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Vocational training in Spain

Toward the knowledge society

Oriol Homs

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Oriol Homs is the president of the Catalan Sociology Association and General Director of the Centre for European Initiatives and Research in the Mediterranean (CIREM). He is a member of the Editorial Committee of the European Journal of Vocational Training of the European Centre for the Development of Vocational Training (CEDEFOP). He has done numerous studies in the areas of the world of work, vocational training and social policy.

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Presentation

The existence of a quality educational system is one of the key elements that defines the level of well-being present in a society and a determinant of future possibilities for an increase in the level and extension of that well-being. Among the diverse elements that constitute our educational system, vocational training has particular importance today, whether considered from the point of view of individuals or from a social and economic perspective.

From the point of view of individuals, vocational training channels the interests of a good number of young people and is responsible for providing them with the competencies necessary to develop a profession and thus, access to an adequate standard of living. It also includes those training programmes that permit active workers to upgrade their skills, facilitating their promotion, and those directed at unemployed workers, increasing their possibilities of reintegrating into the labour market.

From a social and economic perspective, a good system of vocational training is necessary so that businesses have the qualified workers they need for their survival and progress in an increasingly competitive and global environment. What's more, this is a changing environment in which knowledge, technology and innovation are fundamental, demanding a workforce with a sufficiently specialized initial training and, at the same time, a high capacity for learning which allows for the extension of this training throughout life.

In this study, the author looks at the history of vocational training in Spain to offer us a comprehensive analysis of the current situation, the challenges that vocational training faces and the difficulties that it must overcome in the future. He also analyzes the influence that the European Union has had on the Spanish system of vocational training and the ways in which it is or is not

comparable to that of other countries in the EU. Finally, significant space is dedicated to analyzing the impact of the knowledge society and the changes this has led to in the productive and development models on vocational training and the new demands to which it must respond.

With this new number in the Social Studies Collection, the Social Projects of "la Caixa" intends to provide data and analysis that will contribute to the debate on the current state of and ways to improve vocational training in Spain, a debate in which, without a doubt, much of our future is in play.

Jaime Lanaspa Gatnau
Executive Director of "la Caixa"
Social Projects and Chief Executive
Officer of the "la Caixa" Foundation

Barcelona, January 2009

Introduction

Vocational training is considered, almost unanimously, as one of the issues of greatest importance for the professional future of individuals, the competitiveness of businesses and the development of countries. However, it must also be recognized that efforts in this field are never enough. Attributing the solution to all types of problems to vocational training constitutes one of the most frequently employed clichés. It seems that everything can be resolved through vocational training.

The reality is neither so much nor so little. The concept of vocational training is twofold. On the one hand, the concept refers to a part of the training system through which each country organizes the activities dedicated to covering the training needs of the population and of businesses in relation to work. On the other hand, vocational training is also a more generic concept that forms part of the cultural knowledge of every country, and which is associated with the professional trajectory of individuals and the functioning of businesses.

To have a vocation is an aspiration of everyone who wants to place themselves in the labour market with their own identity, and in that way obtain a higher income which facilitate access to a determined social status. The same occurs with businesses, which desire to have a professional workforce available that dominates its trade or profession and adequately resolves all problems related to the production of goods or services. Vocational training is the privileged vehicle for access to a professional identity. In general terms, and speaking from a professional perspective, an individual is what he or she has been trained for (Iribarne, 1993).

Learning is one of the strongest factors in mobilizing the human will in history. *Homo sapiens* possess a natural tendency to know new worlds (to investigate

and try new things), and this innate tendency to learn is also applied to the field of work, which is also the field of vocational training. Training is one of the principal forms that modern societies have for organizing learning and for passing on and spreading the knowledge and skills that form part of the accumulated cultural and technological heritage of a specific society. The existence of this accumulation of organized knowledge is one of the factors which explain the immense leaps in the growth of human productivity throughout history. An additional question is if the organization of work and society facilitates the learning capacities of individuals. The systems of vocational training, in addition to guiding persons toward the needs of the world of work, have the mission of channelling, favouring and strengthening both this learning capacity and an interest in the acquisition of this knowledge.

The contrast between these two aspects, between training systems and human capacities for learning, generates a very extended ambiguity between aspirations and frustrations, between desires and reality. Vocational training is perceived as having great potential for the development of persons, businesses and countries, and at the same time, all the frustrations because of limitations in reaching that development are attributed to it.

Maintaining the aspirations of the population to achieve promotion on the professional terrain through training, as well as that of businesses, to improve their efficiency through the increased skills of their personnel, is one of the conditions for a country to advance. In fact, all the developed countries, in one way or another, have invested large sums for the development of sophisticated systems of training and work to improve their effectiveness (OECD, 2008a).

Thus, without falling into demagogy, it is recommendable to talk about vocational training, but much more important that efforts and resources be employed. The smooth functioning of economies and societies depends, in great part, on this effort.

However, in addition to talking and acting, it is also necessary to know vocational training. Vocational training is a field of great complexity, because it has to permit the intentions of diverse actors and institutions to merge, to a much greater degree than in any other sector of the educational system. On the border of the educational system, the labour market and the system of production, vocational training draws together a great variety of tensions,

aspirations, decisions, contradictions and tendencies that demand a great capacity for synthesis and information to understand its main features and its future evolution. In addition, this knowledge is essential to support any intervention aimed at improving the system of vocational training.

This present study is dedicated to this task of analysis. The principal objectives are to clarify concepts, examine the functioning of the system of vocational training in Spain and the challenges which it faces, and contribute ideas that facilitate reflection and intervention by all those persons and institutions that are interested or involved in the issue.

The analysis that will be carried out on the situation of vocational training in Spain revolves around the following basic themes:

- The delay in the development of the training system until the Organic Act 1/1990 on the General Arrangement of the Education System or the General Law on the Education System (LOGSE) of 1990 laid down the foundation for an initial modern vocational training, which has continued to gain in prestige and effectiveness until the present day.
- The influence of the European vision of training on the evolution of the system of training starting with the entrance of Spain into the European Union.
- The tensions that the difficulty in closing the process of decentralization of the system of training generates and its possible effects on the evolution of the system in the future.
- The requirements of the knowledge society, which demands an accelerated process of reforms in which all the agents involved cooperate.

