

Two or three vocational training pathways?

An assessment and the current situation in Spain (1)

Rafael Merino

Senior lecturer and lecturer of the Department of Sociology, in the sociology unit of the Faculty of Education Science of the Autonomous University of Barcelona since 1993. Currently reader. Since 1992 researcher with the Education and Work Research Group of the same university (GRET - Grupo de Investigación Educación y Trabajo), pursuing avenues of research into the transition between school and work, vocational training and youth

SUMMARY

Keywords:
Training policy;
comprehensive school;
post secondary education;
educational reform;
educational legislation;
educational system

This article outlines the development of vocational training in Spain through the provisions of the major education Laws of 1970, 1990 and 2002. It discusses the extent to which vocational training has been introduced into the education system, i.e. has been converted into regulated vocational training, and how many pathways have been developed. The pathways are the result of the combination of tracks designed by education systems and social initiatives by individuals and social actors. In spite of the education reforms, the types of vocational training pathway retain a certain continuity.

(1) This article is a reflection based on research done for the author's doctoral thesis entitled 'From the vocational training counter-reform of the LGE to the LOGSE counter-reform. Vocational training pathways and training cycles after comprehensive secondary education', guided by Jordi Planas i Coll and presented on 10 July 2002 at the Autonomous University of Barcelona.

Introduction

The aim of this article is to take stock of the development of (regulated) ⁽²⁾ vocational training in secondary education, particularly in Spain which experienced major reforms in 1970 and 1990. A third reform in the pipeline since 2002 has been held up by political vicissitudes ⁽³⁾. One of the fundamental aspects of the legislative reforms is the relationship between academic education and vocational training in secondary education, and more specifically the merging or segregation of training pathways in lower secondary education, especially after completion of compulsory education (up to the age of 16). Although it has become common to use the concept of 'pathways' (Spanish *itinerario*) for the route mapped out by the education system, it is essential to distinguish between these 'official' training routes and those that young people actually follow in practice (Raffe, 2003). This is why we prefer to use the term 'tracks' (Spanish *vías*) to refer to the division between academic and vocational training and the term 'pathways' to describe the actual passage of young people through the education system. As we shall see, this distinction is pertinent when we look at how, in the case of Spain, the aggregate action of individuals can change the number of tracks proposed by the education system.

For many years the debate about whether secondary education should be merged or segregated was the origin of educational reforms. In Europe, the relationship between general and vocational pathways has given rise to three types or models of education system (Jackson, 1999):

- 'tracked system' (Germanic countries), where secondary education is segregated into general and vocational tracks which are only loosely connected;
- 'unified system' (Nordic countries), where secondary education is integrated and there is very little differentiation between specific pathways;
- 'linked system' (France, Spain since the General Law on Education 1970), where secondary education is separated into different tracks but with bridges or contact points between the different tracks.

