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Vocational training in French schools: the State/employer alliance

In France today most initial vocational training is delivered within the school system, in the lycées professionnels (vocational lycées) and the technological streams of general lycées. Historically this characteristic feature of the French system came about at the end of the 19th century as a result of the educational policy of the Third Republic in conjunction with the needs of the mechanical engineering and electrical engineering industries. From the 1960s on, the standing of this training system suffered as it systematically took in pupils who had failed in general secondary education. For their part, employers who originally supported the State's efforts when there was a shortage of skilled labour have sought to regain control over training in a contemporary situation where labour is plentiful and flexibility desired. The future of such training is uncertain and new forms of collaboration between enterprises and vocational and technical training establishments are gradually emerging.

A feature of the system of vocational training in France today is the extent to which training is provided in State school and colleges. Two types of establishment – the lycées professionnels (vocational lycées) and the technological pathways of general lycées – account for almost half of the young people in France coming to the end of compulsory schooling: one million go on to these establishments and pathways, compared with another million going on to the general educational lycées. In contrast, relatively few youngsters of the same age – approximately 300 000 – are accepted for apprenticeship in the workplace.

The purpose of this paper is to describe the thinking that led to this system, starting at the end of the 19th century. The first part outlines the main trends in the history of vocational training since the French Revolution up to the major reforms of the 1960s. The second is a more detailed analysis of what has happened since then.

Technical and vocational education from the French Revolution to the Fifth Republic

The history leading to the contemporary organisation of vocational training for young people in France starts with the abolition of corporations – in other words, guilds – in 1791. The disappearance of this traditional setting for organising apprenticeship triggered off what was called a 'crisis of apprenticeship', one that was to last throughout the 19th century and up to the First World War. In fact the term described three different situations:

- the decline of traditional apprenticeship in craft trades, in line with the decline of the trades themselves. This is still a topical issue today: the sectors that have preserved the traditional apprenticeship arrangement, such as the food trades, hotel and catering and part of the building industry, still complain about the shortage of apprentices.

- the deterioration in the working conditions of young people, and sometimes of children, who were exploited in the industries using manual labour, essentially textiles and mining.

- the shortage of skilled labour in the more modern industries, i.e. mechanical engineering and, from the end of the 19th century, electrical engineering.

The exploitation of child labour and the shortage of skilled manpower were the focus of concern for the political and economic elites throughout the 19th century. They responded in two ways: by developing primary education to teach and protect children, and by starting up technical schools and evening classes. Up to the late 1870s, France was not very different from other leading industrial countries in this respect. Many evening courses, either private or provided by philanthropic associations, workplace schools such as those set up by the Schneider or De Wendel factories, municipal schools (Paris, Le Havre, Lyons, Nantes, etc.) and schools financed by trade organisations (Besançon), offered technical training at varied levels. International exhibitions attracted several international congresses on technical education, especially at the end of the 19th century, providing an opportunity to show how more or less similar schemes were being introduced in Germany, Great Britain, Belgium, Russia and even South America. One of the common features of those initiatives was the low level of involvement of the State and the vital role performed by private and municipal bodies (Charlot and Figeat, 1985).

But two events were to bring about a lasting change in the status of vocational training for young people in France in the last quarter of the 19th century.

The first was the arrival of the Republicans in power in 1879. To stabilise what was initially a fragile regime they put their faith in compulsory schooling, with the aim of educating French youth in the spirit and values of the Third Republic and counteracting the Catholic church's hold over elementary education. But the Republicans had a problem: how to control working class youngsters, especially boys, once they had come to the end of compulsory schooling at the age of 13 and up to the age of military service at 18, or until marriage in the case of girls. Violence among working class youth was not a new issue: from the start of the century successive governments had been concerned with the problem. They feared that the youngsters would fall prey to idleness and crime or to revolutionary ideas. Initial vocational training was thus seen as a way of maintaining order among these young people while meeting the needs of industry and trade.

This project was to provide a solution to the concerns of some of the employers, those at the head of the more modern companies. Mechanical and electrical engineering were at the height of a boom, with the development of the petrol engine and the electric motor and the consequences for road vehicles, aircraft, the navy and railways. As a result they needed skilled manpower in domains calling for new and hard-to-find skills. These sectors were also strategic, since they supplied the armed forces with equipment at a time when the first great world conflict was looming.

Part of the Republican political elite and some of the employers were to form an alliance and create what historians in the English-speaking world who have studied this question have called a lobby ([1]). This was to work towards establishing a vocational training policy with two objectives (Pelpel and Troger, 2001).