Employing the simplest language possible the intention has been to synthesize the information available and the analysis and opinions of experts in this area. In addition, those aspects which contribute to a comprehensive vision of the overall system of training have been prioritized, and the more academic debates on the most controversial issues have been avoided. The bibliographic references will allow the reader to go more in-depth in a theme not without complexities but, at the same time, attractive to all those who have a passionate interest in knowing how societies organize the human capacity for learning in relation to professional life.

Consequently, this study is directed not only at specialists, but also at a much broader public composed of those persons interested in understanding how vocational training in Spain works, how we have arrived at the current situation, what influence Europe has had in the development of the Spanish system, what relationship there is between vocational training and the productive system, how the systems of training are evolving and what the expectations are from training in the knowledge society. This last point in particular raises some especially interesting challenges. The development of the knowledge society will require that the whole population be able to access, in a constant manner, training services with the aim of updating, recycling or specializing one's competencies. The system of training of the developed countries, inherited from the 20th century, are still very much structured around initial training, and their transformation to adapt to the needs of an increasingly more complex society is today object of debates and controversy (Lipinskay, 2007).

This study is divided into three parts. The first part, consisting of the first three chapters, is dedicated to describing and explaining the functioning of the system of vocational training in Spain in all its dimensions. This part includes a brief historical overview of the principal stages in its evolution and the incorporation of the European dimension. The object is to understand how the current situation has been shaped.

Chapter I begins briefly explaining the principal concepts that are used in the study in order to facilitate their understanding. Following, an analysis is made of how the concept of vocational training has evolved historically and how the current modern vision of it was shaped.

Chapter II, which describes the existing system of vocational training, details the division of training into two major subsystems which are known as, using the most recent terminology, initial training and occupational training. The description of the institutions and regulatory bodies of the system are left to a later section.

The European contribution to training in Spain is described in Chapter III, in which the extent of European training policy is described in all its detail, and a complete section is dedicated to presenting the European Qualifications Framework given its importance to the Spanish system and also because of its practical consequences on the free circulation of professionals in Europe.

Part 2, Chapters IV and V, analyzes the relationship of the system of training with the labour market, a relationship which constitutes the fundamental identity of the system of formation. Chapter IV, which deals with the degree of adaptation of the system of training to the needs of businesses, analyzes the way in which the concept of qualification has been shaped in Spain and how a mutual adaptation is produced between the demands for a skilled workforce from businesses and the supply from the system of training, in a context of an agitated labour market.

Chapter V analyzes the focus on competencies and their importance in the recent transformation of all the training systems to achieve a better adaptation to the new challenges and needs of the labour market.

And finally, Part 3, the last two chapters, is dedicated to analyzing the future of vocational training: Chapter VI deals with the evolution toward a system open to lifelong training, while Chapter VII offers a preview of the function of training in the knowledge society. In chapter VI a section is dedicated to explaining the most recent evolution in the area of recognition and accreditation of professional experience, one of the most innovative issues in the field of vocational training.

To finish, a chapter is dedicated to summarizing the principal conclusions of the study and to set out a series of ideas and proposals on how to confront the principal challenges facing the system of vocational training in Spain.

The moment is appropriate. Spain's system of vocational training, as in almost all the world, although under different circumstances, is going through a process of profound change, forced to face new challenges from the rapid technological, economic, social and cultural transformations with which we have begun the 21st century.

I. An historical perspective

The Spanish system of vocational training was consolidated under a modern conception just a few years ago. It was not until the application of the General Law on the Education System, known as the LOGSE (LOGSE, 1990), in the middle of the decade of the 90s, when the foundation of the modern system of vocational training was put into place. Thus, the system itself as well as the images and experiences that the population has regarding vocational training are still in debt to its evolution from previous times. It therefore seems a good idea to initiate the reader in the stages that the evolution of the system has followed and explain to what degree its history is still conditioning the present.

Before entering into this brief historical analysis and in order to understand the basic concepts that are used in this study, this chapter begins with a section dedicated to defining the concept of vocational training.

1.1. What is understood by vocational training?

The reader will have realized that up to now different though apparently similar concepts have been used to speak about the theme of this book: «training» and «vocational training». With the aim of avoiding confusion, these lines are dedicated to clarifying concepts which will permit a greater understanding of the details and different elements that compose the training system (Tissot, 2004).

In the first place, it is necessary to distinguish between education and training, concepts that are often used in an indistinct manner but which, in this specialized area, have different meanings. Education refers to the primary

objective of developing the learning capacities and general knowledge of the individual. A person is educated when he/she is acquiring the instrumental capacities to know and interpret his/her environment. Basically, education offers the individual answers to those «whys» of one's life, of the world and of the society in which the individual lives. Training, on the other hand, is more specific. It prepares the individual first and foremost for the acquisition of competencies intended for the development of one's professional life in a broad, not only work-related sense. In a basic sense, training offers answers to «how» (Bruno, 1991). Said in a very brief manner, education tends to develop «knowing» and training «knowing how».

The two concepts are not in conflict, rather they are often complementary and difficult to distinguish. Obviously, in education a person also acquires practical knowledge directly applicable in professional life, while vocational training also widens the generic learning capacities of a person. But education and training differ in relation to their final objectives and, above all, in one characteristic: education does not end. This distinction is very useful for understanding the world of vocational training. The development, through education, of our capacity to learn structures our intellect in such a way that what we learn has an effect during practically all our lives.

Specific things that have been learned can be forgotten, but the organization of our learning capacity will last over time. In contrast, the competencies acquired through training, if they are not practiced, become rusted and eventually obsolete. This distinction, and the differences in their objectives, obliges us to treat education in a different manner than training.

Therefore, when we speak of training we are referring to all those elements oriented toward equipping individuals with useful competencies for their professional lives understood in a broad sense, separate from those elements related to the development of generic capacities for learning (Tissot, 2004).