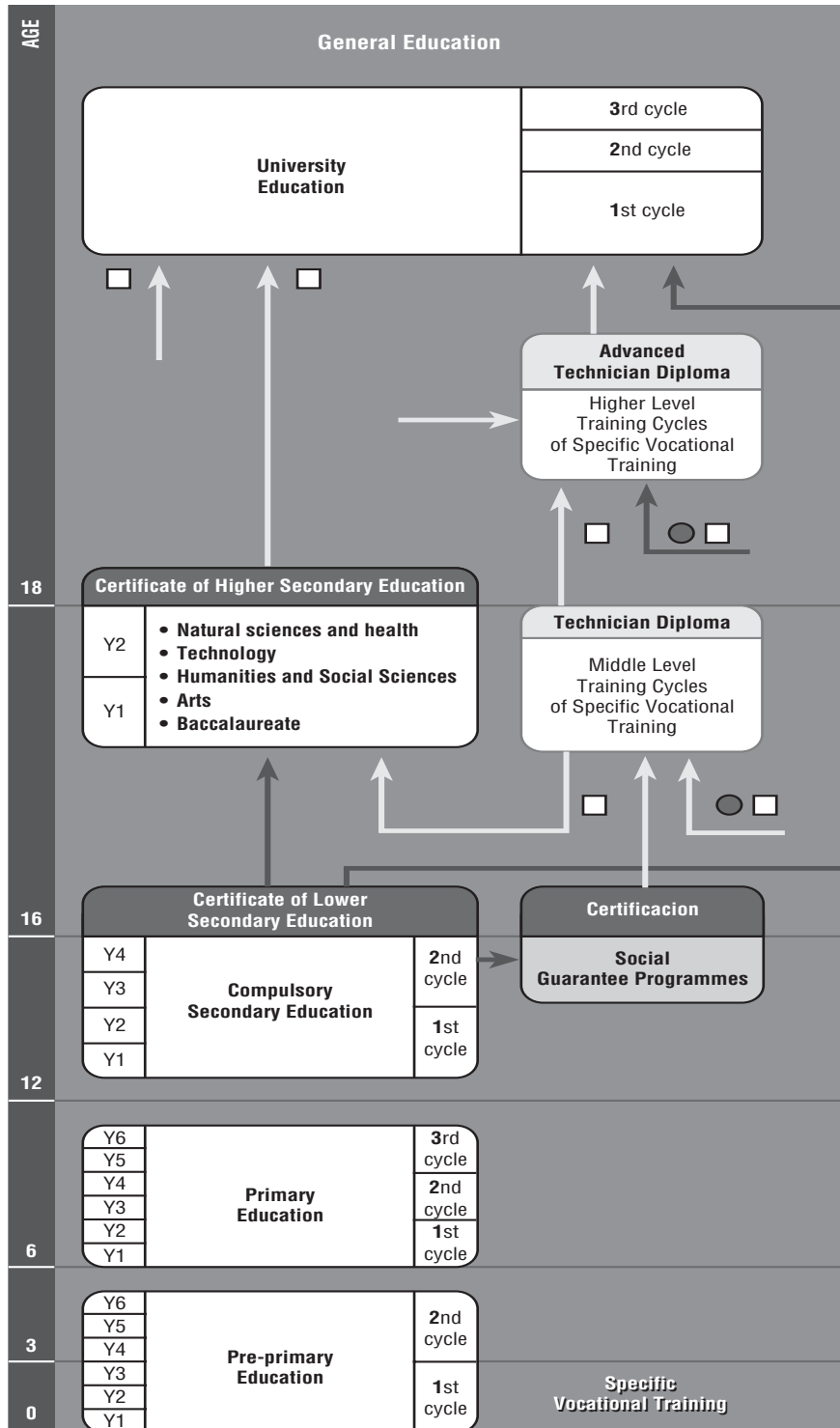
⁽²⁾ In Spain, regulated vocational training is any training to enable the trainee to engage in an occupation included in the education system. It is thus different from occupational training, which is promoted and financed by the labour authorities, normally at a basic level for young people or designed to retrain adult unemployed people. Historically, there have been two levels of regulated vocational training, levels 2 and 3 in accordance with the European Union's classification of qualifications. The connection between those two levels has been through ups and downs, as explained in the article.

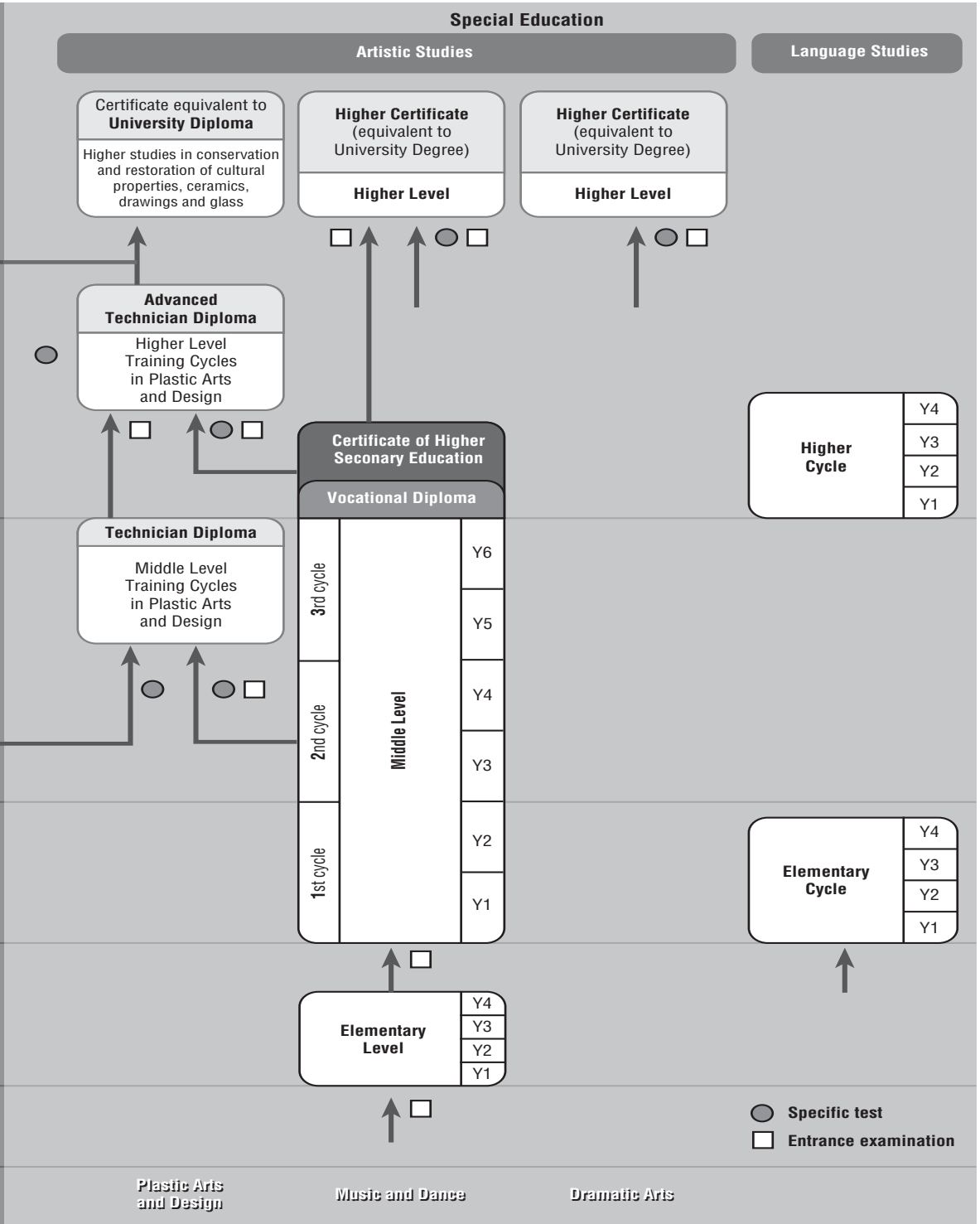
⁽³⁾ In 2002 the Law on the Quality of Education was passed which transformed compulsory secondary education; but the change of government in March 2004 brought the implementation of this Law to a standstill and led to a slow process of debate with the education community which is just starting to bear fruit (December 2004). We will return to this point at the end of the article.