The first was the development of technical schools funded jointly by the State and by local authorities. The schools selected from among the best pupils in elementary school those whose social origins meant that they would opt for a short period of training leading straight to stable occupations. They trained highly skilled workers for industrial concerns, who then rose rapidly to become foremen or skilled technicians, the best among them acquiring the status of engineers (Legoux, 1972).

The second objective was to bring in legislation to regulate the training of blue- and white-collar workers and to ensure that those employers bearing the cost of apprenticeship would not be at a disadvantage compared to others not making the effort to train their workers. For example, a diploma attesting occupational skills, the Certificat d'Aptitude Professionnelle (CAP), was created in 1919 (Brucy, 1998), theoretical training courses were made compulsory for apprentices, and in 1925 an apprenticeship tax ([2]) was levied on enterprises that did not train apprentices.

The first objective was successfully achieved: by the eve of the Second World War, several dozen technical schools were catering for nearly 100 000 pupils, a school population almost as large as that of the lycées. The second objective, however, was not attained at the same time. Very few apprentices enrolled for the vocational courses or sat the CAP.

It was the failure of the second objective that was to lead to the creation of a second type of vocational school, what are now called lycées professionnels, with the aim of training not technicians or foremen but shop-floor and clerical workers. During the Second World War, the Vichy Government had set up training centres to take in unemployed people from the working classes and inculcate in them a Pétainist ideology. In 1944, these centres were taken over by the new government and, with the support of the employers in the metallurgical industry, represented by a powerful employers' association, the Union des Industries Métallurgiques et Minières, they became public vocational education establishments (Pelpel and Troger 2001). This time, there were two factors motivating the agreement between the State and the employers: post-war manpower shortages, since the generations now arriving in the labour market reflected the low birth rate in the first half of the century; and the need for national reconstruction after most of the country's infrastructure had been destroyed by bombing.

From this date on, there were two parallel categories of public-sector technical schools in France: one providing training for those who would go on to work as middle management in enterprises, the other training future blue- and white-collar workers.

([1]) This lobby has been described in particular by two British historians, R. Fox and G. Weisz, in The organization of science and technology in France, 1908-1914, Cambridge University Press, 1980.

([2]) This tax, calculated as a proportion of each enterprise's wage bill, is still levied today and represents a not insignificant source of funding for many vocational and technical education establishments.

Up to the 1960s this system worked very well. It provided employers with shop-floor and clerical workers and with junior managerial staff who could be put to immediate use on leaving school. This meant that enterprises did not have to fund and organise the training effort themselves. The system offered students a rapid route to qualifications, at a time when post-compulsory school education was still not very well developed. A historian has called the vocational education of the time a 'lifebelt thrown to the working class'. Technical education or vocational education diplomas had little competition in the labour market from other diplomas; because of this, ordinary people held such education in high regard.

The devaluation of technical and vocational education

In 1959, General De Gaulle returned to power and embarked on a policy of modernisation in France. From the educational viewpoint, this policy was based on the assumption that there should be investment in human capital and, therefore, that the school population should be proportionately higher. From 1959 to 1975, a series of reforms pursued a twofold objective. The first was to defer the point at which individuals made their final career choice by raising the school-leaving age for all: the culmination of this objective was the comprehensive school and a school-leaving age of 16. The second was to expand scientific and technical education: the scientific baccalaureate became a highly valued secondary education diploma; there was a proliferation of engineering schools; and technical and vocational education was developed.

At first, technical and vocational courses benefited from these reforms, since they expanded to the point they have reached today, accounting for half of all lycée pupils. But very soon they also started to suffer from several side effects that were rapidly to transform them into what came to be regarded as the second-best stream of the French educational system.

The first factor was demographic. With the arrival in the labour market of the baby-boom generations at a time when few people in the older generations were reaching retirement age, it automatically became harder for young people to enter the working world. Far more people were seeking their first jobs than there were jobs released by retirements. The slowdown in economic growth following the oil crises of 1973 and 1975 considerably aggravated the problem: the resulting unemployment, combined with the relative scarcity of jobs created by retirement, made it very difficult for young people to find work.

Simultaneously, another process more closely linked to the development of the school system was to have adverse effects on technical and vocational education. The proliferation of engineering and commercial colleges and the development of university-level technological education meant that enterprises and the administration could increasingly look to these sources for the future managerial staff and senior executives they needed. But the effectiveness of this system had a negative effect on the technical, and above all vocational, diplomas acquired in technical education, by making it increasingly difficult for skilled blue- and white-collar workers to gain access to senior jobs through internal promotion ([3]). Increasingly, middle-ranking or higher-level jobs were being taken directly by graduates from the engineering and commercial colleges or the universities. When combined with the automatic effects of population trends, this process gradually created a bottleneck in internal workplace promotion, creating competition between the internal recruitment market (promotion) and the external recruitment market (the hiring of young diploma-holders). To opt for technical and vocational education meant taking the risk of being locked into lower-ranking social status for the remainder of one's life.