Continuing with the intention of clarifying concepts, a difference between training and vocational training also has to be established (Tissot, 2004). Vocational training is understood as that training which is directed at the development of a specific profession or trade. In contrast, the broader concept of training is used to refer to all the specific learning that a person can acquire throughout his/her life, which, although not directly related to the exercise of

a profession, has to do with competencies that exist in the world of work. For example, the learning of cooking techniques by a person that does not want to be a chef but wants to improve his/her capacity to prepare meals for him/herself or for family or friends, or the learning of gardening by a person who wants to take care of his/her garden.

Often, training, and above all, vocational training, have been assimilated under the technical training or learning of trades or professions in the industrial sector. Currently, this is no longer useful; the industrial sector is not the most important economic sector as services have taken over that position, generating many new professions that have no industrial base or technique in a strict sense. All trades or professions involve techniques understood as methodologies necessary for the development of the tasks of the profession. Thus, we can speak of medical techniques or the techniques of social work, or sales techniques, but these techniques have nothing to do with the industrial process. Today, vocational training is oriented more toward services than toward industry.

At this point another nuance must be introduced: in every country vocational training follows a particular organizational model. Thus, from the professional or technological baccalaureate to occupational related courses, there exists a wide range of programmes that are given different names, such as technical or professional education, training for employment or occupational training, vocational training, etc. The variation among the different programmes depends on their more or less «professionalizing» character, on entrance requirements, on their relationship to general education or their objectives with respect to insertion into the labour market (Refernet, 2007).

The specialists have doubts about situating some of these programs in the field of education or that of vocational training. Today, the general tendency is to use a broad concept which encompasses practically all of the programmes which have as an objective providing professional skill or competencies. The reader should not be surprised to see that in some cases «education and technical-vocational training» is spoken about to encompass both technical-professional education and vocational training while, in contrast, on other occasions, both concepts are presented separately, the first being considered within the field of education and the second that of vocational training.

The same happens with short-cycle higher technical education programmes or short-cycle higher professional education programmes (Mazeran, 2007). These programmes appeared in the 1970s in developed countries to face the technological needs of businesses facing technical and organizational change. They develop mid-level management among skilled workers and engineers, positions that demand not simply practical experience, but also a solid technical training and a scientific culture that cannot be learned through experience.

These training programmes tend to grant higher technician diplomas although there are differences among countries. In some countries they form part of university studies, as could be the case with some «diplomaturas» (three year degrees), while in others they are considered as advanced vocational training, for example, in Holland.

On occasion, the borders of vocational training dissolve. Traditionally, the concept was limited to training that had a professionalizing character during the stages of secondary education, but today it tends to be broadened to higher vocational training and the term Technical and Vocational Education Training (TVET) is used, with the aim of avoiding the problems of classification mentioned.

In the field of vocational training we can also distinguish between initial vocational training and continuing or lifelong vocational training. The first refers to that training which a person does to begin in a trade or profession, normally when a young adult. In contrast, continuing vocational training is understood as subsequent training to widen, specialize or retrain competencies that individuals use in their professional lives. The concept of lifelong or continuing training does not mean, as it could literally be interpreted, that a person is continually training in a course that never finishes, but rather that in different stages of his/her life does training activities to remain up to date (Tissot, 2004).

The same distinction could apply to the training from a more generic perspective or also in the field of education. Thus, we also talk about initial training or continuing training and initial education or continuing education.

Finally, and to not tire the reader with more semantic distinctions, we must also differentiate between formal, non-formal and informal training, according to the form and intention in the organization of learning (Bjornavold, 2000).

We talk of **formal training** when the training activity is organized by an educational centre according to its objective and ends with the recognition and accreditation of the competencies acquired through a diploma or certificate.

In contrast, we talk of training that is **non-formal** when there is no recognition of the competencies acquired and, although the activity is organized, it is not directly intended to train individuals. This would be the case, for example, of a conference or working group in a business. Surely, the individual that participates in these activities intends to learn things, but the primary end of such activities is not training. And lastly, **informal training** is that acquired by an individual through participation in the activities of daily life, for example, working and participating in social and sporting activities, or relating to others.

Later the importance of these concepts and the challenges that the training system faces to include both non-formal and informal training in its operational mechanisms will be seen, a key issue for the development of these training systems in knowledge societies.

Once these elementary concepts have been clarified, we can enter into an analysis of how the modern concept of vocational training was constructed in Spain. Currently, the system encompasses all training activities aimed at developing professional competencies, whether through initial or continuing training. In the case of Spain, this system is dominated by vocational training, and concretely by formal vocational training, despite attempts to integrate non-formal and informal types of training into the system, as will be seen later.

1.2. The evolution of the concept of vocational training

Throughout history, every productive system has organized the manner in which the labour force acquires its productive capacities. The classic vocational training of the medieval guilds spread across all of Europe with a homogeneity that the European Commission would be envious of. This system collapsed with the development of the industrial revolution and with the abolition of the rigid norms that regulated craft production.

CHART 1.1

Classical models of vocational training

	LIBERAL MARKET ECONOMY MODEL- GREAT BRITAIN	STATE-REGULATED BUREAUCRATIC MODEL- FRANCE	DUAL-CORPORATIST MODEL- GERMANY
Who determines the organization of vocational training?	The organization is negotiated «in the market» between representatives of the workers, businesses and the providers of vocational training.	The state.	Craft and trade associations regulated by the state and organized by professional families.
Where does vocational training take place?	There are many options: in schools, in companies, simultaneously in schools and companies, through the Internet…	In specially named «vocational schools».	Training alternates according to a set calendar between businesses and vocational schools.
Who determines the content of vocational training?	Either the market, or individual companies, in function of the needs. The content is not pre-established.	The state (with the social partners). Training does not try to reflect the real practices in the workplace: it tends more toward general and theoretical knowledge.	The decision corresponds to businesses, trade unions and the state together.
Who pays for vocational training?	As a general rule, who receives the vocational training pays. Some companies finance courses that they provide themselves.	The state collects a training fee from companies and finances vocational training with this, but only for a limited number of applicants each year.	Companies finance training provided within the company, and costs are tax deductible. Apprentices receive an established amount per contract. Vocational schools are financed by the state.
What qualification is obtained at the end of vocational training and what opportunities does it provide in the labour market?	There is no supervision of training or accredited final exams in the national school.	Training provides state certificates that qualify the best students to access higher courses.	The qualifications accredit graduates to work in the corresponding profession and to access higher courses.

