with the higher national certificates and diplomas offered by the Business and Technology Education Council. They comprise about 33 hours study a week in *college* and 8 weeks of work experience. The DUT is offered in 21 vocational areas. It is not as highly specialised as the BTS which is offered in 100 specialisms covering 4 vocational sectors: manufacturing, services, paramedical studies and applied arts.

64 In 1991-92, 77,000 students were studying on DUT programmes and 60 per cent, the majority female, were on service sector programmes. Only 20 per cent of those on manufacturing programmes were female. Of the 215,000 undertaking BTS programmes in 1991-92 about half were female.

65 In an attempt to reduce the gap in the vocational emphasis of the universities and the *grandes écoles*, the universities have in recent years offered an increasing number of diplomas and degrees with a vocational emphasis.

Training Taxes

66 Training in France is the responsibility of the Ministry of Labour which levies a vocational training tax (the *taxe de formation professionnelle continue*). Firms with more than 10 employees are expected to spend 1.5 per cent of their annual wage bill on the training of their employees. Such spending must be in line with the firm's annual training plan. Firms may spend their levy by contributing to a centrally administered fund used specifically for vocational training; by paying directly for employees' training (either in house or at an educational institution), or by contributing equipment to an institution. Smaller firms with less than 10 employees are required to contribute 0.15 per cent of their annual wage bill to training. The self-employed must pay 0.15 per cent of their social security contribution to training.

67 An additional 0.5 per cent apprenticeship tax is levied on all employers engaged in industrial, commercial and craft activities, excluding those engaged in agriculture. This tax is paid directly to the government, to vocational *lycées* or to chambers of commerce which provide apprentice training through the *centres de formation des apprentis* which they operate.

68 All employees are entitled by law to continuing vocational training and all employers are required to devote a proportion of their wage bill to training and to produce a training plan. This training plan sets out those

training courses which a firm sees as suitable for its employees to attend and which are consistent with its own aims and objectives as a business. A training-leave system enables all employees to attend a training course of their choice during working hours. Such training-leave may be used to enable employees to update or extend their knowledge and skills, to gain a higher qualification, to prepare for a change of occupation, to prepare for a relevant examination and to undertake courses of a cultural or social character. Retraining programmes are also provided for those who have been made redundant.

69 Many vocational *lycées* are equipped to a very high standard. This is partly funded by the income they receive from programmes offered to apprentices who are required to attend the *lycée* for a minimum of 400 hours study a year during their three-year apprenticeship.

70 Over 1.6 million students (28 per cent of the total) in secondary education and over 300,000 (16 per cent) in higher education received financial aid from the government during 1992-93. Parents' income is a criterion used in determining eligibility for financial aid. Some students on work experience are eligible for financial assistance towards the cost of travel and subsistence.

Apprenticeships

71 On completion of their compulsory education, some young people enter directly into work to qualify as apprentices. Theoretical training in apprentice training centres is combined with practical experience in a firm. Apprenticeships are open to people between the ages of 16 and 25 years who sign an employment contract with an employer. These contracts vary in length from 12 months to three years depending on the trade chosen. All young people engaged in an occupation are entitled to training. All employers are required by law to have a training plan and to contribute a proportion of their wage bill to training.

72 Every firm providing apprentice training is required to have an authorised trainer, known as a *maître*, for each apprentice. Firms that provide training have to be approved by the national inspectorate. The inspectorate has the right to inspect on-the-job training, and the duty to ensure that adequate resources are devoted to it. The inspectorate also approves the qualifications awarded to apprentices.

Continuing Vocational Education and Training

73 France spends about 9 per cent of its education budget on continuing vocational education and training. The state funds a little less than half, industry and commerce 42 per cent, and the remainder comes from tuition fees paid by students and trainees.

74 Continuing vocational education and training are carried out principally in those *lycées* which make up the GRETAs (paragraph 31) and in higher education institutions. The 350 GRETAs cater for the continuing education and training needs of adults and deliver training programmes in collaboration with employers. They are funded through

the fees they receive from employers and for delivering government-funded training schemes. They are administered by the regional academy for continuing education. Many *lycées* which are part of a regional GRETA benefit from employers' direct investment in their technical facilities, under the arrangements for paying the employer vocational training tax. In 1992, over 660,000 people attended GRETAs, of whom just over half were on employer-funded programmes.

75 Institutes of higher education, universities, *grandes écoles* and regional engineering schools play an important part in providing continuing education and training at the higher levels. Some 15,000 higher education teachers were involved in delivering continuing education for over 400,000 people in 1992. About 40 per cent of the funding of this provision comes from the public purse.