Ministry of
Education and Science

Spanish Education System





These three different types of system, which reflect diverse social, economic and political histories, are undergoing a process of European 'convergence' (Green et al., 2001) towards the 'linked system', i.e. countries with a tradition of segregation are introducing common curricular or organisational elements, and countries with a more integrated tradition are introducing more diversified pathways. But we should not forget that 'societal' traditions (in the sense used by Maurice, 1994) also carry considerable weight.

The evolution of the Spanish system is typical. Prior to 1970 it was a highly segregated system, with vocational training practically outside the school system. Then in 1970 there was an unsuccessful attempt to integrate vocational training into secondary education, which led to a counter-reform placing it in the second zone, so called by Grignon to emphasise the subordinate and marginalised role of vocational training (Grignon, 1971), albeit with some links to the baccalaureate. A second attempt at integration was made in 1990, but its implementation encountered numerous difficulties. Since 2000 discussion has focused almost exclusively on the possibilities of unifying lower secondary education; the pedagogical theory of comprehensive education underlying unification (in other words, that measures taking account of diversity would make it possible to have a unified curriculum up to the age of 16) has been extensively examined, as have organisational patterns within this phase. It is as if the system evolved from a 'tracked system' into a 'linked system' via a 'unified system'. Let us look at some details.

Vocational training in the General Law on Education (Ley General de Educación, LGE, 1970)

The General Law on Education of 1970 had the task of responding to the growing demand for education in the post-compulsory schooling phase and of adapting the Spanish education system to the standards of the developed countries. Clearly developmentalist in inspiration, in the fashion of theories of human capital, but without being able to shake off the rhetoric of the Franco regime, it is the first Law to introduce the notion of comprehensive education - without, however, mentioning the word - by unifying primary education, eliminating the elementary baccalaureate and extending unified schooling up to the age of 14 thus creating general basic education (Educación General Básica) from 6 to 14 years of age (Carabaña, 2002; Lorenzo, 1996). Furthermore, it also integrated vocational training into the education system in a process of institutionalisation, formalisation and structuring (Casal et al., 2003) which led to the establishment of regulated vocational training with the clear objective of providing initial training for employment, but within a

school context. The vocational training was incorporated on the basis of comprehensive principles, i.e. in the form of short training courses after each stage of education – not as alternative tracks. There was also a meritocratic component to progression through the education system: the Law envisaged first-level vocational training for students who had completed basic general education, second-level vocational training for students who had acquired the baccalaureate, and third-level vocational training for students who had completed a short course of university education. To some extent, vocational training was seen not as parallel tracks but as extra training in a specific professional field after each stage of academic education.