Source: Journal of Vocational Training, no. 32, CEDEFOP, 2004.

With the industrial explosion of the 19th century different models for training emerged that consolidated during the first half of the 20th century and that have shaped the current systems of vocational training. Some authors (Greinert, 2004) synthesize these into three models: the English liberal market economy model, the French state-regulated bureaucratic model and the dual-corporatist model of Germany. In table 1.1 the principal characteristics of each one of these three classic models can be seen. Today these models have evolved. Although each country presents combined characteristics of these models, they are still useful for developing a typology of systems of vocational training. As will be seen later, the Spanish system would initially be classified as a model of state regulation with respect to initial training, although with elements of the dual-corporatist model.

In contrast, with respect to job training, Spain is more similar to the liberal market model, with elements of the model of state regulation. The three types of systems developed mechanisms for training the workforce that nascent industry needed, based on the new concepts of professionalization that the industrial system was putting into place as a consequence of the birth of mass factory-based production. The new industrial trades required a long apprenticeship to command the conditions of production in a man-machine relationship which still involved much manual work and which required specific manual skills by workers with a very elementary general educational level.

The spread of electrical technology to production and, above all, the application of electronics starting in the second half of the 20th century revolutionized all industrial production and propelled a period of economic and industrial growth without precedent in Europe and developed countries. This also provoked a profound change in the organization of production and in concepts of qualification (Touraine, 1955), based until then on the classical industrial crafts and professions (Friedmann, 1974). The industrial and economic expansion of the second half of the 20th century, based on electronic automation, needed a much more skilled labour force, although with different skills: this was the time of the specialist worker, much more flexible, with a more subordinate and automated relationship to the machine (Sánchez, 1976). In this period this relationship was interpreted as lacking in skill in comparison with the preparation and skills of the industrial trades and professions from the period immediately before (Bravermann, 1974). It is in this period, in the beginning

of the 1970s, when the principal European countries constructed their systems of training as we know them today.

The spread of the new information technologies, especially computing, have again revolutionized the forms of production and have placed the training systems that were constructed in the 1970s into crisis (Altmann, 1982). Currently, vocational training in all of Europe is going through a process of reflection and change to adapt to the new challenges of a post-industrial, increasingly globalized economy (Boyer, 1998), leading to the so-called «knowledge society» (Drucker, 2003).

These briefly described phases have also marked the evolution of vocational training in Spain, but with some specifically Spanish characteristics given the political and economic context of the country (Merino, 2005).

The weakness of the beginnings of Spanish industrialization, very concentrated in the Basque Country and Catalonia, and the political and social turbulence of the 19th century did not permit the development of a proper vocational training system. The few industrial companies of this period learned to develop (internally) the skills they needed for their work force, without a significant contribution from the state, as in the French model, nor from corporative business organizations (trade associations and chambers of commerce) as in the German model. This model of the self-organization of a skilled workforce on the part of the company has marked the evolution of vocational training and currently still has strong roots.

The few centres that imparted training were non-profit institutions, dedicated to the «development» of workers, or of a religious character and followed the social doctrine of the Catholic Church. Outside of these institutions, the few examples of training activities in Spain were concentrated above all in the Basque Country and Catalonia, such as, for example, the initiative on the part of some large companies to create professional schools for their apprentices, the creation at the end of the 19th century and the beginning of the 20th of the first public schools for vocational training (Escuela del Trabajo [School of Work] in Barcelona, in 1913) or collaboration with certain trade guilds. This private and charitable character marked the perception of vocational training as education for the popular classes and the poor, rather than as a necessity for providing the productive system with the skilled labour that it needed.

After some attempts at the beginning of the 20th century, it was not until 1955 with what was called the Industrial Law, that a complete industrial vocational training was designed under the concepts of the national state-syndicalist model of the Franco regime (Martínez Usarralde, 2002). The vertical syndicalist organization of the regime and the Catholic Church both played a very important role in the shaping of a system of vocational training that had a dual aim: integrate the workers into the Francoist system, faced with the first organized strikes by workers, and supply skilled trainees to incipient industry promoted by Francoism. In this period, training was structured on three levels: the «pre-apprenticeship» (two years), the «oficialia» [official] (three years) and the «maestria» [the masters] (two years), oriented toward providing a parallel training system for workers.

However, it would not be until 1963 when the new model would be put into practice, although with little state financing. Thus, the new vocational training remained in the hands of religious orders, the vertical trade unions and large companies, which, in need of skilled labour, created their own schools for apprenticeship. It was a long, generally practical training of a comprehensive type, combining technical subjects with others of general themes to promote personal development, structuring the complete career of a worker. In a country with very low levels of education, with practically no tradition of vocational training and with industry in expansion in the 1960s, this model of vocational training was quickly approved of by businesses and valued by the population. Vocational training offered the hope of mobility, although minor, for the children of workers and provided a training oriented toward work and at the same time educative. In fact, until just a few decades ago, the majority of mid-level managers of many companies or owners of small industrial workshops came from the generations that received this industrial vocational training.

The impact of the new model went so deep that the conception of vocational training, centred on the industrial sector as an alternative course to general education for the children of workers, has been dominant for the entire second half of the 20th century.

In those years, in Europe and from organisations such as the OECD, the utility of the conception of vocational training of many years as an alternative course of study for the training of workers began to be put in doubt. The

skills needed for automated production required going in a different direction (Homs, 1979).

The General Act on Education of 1970 (Ley General de Educación, 1970) tried to tap into these new currents in Europe and proposed the renovation of the existing model of vocational training. In the initial approach presented in the White Paper of 1969 (MEC, 1969), the new concept of vocational training which was then in vogue in Europe was incorporated. Vocational training would no longer have the function of an alternative course of study for workers, but rather had to constitute the steps needed to prepare young people leaving the educational system at different levels with a specialized training and adapted to the needs of business so that they could integrate into the labour market.