TEACHERS AND THEIR TRAINING

76 Teachers are recruited at different levels through competitive examinations. In 1993, France employed about 900,000 teachers of whom 120,000 were working in the private sector and 367,000 in the *colleges* and *lycees*.

77 Over the years, France's attitude to teacher training has been ambivalent. Until recently it was possible to teach in secondary education with a higher education qualification but without being teacher-trained, but not in primary education. This has now changed and secondary teachers are required to have a higher education diploma in a specific discipline and to have undertaken a teacher-training course in the newly-established teacher-training institutes which recruit potential primary and secondary-school teachers at graduate level. Teachers qualify at two levels, the certificate level which is the qualification held by most primary teachers, and the *agrégation* level which is the qualification held by most who teach in the *lycée*.

78 Initial-teacher training is reinforced by in-service training programmes for both primary and secondary teachers. Each institution draws up an annual staff-development plan. The plan reflects any national or regional priorities and the institution's own needs. Teachers also develop new skills through work-shadowing. As no funding is available to cover for teachers on in-service training, institutions' staff-development plans are rarely acted on in full. In Lyon, all teachers are entitled to five days staff development each year but the lack of cover means that few teachers are able to take full advantage of this.

CAREERS EDUCATION AND GUIDANCE

79 Careers education and guidance provision in French schools is covered by a legislative framework introduced in 1989. Under this legislation, teachers and teams of careers advisers share responsibility for careers education and guidance which pupils are entitled to from the age of 11. Most careers guidance is concentrated in the final year of *college* and involves pupils, parents, teachers and careers advisers. For

those seeking an apprenticeship, the local chamber of commerce is involved. Careers guidance is a lengthy and detailed process, the aim of which is to reach agreement on the next stage of the pupil's education.

80 There is no competition between institutions for students leaving the *colleges*. As a result of the guidance process, they are placed at a named institution. There is an appeal procedure if the pupil and their family disagree with the recommendation.

81 A central careers advisory service, the *Centre d'Information et d'Orientation* (CIO), has local offices which provide a drop-in facility for young people seeking careers advice. The local CIO has the additional task of helping those who wish to leave *college/lycée* to take up paid employment. Careers advisers from the CIO also visit *colleges* and *lycées* one day each week. It is expected to provide young people with careers advice for up to one year after leaving their courses.

82 During the visit, the team found it difficult to obtain precise statistics on student destinations. None of the *lycées* or the *college* visited collected information on this important indicator.

EMPLOYERS AND THE EDUCATION SERVICE

83 There has been a long debate in France about the role of vocational education in compulsory and post-compulsory education curricula. The practice of separating pupils into vocational and academic streams has changed following the introduction of the Bac Pro in 1985. The creation of a technological curriculum for some pupils in the last two years of compulsory education in *colleges* is evidence of a more positive approach to streaming. Pupils from these technological streams are prepared to progress to the BEP and Bac Pro offered by the *lycées professionnels*. A small group of pupils unable to cope in these streams receive remedial help and a more work-oriented curriculum in the final year of *college*. However, some still leave the *college* early and transfer to the *lycée professionnel*. These changes aim to reconcile employers' demands for a more vocationally-oriented college curriculum, which caters for all abilities, with the education service's belief that a broad general education is the best preparation for life.

84 Beyond compulsory schooling, co-operation between the education service and the trades and professions is a statutory obligation. Seventeen vocational advisory boards, *Commissions Professionnelles Consultatives*, advise the Ministry of Education on the need for new vocational programmes and qualifications, and on changes to existing programmes. Their membership is drawn from employers, trade unions and public bodies. These boards played a key role in developing curricula, validating programmes and setting standards, and they had a powerful influence on the reform of the BEP as a broadly-based vocational qualification ranked at the same level as the CAP but with different objectives. They also played an important part in redefining the CAP, by ensuring that programmes leading to it not only prepared young people for a particular occupation, but also helped them to cope with

expected developments in that occupation. The vocational advisory boards are also involved in the development of BTS and DUT programmes.

85 Employers play a key role in vocational education through their involvement in the apprentice training. Only 7 per cent of apprentices are enrolled in the 58 apprentice training centres (CFA) attached to local *colleges*. Over three-quarters enrol in private institutions or institutions run by chambers of trade; the remainder in CFAs run by chambers of commerce or local authorities. CFAs are overseen by regional authorities with whom they have a contract. *Lycées* may also now train apprentices without having to create specific training centres. This move ensures closer co-operation between *lycées* and employers since the providing *lycée* is required by law to enter into an apprentice training contract with the representative trade organisation as well as the regional authority.