The implementation of this educational reform led to a real counter-reform (Planas, 1986): due to pressure from the social partners (linked to the private sector) and a chronic shortage of public resources, the Decree of 1974 regulating vocational training introduced compulsory first-level training for students who failed their basic general education, second-level training which could be entered from first-level training after taking special courses (which ended up accounting for more than 90% of enrolled students) and abolished third-level training. Thus, first- and second-level training and the BUP-COU (Polyvalent Standard Baccalaureate – the academic track giving access to university, the baccalaureate) remained as the two typical tracks defined by Baudelot and Establet (1976) ⁽⁴⁾. Despite this, the pathways that emerged as a result of action taken by individuals, students with their strategies and expectations, teachers with their assessment practices, and local implementation by training schools can be said to be of three kinds (Merino, 2002):

- pathways which led to lack of schooling or, more accurately, a lack of a training pathway and young people dropping out of school. Even though first-level vocational training was compulsory for pupils without a school-leaving certificate, the fact that many of them were discouraged and the lack of effective control by the education authorities meant that a significant percentage of pupils under the age of 16 were already outside the education system, either because they did not enrol for vocational training, or because they dropped out in the first or second year (approximately 30 %);
- continuous pathways between primary education and vocational training. Although in the dual track approach this pathway lacked status, it has to be recognised that half of the enrolled students had the school-leaving certificate but, for various reasons, preferred vocational training. In fact, it was those students who had the best prospects of completing second-level vocational training;
- continuous pathways between the baccalaureate and university. Despite its name, the Polyvalent Standard Baccalaureate (BUP) was

⁽⁴⁾ See Annex 1.

standard to some extent but not very polyvalent, while the Pre-University Course (COU) turned into a kind of fourth baccalaureate with 'natural' continuity in selection and university entrance. Although the growth in vocational training meant that fewer enrolled for the baccalaureate (Carabaña, 1997), this did not prevent strong growth in university enrolment during the 1980s, with university too no longer being the closed and elitist institution it was in former times.

A fourth pathway has to be added to these three, namely, the students who were secondary school graduates but did not opt for BUP and went on to take second-level vocational training as their second course. This phenomenon was recognised by vocational training institutions, which had specific groups of 'BUP-ists' ('*buperos*')⁽⁵⁾ (Merino, 2002). This was a third network which Baudelot and Establet (1976) refused to recognise as a real network. Not only was it numerically larger, it also represented one of the fundamental features of alternance systems.

Vocational training in the Law on the General Regulation of the Education System (Ley de Ordenación General del Sistema Educativo, LOGSE, 1990)

The Law on the General Regulation of the Education System (LOGSE) was passed in 1990⁽⁶⁾ under the banner of comprehensive education and after a trial period with the so-called common 'trunk' (i.e. the unified curriculum up to 16 years of age). Paradoxically, this Law also contained elements capable of negating the comprehensive principle, and the trial period was too short to convince the education community and too long to maintain the hopes and expectations of the actors involved.

One of the objectives of the Law was to remedy the deficiencies highlighted by implementation of the LGE, such as the dual certificate after completion of basic schooling at the age of 14 and the poor image of vocational training⁽⁷⁾. In order to do so, the Law applied organisational and didactic solutions from socio-pedagogical theories inspired by comprehensive principles. However, what it did was to unify the curriculum for 12-14 year-olds by eliminating first-level vocational training

⁽⁵⁾ This was the name commonly given to the groups of pupils coming from the BUP and entering directly into second level vocational training. In some schools they were grouped separately from students coming from first level vocational training.

⁽⁶⁾ See Annex 2.

⁽⁷⁾ For many years it was thought that vocational training schools were only for students who did not want to study and had not been successful in compulsory education. The fact that many public vocational training schools were located (segregated from academic schools) on the outskirts of large and medium-sized cities only contributed to this image of marginalisation and of a place to 'park' troubled young people. The fact that many of the teaching staff were demotivated also contributed to this gloomy picture.

and building a bridge between basic education and the baccalaureate, even though the Law gave part of basic vocational training to compulsory secondary education (ESO, from the ages of 12 to 16) by introducing curriculum variability through variable credits – optional courses that pupils choose in principle but which teachers take as background for organising pathways on the basis of the academic performance of pupils. In other words, although an optional part to the curriculum was introduced, it was the differences in performance and the guidance of the teachers which ensured that the different subjects offered by the institutes allowed pathways to be created in line with the type of studies to be followed after compulsory education. So the strong comprehensive nature of lower secondary education in practice meant a fundamentally academic curriculum, and in the first years of application it was already clear that this comprehensive element would have to be toned down ⁽⁸⁾.