The economic «boom» of the 1960s had broadened the industrial base of the Spanish economy in addition to creating a service sector that began to emerge as a key to the economy. A labour force with higher levels of general education and a much more flexible vocational training was needed. The law proposed three paths: FPI (Vocational Training level I), obligatory for those that did not obtain a certificate of completion of compulsory education, the FPII (Vocational Training level II), upon finalizing secondary education, and FPIII (Vocational Training level III), which in the end, never happened. The priority at that time was not vocational training, but rather making primary education widespread and lengthening schooling incorporating some basic vocational content. The law of 1970 was focused on these last aspects.

But this conception, ahead of its time, directly conflicted with the interests of the sectors which had the most influence in the old model of industrial vocational training. In the parliamentary debate on the law, still during the Francoist regime, the sectors closest to the Church and the vertical trade unions managed to reorient the initial proposals with the aim of maintaining the structure of a parallel course of study for the intellectually or economically disadvantaged sectors of the society, over whom they intended to maintain their influence. The paths became a secondary route, just as vocational training had been until then.

The result was the overlapping of models full of contradictions which made their subsequent deployment difficult. This did not fully happen until 1976, the year in which the effects of the first oil crisis of the 1970s began to be felt. The

lack of financing of the law, the resistance to reform and the political weakness of the regime which was tottering meant a chaotic application of the law in the area of vocational training, with constant delays and corrections.

Added to this situation were some controversial measures of the law, such as for example, the existence of two qualifications upon finishing Basic General Education, the Certificate of Basic Education and the Basic General Education Diploma (Certificate of School Attendance), and the obligation for those that did not obtain the Graduado Escolar to continue their studies with vocational training of the first level. As a result, the loss of prestige of vocational training spread rapidly, particularly in regard to the first levels, despite the large number of students that acceded to some type of vocational training.

At that same time, France and Germany were carrying out reforms to consolidate their modern systems of vocational training, after a long period of classic vocational training being in force during the whole period of economic expansion of the 1960s (Maurice, 1982). Classic vocational training had become a key element in the policies of the developed welfare states after the Second World War, offering a path to social mobility for the working class which, from a political, social and economic perspective enjoyed one of the greatest periods of well-being in all of history.

In those years, work and workers were still a central value in European welfare societies, and the qualification constituted a mechanism for assessing the value of work and improving the competitiveness of their economies. The modern systems of training in Europe were built over this positive experience based on this pairing of qualification-vocational training.

In Spain, however, the classic industrial vocational training did not have enough time to consolidate itself and, although it also coincided with a period of economic expansion and of social mobility of workers, the lack of liberty, a practically non-existent welfare state, with little investment in social policies, and business and trade union organizations controlled politically by the regime and incapable of playing a structuring role in labour relations, did not contribute to the development of vocational training. The reform of the General Act on Education (LGE) was only half-done and poorly applied. In these conditions it was difficult to consolidate the new concepts of training-qualification.

Despite this, the General Act on Education of 1970 contributed two important elements to vocational training. In the first place, it integrated vocational training into the educational system, connecting it with general education. It also integrated a wide range of training activities dispersed across different ministries (for example, health training) and others that had only existed as non-formal training in the private sector, for example, all administrative and business training. (In the previous period practically each ministry had had its own system of vocational training.)

The second positive element was the introduction of the message that young people had to continue studying after Basic General Education, whether it was vocational training or the baccalaureate (university preparation). Although the economic situation of the following years provided a favourable context for the lengthening of secondary schooling, the law laid the groundwork for this prolongation of studies.

1.3. Modern vocational training

Some 15 years would have to pass before the 1990 General Law on the Education System (LOGSE) would attempt, with the country now in full democracy, a new modernizing reform of vocational training. But meanwhile, Spain had suffered a severe employment crisis that disrupted the behaviour of the population in regards to education and training.

The modernizing impulse of the LOGSE

The exhaustion of the Francoist model of development, the opening of the economy to external markets with the arrival of democracy and the effects of the oil crisis all joined together to produce a complete closure of the labour market. Spain went from an unemployment rate of 5 percent in 1977 to 21 percent in 1985 (Fina, 1987). The generations of the demographic «boom» of the 1960s, which began to join the labour market specifically in these years, found no other options other than to continue studying, as their possibilities of finding work were virtually nil.

Before the poor reputation that the reform of vocational training of the first level had under the General Act on Education, the most certain path for those

that had obtained the Certificate of Basic Education was to continue with the BUP (General Unified Baccalaureate) with the subsequent intention of entering the university, as the labour market continued to be closed. Clearly, the unemployment crisis of the 1970s and 80s is the factor which most contributed, in an indirect manner, to lengthening schooling and notably increasing the educational level of the Spanish population.

In the beginning of the 1990s, under an improved economic situation, the LOGSE was a deep reform which resisted the pressures to maintain vocational training as a secondary path within the educational system. The law made the old aspiration of the White Paper real, establishing paths between general education and the labour market, and placed as a condition for access to the intermediate level of vocational training having obtained a certificate as graduate of Compulsory Secondary Education (ESO). The LOGSE increased compulsory general studies by two years, thereby delaying the incorporation of young people into the labour market. Finally, it laid the foundation for a modern structure for vocational training.(1)

Just when the children of workers no longer wanted to be workers and the new technologies were demanding broader general learning capacities to reach higher qualifications, the alternative of the secondary path for the children of workers or for young people with less intellectual capacity was losing importance, reduced to barely used short cuts within a much more flexible conception of the relationship between educational levels, and between the educational system and the labour market. The unemployment crisis did the rest, delaying the age of incorporation of young people into the labour market. In this situation, secondary paths no longer had any sense.

During this difficult period from 1977 to 1997, education was the only option for young people who aspired to a better future. On finalizing one's studies either one tried to directly integrate into the labour market through personal or family contacts and the dynamic of the current situation, or one continued vocational training to improve even more one's possibilities for employment. During those years, secondary education, both general education as well the

(1) For a more comprehensive analysis on the evolution of the Spanish educational system, see Prats (2005).

vocational training cycles, became the best way to keep adolescents out of the labour market, despite all the difficulties that this created for the educational system.

It is possible that the LOGSE was too radical in its approach. The Organic Law of Education (LOE, 2006) was what was missing to make its planned paths more flexible and adapt it to the new times which require a much more pronounced orientation toward lifelong training.