86 The difficulty experienced by young people in finding jobs after leaving education has led to the introduction of a range of measures designed to ease the transition from education to employment. These include the provision of improved careers guidance and counselling and a wider range of courses which include a work experience element.

87 Employers purchase training from the state system and collaborate with the education service in implementing government training schemes and employment initiatives targeted at adults as well as young people. Many of these schemes are delivered through GREtas, which in 1992 provided training courses for over 650,000 people; 300,000 of them on company-funded courses, 250,000 on government training schemes and 100,000 on local authority schemes.

88 An example of collaboration between employers and the education service is the programme offered at the *Lycée Ampère* in Lyon for the Rhône Poulenc Silicone Corporation and the Lyon DAFCO. The programme, which was designed to dovetail with work, consisted of a regular pattern of one week's training followed by two weeks of work. Its aim was to enable operatives employed at the Rhône Poulenc factory to upgrade their skills, knowledge and understanding so that they could operate at technician level. Prior to joining the course, each employee's needs were assessed by teachers over a three-day period and the training programme was tailored to suit individual needs. The training programme was certificated by Rhône Poulenc. On the successful completion of the course, employees were rewarded with a salary increase and the employer benefited from the productivity increase which was achieved and which the company attributed to the success of the training programme. The company intends to extend the scheme to all Rhône Poulenc employees who are likely to benefit from it. Such extensive collaboration is not common, but the success of this scheme has aroused a great deal of interest and other companies throughout France are exploring similar schemes.

APPENDIX 1

INSTITUTIONS AND ORGANISATIONS VISITED

Le Lycée Parisien de la Plasturgie et de Moule, Paris
Lycée Juliette Recamier, Lyon
Lycée Professionnel Jean Lurcat, Lyon
Lycée Professionnel Marc Seguin, Venissieux
Lycée Polyvalent Marcel Sambat, Venissieux
Lycée Ampère, Lyon
College Paul Eluard, Venissieux
Academy, Lyon
Fédération de la Plasturgie, Paris
Rhône Poulenc Silicone
Délégué Académique à la Formation Continue (DAFCO), Lyon
Centre Permanente GRETA, Ampère, Lyon
French Ministry of Education, Paris

APPENDIX 2

BRIEF DESCRIPTIONS OF INSTITUTIONS AND ORGANISATIONS VISITED

Le Lycée Parisien de la Plasturgie et de Moule, Paris

Le Lycée Parisien de la Plasturgie et de Moule is a small Parisian monotechnic providing BEP programmes in material fabrication and Bac Pro courses. It has a student enrolment of 250, including about 25 pupils under the statutory school-leaving age. The 31 teaching staff include specialists in both materials fabrication and general education. The college is generously accommodated and well equipped with up-to-date moulding and fabrication equipment provided from public funds and through the support of the plastics industry.

Lycée Juliette Recamier, Lyon

Lycée Juliette Recamier is in the centre of Lyon. It has a student enrolment of 900 and a full-time staff of 117 of whom 83 are teachers. It provides Bac Gen and Bac Tec programmes for over 800 students and a BTS programme for about 70 young people on a tri-lingual secretarial course.

Lycée Professionnel Jean Lurcat, Lyon

Lycée Professionnel Jean Lurcat is in the suburbs of Lyon about 12 km from the city centre. It has an enrolment of about 750 and a staff of 112, of whom 75 are teachers. It provides CAP, BEP and Bac Pro programmes and specialises in textile, commercial and paramedical subjects. It is located in a relatively poor area of Lyon and about half of its students are second-generation immigrants.

Lycée Professionnel Marc Seguin, Venissieux

Lycée Professionnel Marc Seguin, Venissieux, shares a campus with the Lycée Polyvalent Marcel Sambat and they have the same principal. The Lycée Professionnel has 400 students and 50 full-time teachers. It offers a CAP in mechanical engineering, a BEP in mechanical and production engineering and a Bac Pro in mechanical engineering. The CAP in mechanical engineering is to be withdrawn in September 1995.

Lycée Polyvalent Marcel Sambat, Venissieux

Lycée Polyvalent Marcel Sambat, Venissieux, shares a campus with the Lycée Professionnel Marc Seguin and they have the same principal. The Lycée Polyvalent Marcel Sambat has 900 pupils and 100 full-time teachers. It offers the Bac (Technology) in humanities, social sciences and science. It also offers the BTS in mechanical and electrical engineering and BTS in electronic techniques.