During the trial period a phenomenon occurred which handbooks of sociology classify as ‘perverse effects’. The demand for the so-called ‘common trunk’ was very widespread in the most progressive sectors of the education community. However, in some of the schools which volunteered to try out the reform, the common trunk was provided in parallel with BUP, or with vocational training, and with both BUP and vocational training in the private officially-approved schools that joined up for the trial period. In other words, these private schools offered the three tracks at the same time. And the students who went in for the common trunk were those who did not have the required level to do the baccalaureate (by common agreement between the students, families and teachers) but who felt that vocational training alone was not enough (Merino, 2002). We can say that, paradoxically, instead of bringing the general and vocational tracks closer together, the creation of a common trunk merely forced them further apart. However, with the general implementation of the reform this effect is no longer in evidence, but it partly explains subsequent pressure to establish training pathways within the ‘common trunk’.

The application of comprehensive criteria, combined with meritocratic criteria, led those who drafted the LOGSE to adopt – intentionally or unintentionally – the model of the regulated vocational training in the LGE, eliminating the first level or steering drops-outs from compulsory secondary education into the Social Guarantee Programmes, and setting up two courses with a short cycle of professional development after a stage of academic training, i.e. the Intermediate-Level Training Cycles (Ciclos Formativos de Grado Medio - CFGM) for holders of the secondary school leaving certificate, and the Advanced-Level Training Cycles

⁽⁸⁾ This was needed not only for the organisation of groups who could use the variable credits, but also to underline the necessity of creating internal and external training measures for students with serious difficulties in following the normal rhythm because of their attitudes or aptitudes. These measures emphasised manual apprenticeship and basic social skills.

(*Ciclos Formativos de Grado Superior* – CFGS) for secondary school graduates. In theory, the CFGM was intended to provide pupils with an alternative to the baccalaureate, not because they did not meet the entry requirements, but because of their interests, and in the same way the CFGS would provide an alternative to university ⁽⁹⁾.

The possibilities of a counter-reform, as happened with the LGE, point in two directions. The first is that the CFGM becomes the second option for those who fail the baccalaureate. In fact, since entry requirements for the academic and vocational track have been made the same (a certificate of secondary education is necessary to enrol both for the baccalaureate and for the training cycles of the intermediate level), and the intermediate and advanced levels have been left unconnected, enrolment for the baccalaureate far exceeds enrolment for the CFGM, and each year the proportion of students enrolling for the baccalaureate is increasing (Merino, 2002). Furthermore, a significant but unquantifiable number of pupils with secondary school-leaving certificates have been upgraded by their teachers, who know that students without a school-leaving certificate are caught in a dead-end, and they agree to give the certificate on condition that the students enrol for a CFGM, a condition which the family then does not keep. In any event, failure in the baccalaureate highlights the option of the CFGM. The second direction is a link between the CFGM and the CFGS to prevent the former becoming another dead-end. Many actors in the education community have called for such a link, and it has been tried out in a number of places such as Catalonia, but it is strongly opposed by the education authorities and vocational trainers, who do not want to lose vocational training for academic (baccalaureate) students.

In any event, we again encounter three pathways:

- failure of compulsory schooling. Ending compulsory schooling without a school-leaving certificate is the consequence of educational careers consisting of an accumulation of failures, maladjustment to school and low expectations, and probably stems from the transition from primary to secondary education. We have two variants in this first group: students who enter training schemes (social guarantee programmes (PGS) or others provided by the local community) and students who enter the labour market directly ⁽¹⁰⁾;

⁽⁹⁾ This, incidentally, lowered the demographic pressure on the university, where the debate on mass entry had popularised two more than dubious ideas: that the university did not serve to promote integration in the working world and that the students and their families placed excessively high expectations on the university as an institution. No one seemed to realise that the application of LOGSE was being undertaken in a situation where demographic cohorts were declining, which meant that, if the problem in the 1980s was that of mass entry of students, in the first ten years of 2000 the problem would be precisely the opposite, namely the lack of enrolment. Furthermore, in many vocational branches, completing the CFGS was a preliminary and not an alternative to university. In the case of Catalonia, 40 to 60 credits were recognised (almost a complete academic course) in many technical engineering subjects for the industrial CFGS courses, and in education-oriented subjects for CFGS courses dealing with community services.