In addition, the LOGSE did not resolve a question of great importance for vocational training: what options are available to young people who do not complete the two additional years of obligatory general education. Despite intense debates among those that wrote the law, there was no solution to this question and the result has been one of the most negative effects of the LOGSE.

During all these years, thousands of young people have abandoned the educational system, generally after more than 10 years of schooling, without any certificate or preparation for the labour market. The so-called «social guarantee» courses, despite some programs worthy of mention, have not provided a solution to this serious problem. As a consequence Spain has one of the worst dropout rates among the educational systems in Europe. As can be seen in table 1.1, in Spain 31.1 percent of young people from 18 to 24 years of age do not have the Certificate of Basic Education, nor do they continue studying, in contrast to the overall average of 14.8 percent of 18 to 24 year olds in the European Union.

Luckily, the impact of the demographic crisis, which drastically reduced the number of young people entering the labour market, and the period of expansion of jobs in sectors requiring low skill levels that followed the years of implementation of the LOGSE attenuated the negative effects of the high numbers of young people dropping out of the educational system with no recognized skills.

One of the positive points of the LOGSE in the improvement of vocational training is the integration of this type of training into secondary schools under a comprehensive conception of all secondary education. The legislators were influenced by the debates of the 1980s about the advisability of organizing secondary education around a common trunk which would assure a comprehensive

TABLE 1.1

Early abandonment of schooling in Europe

Percentage of young people that have neither completed compulsory secondary education nor continue studying

COUNTRIES	2006	2007
European Union 27	15.2	14.8
Belgium	12.6	12.3
Finland	8.3	7.9
France	12.3	12.7
Germany	13.9	12.7
Greece	15.9	14.7
Italy	20.8	19.3
Holland	12.9	12.0
Poland	5.6	5.0
Portugal	39.2	36.3
Spain	29.9	31.0
Sweden	12.0	–
The United Kingdom	13.0	–

Source: Data and Figures from School year 2008-2009, Ministry of Education, Social Policy and Sports.

vision of education and at the same time a vocational specialization, with the conviction, at the time, that that was the best strategy for maintaining a comprehensive education in the face of the rapid evolution of new technologies (Planas, 1982).

Although the debates about the LOGSE were more theoretical than practical, the solution to place all the options of secondary education in the same educational centre has had very positive effects on vocational training. The most important has been the increase in its status within the educational system and among students and their families, helping to overcome the stereotype of it being a substitute for those less gifted.

Finally, the introduction through the LOGSE of internships in companies as a compulsory part of all the training cycles has made vocational training a respected path for entering the labour market, and, in addition, more than any other previous measure, has contributed to opening the schools to the reality of the world of work.

Therefore, it was not until the beginning of this century that an initial vocational training, built upon modern concepts and valued in the labour market, was truly integrated into the educational system in Spain and, as we will later see, seen as a valid option for young people, above all in the advanced training cycles (De Asis, 2003). The positive results in finding employment among those who finished the training cycles during the period of strong economic growth of the last decade have contributed to this. Thus, in 2001, six months after finishing their studies, only 10 to 12 percent of graduates were unemployed and looking for work (ETEFIL, 2005)

In Spain, in contrast to other countries of the OECD, more young people continue choosing to do the baccalaureate than the training cycles after completing compulsory education. As can be seen in table 1.2, in Spain 57.5 percent opt

TABLE 1.2

Distribution of students by programmes in higher secondary education in different countries of the OECD

Year 2006. In percentages

COUNTRY	GENERAL ED.	PRE-VOCATIONAL TRAINING	VOCATIONAL TRAINING	ALTERNATION
Austria	22.1	6.2	71.8	33.0
Belgium	30.6	A	69.4	3.5
Czech Republic	20.7	0.1	79.2	34.8
Denmark	52.2	A	47.8	47.6
Finland	34.6	A	65.4	10.9
France	56.9	A	43.1	11.6
Germany	40.6	A	59.4	44.2
Greece	66.1	A	33.9	5.1
Holland	32.5	A	67.5	18.3
Hungary	76.3	10.7	12.9	12.9
Italy	39.5	35.6	24.9	A
Japan	75.4	0.9	23.7	A
Korea	72.2	A	27.8	A
Spain	57.5	N	42.5	2.2
Sweden	44.9	0.9	54.2	N
OECD	53.8	4.1	44.0	15.2
EU-19	46.7	5.8	47.8	16.3

Notes: A: category not applicable; N: data not significant.
Source: OECD Education at a Glance. 2008.

for the baccalaureate and 42.5 percent for training cycles, while in the OECD the percentages are 53.8 vs. 44 percent respectively, and among the EU-19, 46.7 percent and 47.8 percent respectively.

There are even countries such as Germany, Austria, Belgium Finland, the Netherlands, the Czech Republic and Sweden where more than half the young people opt for a vocational training after compulsory secondary education. The reason for these differences has to be looked for in the difficulties to consolidate a modern vocational training of quality here in Spain. This evolution arrived here late and out of step, in other words, when the processes of qualification were already putting the same concepts of training in crisis, as will be seen later.

Training for the unemployed

If up to now we have explained the evolution of current conceptions focusing on initial vocational training, to understand the evolution of the rest of the training system it is necessary to look at Europe. In 1986, some years before the application of the LOGSE, Spain became a member of the European Union and also became a recipient of the Union's structural funds. The support of the European Social Fund for training was key, not only in terms of financing, but also in conceptual terms. The European Social Fund permitted co-financing of the Employment Training and Integration Plan [Plan de Formación e Inserción Profesional], known as the Plan FIP, focused on training the unemployed, who in those years made up more than 20 percent of the economically active population. In fact, this plan inaugurated so-called occupational training as a subsystem of training administered by INEM (the National Employment Institute).

There had existed training programmes for the unemployed previously, but not with the breadth and resources that could be mobilized with European support. The Plan FIP was practically the initiation of active employment policies in Spain, one of the concepts of European influence which contributed to alleviate the situation of the unemployed at that time, promoting the active search for work and the retraining of skills.