From the late 1970s, despite the rise in the number of people in technical and vocational education, this became the 'second-best' stream of schooling (Troger, 1996). As a result, families systematically tried to avoid the pathways that might keep their children down at a lower-level working status, and a majority rejected guidance suggesting that this direction be taken, especially vocational education. Youngsters threw themselves into the race for diplomas, with the obvious multiplying effect. The more diplomas there were, the more each individual felt that a more advanced diploma should be sought.

Because of this, the intake of vocational education schools now consisted only of pupils

([3]) A law that was in effect in 1971 made it compulsory for employers to fund their employees' continuing training. But surveys have shown that it was mainly the managerial staff who benefited from such training.

who had reached school-leaving age but had failed at school, whereas the technological pathways took the pupils who, at the end of their secondary education, had not reached a high enough standard to continue their general education in the humanities, science or economics. There were only rare exceptions to this process: the courses preparing young people for careers that were still held in regard, such as the hotel and catering trades or applied arts for industry (industrial design). The situation has changed since the 1950s, when vocational education was relatively selective and took good or average-level working class pupils; today its intake consists of the group of youngsters who have encountered setbacks in their general school education.

This changing pattern of recruitment, however, has conflicted with another trend, the changes in the skills required in the labour market. Since the early 1980s, production of goods and services has been increasingly influenced by the demand for quality. The organisation of work is less determined by the material constraints of production, and increasingly by consumer demand. Commercial and marketing departments now dictate requirements to production departments, a situation that is a reversal of 30 years ago. Public-sector services, which are highly developed in France, refer less to 'users' and more to 'clients'. For shop-floor and clerical workers and for junior and middle managerial staff this means that they are expected to have new skills in addition to essential technical skills. They are required to communicate better, to adapt quickly to new situations, to master elementary computer skills, to take over responsibility for some customer relations, etc.

Because of this, technical and vocational education has been forced to bring about a minor internal revolution. It has adapted its teaching methods to these new demands at a time when the standard of their pupils has been in decline. This evolution is evident in two fields.

The first has been the development of alternance training (Agulhon, 2001). From now on, all pupils in vocational education and some of the pupils in technical education spend part of their period of schooling in work placements, which are taken into account in awarding their diploma. This applies in particular to a diploma created in 1985, the baccalauréat professionnel or vocational diploma. It has helped to narrow the gap between the training delivered in technical and vocational education and apprenticeship training, since apprentices receive theoretical training as well as working in their enterprise. Serious thought is also being given to combining this training as often as possible in the same establishments, which might be called lycées des métiers (trade lycées).

The second area of change has been the development of thinking on the content of training, taking into account the changing requirements of employers. What are called 'job standard' documents have been drawn up together with the representatives of employers and employees' unions, defining the set of skills sought by employers in each trade (Eckert and Veneau, 2001). These 'référentiels d'emplois' are then converted into 'référentiels de formation', or 'training standard' documents, that are used as a basis for implementing teachers' educational methods. They are often criticised for being too detailed, which sometimes make them difficult to apply to the letter. However, there is no doubt that the new approach has breathed fresh life into teaching methods in technical and vocational education and to an extent has helped to bridge the gap between the standard attained by pupils and level of the skills they need to acquire.

In conclusion, I would say that technical and vocational education has today become a sort of 'safety valve' for the French educational system. It takes in over half of French youngsters who have more or less failed in comprehensive school, and its teachers have displayed imagination, determination and patience in offering them the training and additional education that will help them to obtain a diploma and enter the labour market on the best possible terms. In this, they are rendering service to the employers by relieving them of most of the cost of training.

Over the past few years, this system has been criticised partly for its cost and partly for its relative slowness in reacting to the changing demands of the labour market. Today, these criticisms are muted because technical and vocational education has achieved progress in its practices. Also, the model of apprenticeship, which has developed significantly in certain sectors in competition

with school-based training, has nonetheless reached a certain limit: most enterprises and the French Administration have not acquired a true 'training mindset', unlike what has been happening in Germany. As a result there are often problems with taking on apprentices, as there are with the placements of young people from vocational education.

This is why we now feel we should be moving towards a sort of compromise: initial vocational education and training will no doubt continue to be provided in the school for a long time to come, but its practices will tend to move closer to those of apprenticeship, without making the heavy demands on enterprises of traditional apprenticeship.

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