- secondary school-leaving certificate and entry into professional life with or without a fail in the first cycle of the baccalaureate. There can also be other forms, such as the young people who decide to enter the labour market after the CFGM because they think they have already had enough training, or the opportunity costs are too high, (they can get jobs in the short term) and the option costs for a continuation of studies (reversibility of options, Vincens, 2000) are very high. The young people who decide to extend their training and professional development are those who, through different mechanisms, enrol in a CFGS. The expectations of a higher status mean that the expected benefits of the decision outweigh its costs;
- secondary school-leaving certificate and a continuation along the academic track. Under the LOGSE, the academic track of post-compulsory secondary education is reduced to two courses, the gap between the end of compulsory schooling and entry into university is reduced to two years, which brings it much closer. Here too, there are two variants: university entrance after the baccalaureate and the entrance examination, or access to a CFGS. This latter variant would update the fourth pathway produced following implementation of the LGE, albeit with a higher status.

The attempt at reform of the Organic Law on the Quality of Education (2002)

The real counter-reform of the LOGSE started in 2002 with the entry into force of the Organic Law on the Quality of Education (LOCE) ⁽¹¹⁾, but in a slightly different sense from the LGE counter-reform. The LOCE is expressly opposed to the comprehensive principle, to which it attributes many of the ills afflicting Spanish education, and it automatically attributes beneficial effects to measures designed to destroy it. However, the LOCE is based on a fundamentally ideologically anti-comprehensive discourse, a discourse committed to combating the ideological assumptions of progressive tendencies in education. Under the label of 'quality for all' segregation is introduced into lower secondary education, which ceases to be highly comprehensive. On the other hand, it introduces practically no measures to reduce the mild comprehensive component of post-compulsory secondary education ⁽¹²⁾, which remains a paradox. Furthermore, the creation of pathways in compulsory secondary education (ESO) was a common practice in many secondary-level

⁽¹¹⁾ See Annex 3.

⁽¹²⁾ Nor did the Law on Vocational Training and Qualifications, more preoccupied with the avatars of the relationship between regulated training and non-regulated occupational and continuing training, and the complex subject of recognition and accreditation of competences acquired from diverse sources.

institutions, based on those mechanisms which LOGSE itself envisaged. LOCE sanctions these pathways, translates them into pedagogical dogma and in effect reduces compulsory and common education to 15 years with the introduction of the Vocational Initiation Programmes (*Programas de Iniciación Profesional* – PIP). Finally, a second cycle of compulsory secondary education (15-16 years) has been designed with pathways geared to the type of education (general or vocational) that students are to follow afterwards, and with the possibility of leaving the education system to enter unregulated training schemes.

Obviously, young people, their families, teaching staff, schools and the various levels of education authority have not had time to act and to influence the construction of educational pathways. Therefore, we can only surmise the possible pathways constructed from the tracks outlined in the new legislation:

- early school-leaving channelled through PIPs. The replacement of the PGS (Social Guarantee Programmes) by PIPs is unlikely to resolve the problems created beforehand. The fact that PIPs last for two years reminds one a little of the now defunct first-level vocational training, and that its role is to provide a second chance academically (giving access to the secondary education leaving certificate) may change the plans and expectations of the young people who enter these programmes;
- early professional development within compulsory secondary education with more or less natural continuity in the CFGMs. The scope of the classification of students in the second cycle of compulsory secondary education, the cachet of technical and professional education groups, and the discretionary nature of teachers' assessments will determine the expectations and options of young people;
- early entry into the academic track. The specialisation in scientific and arts subjects in the second cycle of compulsory secondary education in effect represents a return to the four-year baccalaureate and clearly prepares students to continue their studies in higher education. Once again there are two variants: university and CFGS.

Some conclusions on the current confused situation

The change of government in March 2004 brought the implementation of the new legislation to a standstill. There is a great sense of uncertainty in the education community, and at the time these lines are being written (December 2004) there is only one discussion document which the Ministry has published for public debate (*Quality education for all and between all*: www.debateeducativo.mec.es) which criticises the LOCE pathways and proposes vague measures to foster diversity which hark

back to measures already defined in LOGSE. One of the intentions of the new ministerial team ⁽¹³⁾ is to avoid vocational training being associated with poor students, and to ensure that failure in school does not lead to social exclusion. They have not been able to finalise a proposal on tracks, with ages and access requirements for each track.

The dual or triple track debate has developed into the (old) familiar debate on the prestige of vocational training and strategies to 'lend more dignity' to vocational training. As De Pablo says, the problem is not that there are two tracks but that one of them is the Royal Road and the other is discredited. The solution, according to De Pablo, is to set up many different tracks, as in Sweden and Germany, with different regimes (De Pablo, 1996). Other authors think exactly the opposite, and say that in order to find a solution the different tracks should be increasingly integrated into an upper secondary level; this has been the objective of a number of recent reforms in Norway and Australia (Skårbrevik, Båtevik, 2001; Polesel, 2001). From another point of view, Carabaña claims that vocational training should be given a formative value which cannot be measured by the results of vocational integration, nor should one believe that these measures will change the social status of manual labour. Despite this, vocational training should give students training in general content which should not be confused with the baccalaureate (Carabaña, 1988), and should thus avoid creating an excessively technical vision because, in the words of Gramsci, the aim of vocational training is not to produce 'little monsters with an infallible eye and an unflinching hand' (Manacorda, 1985).