The severity of the closure of the labour market during the second half of the 1970s and the beginning of the 1980s also produced the breakdown of the

concepts and values related to work that had been generated during the economic growth of the 1960s. The socially constructed norm (Prieto, 1999) of one's job understood as a job for life, with a fixed full-time contract and easily attainable upon finishing one's studies clashed openly with the reality of the difficulties of finding work and the lack of secure employment.

The young people that entered the labour market during the crisis of the 1970s and 80s had to quickly adapt to a completely different context, in which the competition for employment was fierce. The importance of training to stay in the labour market, the need to manage one's own professional career, the opportunities to create one's own position, etc., are concepts that came to Spain through the policies of vocational and job training promoted by the European Commission, aimed at inculcating a much more active attitude before the adversities faced in the labour market.

In addition to the Plan FIP, European aid provided incentive for the creation of new innovative programmes, such as workshop schools, which surely could never have been financed with funds only from the Spanish state. Thus, the INEM found itself with the possibility of financing a programme of greater reach for the training of the unemployed population, and during the initial years of funding was under great pressure to spend all the subsidies received from Brussels. There was no time to invest in the development of infrastructure and training equipment, and the programmes had to adapt to the eligibility criteria of the European Social Fund, which had the objective of supplementing state policies with the promotion of innovative projects of European scope.

These two factors, that is, the pressure to spend all the monies budgeted and the European eligibility criteria, contributed to shaping a subsystem which, instead of playing a complementary function, in the case of Spain became the method of job training, and one which essentially lasted without many changes until the Royal Decrees of 2007 on the organization of the subsystem of vocational training for the unemployed. The funds, originating form the payment for vocational training that businesses and workers make to Social Security, as well as European financing, permitted the costs not to overload the general budget of the state while attending to the most urgent needs of the growing number of unemployed workers.

The annual call for training programmes, open to a wide range of agents, was the fastest and most efficient mechanism for distributing the available funds. In just a few years a considerable number of the unemployed received training.

The difficulties of the labour market in those years also explain another of the characteristics of the Spanish subsystem of employment: the strong involvement of local governments and other social actors on the local level. The unemployment crisis of those years led the population to the nearest governing authorities, and many municipal governments reacting by organizing local programmes to fight against unemployment, which found in European programmes a way of financing, often in collaboration with local organizations and associations conscious of the problems in the labour market.

The consolidation of these programmes led to generating more stable structures, although financed precariously, for promoting training and jobs programmes with an important locally developed dimension. The Plan FIP and the European programmes facilitated the extension of these local initiatives, promoted also by European policies. The result of this situation was a panorama of diverse and heterogeneous local initiatives with the participation of a multiplicity of local agents, often led by local governments, which constituted a characteristic specific to Spain.

In a nutshell, from its beginning the Spanish subsystem of occupational training was established as a large training market regulated by public subsidies with a high participation of private, socially oriented local actors. Local governments themselves had to act in this local market like private agents.

Subsequently, the bureaucratic evolution of this training market, very centrally regulated by INEM, and the aspirations of the Spanish autonomous communities based on the powers recognized in their statutes of autonomy to participate in the management of training and establish criteria better adapted to local needs, led to the decentralization of the system and the transfer of the administration of occupational training to the autonomous communities during the decade of the 1990s.

The form in which this transfer was produced, more a result of political negotiation to obtain parliamentary majorities than to the rational planning and reorganization of the subsystem, has led to numerous problems both in

the administration of the subsystem as well as in the relationship between the autonomous communities and INEM, and has made the possibility of producing an effective adaptation to the needs of each autonomous community more difficult.

The fact that all the programmes have been maintained almost intact, despite the labour market having undergone significant transformations during these years is evidence of the need for reforms which the decree of 2007, creating a new subsystem of occupational training, has attempted to provide with uneven results, as will be seen in the next chapter.

The birth of continuing training

At the beginning of the 1990s there existed two subsystems: that of initial training and that of occupational training. The development of continuing training was lacking.

Negotiations, first between social partners and subsequently with representatives of the state, ended in December of 1992 with the establishment of the first collective agreement of national scope on continuing training. Among the diverse factors which contributed to attaining this agreement were continuing improvements in the labour market beginning in 1985, European influence in matters of vocational training related to the idea of lifelong training, the importance of occupational training and the lack of transparency in the allocation and administration of funds collected through the payments for vocational training that businesses and workers pay to Social Security. In addition, also playing a role was the strategic vision among the representatives of the social partners - the two largest trade unions (UGT and CCOO) and the representatives of employer's associations - and the representatives of the ministries of education and labour on matters of vocational training.

Following European experiences, the social partners took the initiative on the agreement that the government would subsequently present for the realization and financing of the mechanism that had been agreed upon. Thus the first Tripartite Agreement on matters of continuing training for employed workers was born in December of 1992 (Forcem, 1992), signed by those same social interlocutors (trade unions, employer's associations) and the Ministry of Labour as representative of the central government.

The Tripartite Agreement established the allocation of a part of the payments for vocational training to the financing of training plans for employed workers (10 percent of the payments in the first year, with a forecast of an increase to 30 percent in 1996), while the rest of the money was dedicated to financing job training for the unemployed. This system of financing continues in existence and currently the proportion dedicated to continuing training is, at minimum, 60 percent. In this way a new subsystem independent of the occupational subsystem was born. Training for adults was in this way divided into two subsystems: one dedicated exclusively to employed workers, through the contribution of the payments for vocational training, and the other dedicated primarily to unemployed workers. This separation had no comparison in other European countries, in which the only distinction was between initial training and continuing training.

The fact that this subsystem came into existence tied to the payments for vocational training and the initiative of the social partners would bear on its philosophy. The representatives of business interpreted this structure as a return of the payment that they had contributed, while the workers demanded their participation also as contributors of a part of the payment and as guarantors of the administration of public resources which ought to be subordinate to objectives of general interest.

The agreement envisaged the creation of a bipartite body for the administration of the funds and the organization of the subsystem, a measure that was concretized in the creation of the Forcem Foundation in May of 1993. The first announcements of aid for training were made using three formulas: plans for companies with more than 200 workers, plans for groups of companies which totalled more than 200 workers and individual permits for training. The plans were proposals for training programmes that companies made individually or collectively and required previous authorization from representatives of the workers in the companies and were presented to the Forcem Foundation for approval. After, their performance had to be evaluated before the Foundation.