Lycée Ampère, Lyon

Lycée Ampère, Lyon is in the centre of Lyon. It offers the Bac Gen and Bac Tec. It also serves as a *centre permanent* within the continuing education GRETA provision in Lyon. In this capacity it offers individually tailored CAP, BEP and Bac Pro programmes, and a range of modular access courses which prepare adults for entry to other programmes. The *lycée* provides a range of language programmes including French, English, German, Spanish, Italian, Japanese, Arabic and Chinese. It has an outstanding science museum which charts development in the electrical sciences and is located in the laboratory of the famous French scientist Ampère.

College Paul Eluard, Venissieux

The College Paul Eluard has 537 students, 47 teachers (4 part-time) and information technology support staff. Situated in an educational priority area, a third of its students are not indigenous and 80 per cent are of foreign parentage. It offers general education for pupils aged 11 to 18; a substantial minority have repeated one or more years. As well as repeat years, special arrangements are available for those needing additional help. Despite this, only 10 per cent of its pupils obtain the BEP, compared with an average of 42 per cent in the Rhône area. Attached to the *college* is a centre for research and information, established to raise awareness of social issues in teacher training throughout France and to encourage effective links between primary/secondary education and higher education.

Academy, Lyon

The Lyon Academy is one of two academies in the Rhône-Alpes region of France. The region has a population of 3.5 million, of whom 2.6 million live in the area covered by the Lyon Academy. The Lyon Academy provides for 732,500 pupils/students, at 3,352 establishments, and has 52,750 staff of whom 39,500 are teachers. There are 2,685 primary schools with 332,450 pupils and 14,580 teachers. There are also 583 secondary schools (comprising 302 *colleges*), 111 *lycées*, 105 *lycées professionnels*, 23 *centres de formation pour apprentis* and 65 specialist monotronics attended by 160,584, 73,713, 34,444, 8,915 and 5,149 pupils/trainees, respectively. Some 121,000 students are engaged in higher education: 19,000 are at *grandes écoles*, 75,000 at universities, 22,000 at post-baccalaureate institutions and 5,000 at specialist institutes of higher education.

Fédération de la Plasturgie

The Fédération de la Plasturgie is a federation of companies engaged in plastics production. It represents over 4,000 companies employing 130,000 people. The majority of its companies employ less than 20 people. The turnover of the industry is about £12 billion a year. The federation works closely with education institutions in developing courses and informs the education service of the needs of the plastics industry.

Rhône Poulenc Silicone Corporation

Rhône Poulenc Silicone Corporation is an international business, based in France, which makes over 2,300 silicone-based products. Its main factory in France employs nearly 1,000 people. It also has factories in Germany, Italy, Spain, Australia, the United States and Japan. The recession and increased competition have caused it to rethink both its recruitment and training strategies. It has identified a need to upgrade the skills of its workers and to increase their knowledge and understanding of the tasks they perform. It has collaborated with the Lyon branch of DAFCO in developing a training programme aimed at upgrading its operatives to technician level with the ultimate aim of extending the programme to produce a multi-skilled and more knowledgeable workforce.

Délégué Académique à la Formation Continue (DAFCO) de Lyon

The Délégué Académique à la Formation Continue de Lyon is one of 28 regional DAFCOs with responsibility for identifying continuing education and training needs, developing continuing education policy and forming links with employers. The Lyon DAFCO is funded by the region's 14 GRETAs. It has 30 administrative staff. A further 61 staff from the GRETAs assist DAFCO in identifying employers' training needs.

Centre Permanente GRETA Ampère, Lyon

The Centre Permanente at Lyon is one of 28 centres in France which deliver individually-tailored learning programmes for adults. Students are either employed and wishing to improve their career prospects, or unemployed and working to improve their chances of getting work. The centre is one of the 14 GRETAs in the Lyon region. It is in the centre of Lyon and has a particularly attractive learning environment. Students in employment are funded by their employer. The centre has extensive links with the local health authority and many students work in the health sector. Some unemployed students receive state funding. Programmes lead to qualifications in French, mathematics, physics, chemistry and biology. Programmes last 80 hours. Students can start at any point in the year. They attend once a week for six months. Each student's learning programme is based on their specific needs and drawn up in discussion with subject tutors. Students work alongside each other in small groups, using individually-tailored study packages, and are supported by the subject tutor.

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