The situation is at present confused. A great many people in the world of education question the chances of success of the education reform. Indeed, people have begun to say it is impossible to solve educational problems through reforms (Sarason, 2003). It is also true that people often have excessively high expectations of reforms, or the reforms have over-ambitious goals such as the elimination of social inequalities by according vocational education the same status as academic education. These excessively high expectations and ambitious objectives run the risk of creating considerable disappointment or generating undesirable effects if there is not sufficient consensus, particularly among the key players in the development and implementation of the reform (Planas, Tatjer, 1982; Tedesco, 1994).

With regard to future scenarios, regulated vocational training faces two big paradoxes: the first paradox consists in the fact that, if the intention is to increase its prestige, it has to become more selective, but then it will lose a large part of its potential target-group, which will be thrown back on welfare measures rather than training measures. The second is that integrated vocational training consisting of cycles after each stage of

⁽¹³⁾ The words of the Secretary of State in the Ministry of Education, Alejandro Tiana, in the speech given in the Athenaeum in Madrid on 26 October 2004.

education becomes blurred and loses its identity. On the other hand, segregated vocational training may appear condemned to the second 'zone', but it can strengthen a feeling of identity that will socialise students and teachers within a professional ethos which, without descending into an anti-intellectual discourse, can contain a positive element of identification with 'manual' trades, even though they are increasingly less manual (this was Castro's backing for segregated schools in order to preserve 'the soul' of vocational training, Castro, 1988).

A personal conclusion to end: vocational training is not an instrument for making the social division of labour less unequal (is the education system as a whole less unequal?), but if we cannot improve the social status of manual labour, we can at least make an effort to 'dignify' vocational training. Dignifying it does not necessarily mean making it more selective. On the contrary, it means making it more attractive to a large percentage of the students who have successfully completed their compulsory primary and secondary education (as happened with the LGE); it means equipping it with reversible pathways which do not lead to dead-ends for students and their families; and it means giving students the possibility of a link to higher education, a link which will be feasible only for a few students, but which will highlight the possibility of reaching the apex of the education pyramid. Indeed, higher vocational training and the first cycles of university are converging. Some autonomous communities, such as Catalonia, have even started to recognise the credits from vocational training of students who enrol in university in careers in the same professional field.

Improving vocational training is a very laudable objective, which also generates consensus among the social actors, the educational community, politicians and society in general (who is against improvement?). But achieving that objective is an entirely different matter. We have already mentioned the paradox of selectivity, which in our opinion is not the way to improve the standing of vocational training. Nor is it worth naively copying the vocational training systems of other countries, such as the well-known German dual system, since changes have to be adapted to the characteristics and inertias specific to each country, although the spread of in-company training placements represents unquestionable and unquestioned progress. The eternal question of economic resources can – especially in a country like Spain where the education system suffers from a chronic lack of funding – become a pretext for obscuring other organisational or pedagogical shortcomings. Nor is it worth making the argument about vocational training's alleged superiority over university when it comes to finding a job and career advancement (in Spain it is common to hear that a construction worker earns more than a doctor), because it generates more mistrust than benefits for vocational training (especially if those who make such statements have been to university and are also sending their children to university). In the end, perhaps it is the teaching profession

which holds one of the keys, in so far as it shares and is capable of transmitting a professional ethos that links training to the working world where pupils will have better chances of professional, and hence social, integration. ■

Bibliography

- Azevedo, J. 'Entre la escuela y el mercado de trabajo. Una mirada crítica sobre las transiciones', en Marchesi, A.; Hernández Gil, C. (Coord.): *El fracaso escolar. Una perspectiva internacional*. Madrid, Alianza-Ensayo, 2003.
- Baudelot, Ch.; Establet, C. *La escuela capitalista en Francia*. Madrid: Siglo XXI, 1976.
- Carabaña, J. 'Sobre educación y mercado de trabajo: los problemas de la Formación Profesional'. In: Grao, J. (coord.) *Planificación de la Educación y mercado de trabajo*. Madrid: Narcea, 1988.
- Carabaña, J. 'La pirámide educativa', in *Sociología de las instituciones de educación secundaria*. Barcelona, ICE-UB y Horsori (Cuadernos de Formación del Profesorado), 1997.
- Carabaña, J: 'Las políticas de izquierda y la igualdad educativa', in Torreblanca, J (coord.): *Los fines de la educación. Una reflexión desde la izquierda*. Madrid, Biblioteca Nueva, 2002.
- Casal, J.; Colomé, F.; Comas, M. *La interrelación de los tres subsistemas de formación profesional en España*. Madrid, FORCEM, 2003.
- Castro, C. M. 'The soul of vocational schools: training as a religious experience'. In: *International Review of Education*, No 34 (1988).
- De Pablo, A. 'La nueva formación profesional: dificultades de una construcción'. A: *Reis*, No 137 (1997). pp. 137-161.
- Green, A.; Leney, T.; Wolf, A. *Convergencias y divergencias en los sistemas europeos de educación y formación profesional*. Barcelona: Pomares, 2001.
- Grignon, C. *L'ordre des choses. Les fonctions sociales de l'enseignement technique*. Paris: Les Éditions de Minuit, 1971.
- Jackson, N. J. 'Modelling change in a national HE system using the concept of unification'. In: *Journal of Education Policy*, Vol. 14, No 4 (1999).
- Lorenzo, J.A: 'Evolución y problemática de la Educación Secundaria Contemporánea en España', in *Revista Complutense de Educación*, 7, 2, (1996), pp. 51-79.
- Manacorda, M. 'Introducción'. In: Gramsci, A. *La alternativa pedagógica*. Barcelona: Hogar del Libro, 1985.
- Maurice, M. 'L'analyse sociétale des relations entre système éducatif et système productif'. In: *Revue internationale d'éducation*, No 1 (1994).
- Merino, R. *De la contrareforma de la formació professional de l'LGE a la*

- contrareforma de la LOGSE. Itineraris i cicles de formació professional després de l'ensenyament secundari comprensiu.* Barcelona, UAB, tesis doctoral, 2002.
- Planas, J.; Tatjer, J. M. *Implicacions i problemes de la reforma de l'ensenyament mitjà.* Barcelona: ICE de la UAB, 1982.
- Planas, J. 'La Formación Profesional en España: evolución y balance'. In: *Educación y Sociedad*, 1986, No 5.
- Polesel, J. Vocational education and training in schools – an Australian initiative: towards the integration of vocational and academic studies in the senior secondary curriculum. In: *European Journal Vocational Training*, 2001, No 21. Available from Internet: <http://www2.trainingvillage.gr/download/journal/bull-21/21-en.pdf>
- Skårbrevik, K.; Båtevik, F. Documented partial competence. A third way to a diploma in upper-secondary education in Norway. In: *European Journal Vocational Training*, 2001, No 21. Available from Internet: <http://www2.trainingvillage.gr/download/journal/bull-21/21-en.pdf>
- Raffe, D: 'Pathways Linking Education and Work. A review of Concepts, Research, and Policy Debates', in *Journal of Youth Studies*, 6, 1, 2003 , pp. 3-19.
- Sarason, S. El predecible fracaso de la reforma educativa. Barcelona: Octaedro, 2003.
- Tedesco, J. C. Tendances actuelles des reformes éducatives. In: *Revue Internationale d'Education*, 1994, No 1.
- Vincens, J. *L'évolution de la demande d'éducation.* Note 329.0029, projet EDEX, 2000.

ANNEX 1

Basic structure of secondary education under the General Law on Education (LGE, 1970) following implementation of the Decree of 1974

years

14	EGB – Basic General Education		
	(School-leaving certificate)	(Certificate)	
15	BUP (Polyvalent Standard Baccalaureate)		
16			FP1 (Vocational training 1)
17			FP2 (Vocational training 2)
18	COU (Pre-university Course)		
19	University		

ANNEX 2

Basic structure of secondary education under the Law on the General Regulation of the Education System (LOGSE, 1990)

years

13-16	ESO – Compulsory Secondary Education		
	(School-leaving certificate)		(No School-leaving certificate)
17	Baccalaureate		CFGM (intermediate-level training cycles)
18			
19	University	CFGS (advanced-level training cycles)	

ANNEX 3

Basic structure of secondary education under the Organic Law on the Quality of Education (LOCE, 2002)

years

13	ESO – Compulsory Secondary Education			
14				
15	Science-Humanities pathway		Technical-vocational pathway	
16	Science pathway	Humanities pathway	Technical-vocational pathway	PIP (Vocational Initiation Programmes)
	(School-leaving certificate)			
17	Baccalaureate		CFGM (intermediate-level training cycles)	
18				
19	University	CFGS		