This structure, with some slight changes to correct the distortions provoked by the process of prior approval of plans for training and to improve the adaptation to the model itself, lasted until 2003. (The changes focused on characteristics of the plans, definition of the collectives, procedures

for elaborating plans, the organization of calls for proposals, criteria for justification of spending, etc.).

When the model was put into action it had a major impact on labour relations within companies and in the private sector overall, and within trade unions and business associations. The fact that workers' representatives and business representatives had to come to agreement to elaborate a company training plan was one of the most positive experiences of social dialogue in the history of labour relations in Spain. For the first time, trade unions and businesses sat down together, not to tensely negotiate a collective agreement on labour conditions in the company, but rather to discuss a theme in which, in theory, they shared a common interest, although in practice, as was immediately seen, with different visions.

The social dialogue emerged from the leadership of the trade unions and business associations to reduce the tension in daily labour relations in workplaces. In the initial negotiations all was still to be decided: the training to be imparted, the form in which training needs would be determined, the way in which participants in training would be chosen, the teaching of training within or outside of the work schedule, the possibility of payment, the manner in which monitoring would be done, the recognition that would be ascribed to training in function of labour categories, etc.

Little by little consensus and case law was generated around all of these themes, which, although not exempt from conflicts and tension in the beginning, were gradually developing into the framework of collaboration which today presides over the system and which has served as a model for generating other spaces of collaboration, such as for example, in matters related to the prevention of occupational hazards, product quality and more recently conciliation. The participatory model of continuing training initiated a new stage in labour relations at the company level in Spain based on social dialogue. This model has spread to the sectoral and territorial level, contributing a successful example of social dialogue and structuring a strong training market.

In just a few years a true training sector has been constructed and technicians, specialists, administrators, intermediary organizations, etc. have emerged in all fields and territories. Once again, as had happened some years before

with the Plan FIP, the pressure to spend a large amount of subsidized money generated a series of obligations that have subsequently been difficult to eliminate and which have affected and continue affecting the evolution of the model. The priority both in occupational training and in continuing training was for training to reach, as quickly as possible, the greatest number of people. All the other elements are conditioned by this objective: training centres, quality, professionalism of teaching staff, etc.

But the effects of this new model were also noted within each organisation. Continuing training became one of the activities emerging in the work plans of trade unions and business associations, either for the enormous mechanism of representation and negotiation that it created within companies, in the different sectors and territories and in joint committees, or for the direct promotion of training plans which constituted an excellent opportunity to strengthen an organization by offering new services to its members or by getting new members. Training appeared as a new element in the criteria for the distribution of influence and the relationship of forces among the different hierarchical structures of trade union and business organizations.

The major involvement from the start of trade union and business organisations, conscious of the challenge that they were assuming as social partners for the first time taking on the administration of a system organized with public resources, was the key to explaining the rapid spread of the model. The social partners, with their widespread presence throughout the country, transmitted trust and credibility to individual businesses and to workers. Despite all the difficulties at the start, the pedagogical work of explaining the importance of training to the competitiveness of companies and for the employability of workers constituted the major contribution of the social partners to the development of training in Spain.

But this same involvement of the social partners also generated certain problems, which manifested above all in the difficulties the model had in evolving. At the end of the first agreements (1993-1996), at the height of success of the model, although at that moment some problems were surfacing, a second set of agreements (1997-2000) of a continuist character were signed (Forcem, 1996). These agreements did not deal with the problems that were appearing in a system that was bureaucratizing through the multiplication of opaque management criteria. Due to the relationship of

the model with the complex area of social dialogue and the fear of initiating reform while faced with pressure from the autonomous communities, who distrusted a model which excluded them, continuity was opted for.

The constant increase in resources (in 1997 the programme administered 35 percent of the monies from payments made for vocational training by business and individuals into the Social Security system), the expansion of the system to new collectives and a greater number of companies and workers, and the complexity of the management of the model led to some cases of mismanagement of resources, which provoked the government joining in a more decided manner in the management of both the funds and the subsystem in the third agreements (2001-2004) (Forcem, 2001), approving the creation of the Tripartite Foundation for training for employment, which absorbed through fusion the Bipartite Forcem Foundation. This provoked a progressive change in the function of the social partners, who went from co-responsibility for the management of the subsystem to collaborators with the Public State Employment Service in the development of the model.

Before the third accords finished, and facing differences between state administrative structures and the social partners, the state administration decided to take the initiative and reform the subsystem with the publication of Royal Decree 1046/2003 on the first of August 2003, which regulated the subsystem of continuing vocational training.

This Royal Decree altered the mechanism of financing of business plans for training, making previous approval unnecessary and introducing a system of direct subsidies on the payments for vocational training which will be described in greater detail in the next chapter. In addition, the Royal Decree opened the subsystem to the autonomous communities with their presence in the Tripartite Foundation and with the creation of territorial commissions.

As can be seen, the evolution of the subsystem happened rapidly and in practically 10 years had covered the route that had taken more than 20 years in other European countries. In this time the value of training, in addition to becoming widespread, became integrated into the behaviour of business and workers. The current model of continuing vocational training is completely comparable to European models, and with the combination of the system of subsidies and the programmes of continuing training offered

has managed to reach a considerable number of businesses, workers and towns and cities.

Although acceptable objectives have been achieved with the spread of the model, the subsystem is still far from meeting the challenges it faces, which require the resolve of a model of greater business competitiveness and greater job quality. The fact that not even the most active businesses in the model manage to spend all the credit they have available for training is an indicator of what still remains to be done.

Already into the 21st century, the whole training system is heading through a series of reforms toward greater systemic integration, introducing flexibility between and within subsystems, and the search for consensus among all the social and territorial actors. The 2002 Qualifications and Vocational Training Act (Ley Orgánica, 2002), the Royal Decree for the Reform of Continuing Training of 2003 (Decreto, 2003), The Law of Education (LOE, 2006), the 2007 Royal Decree (Decreto, 2007) for the Regulation of the Subsystem of Occupational Training and the Orders of 2007 (Orden, 207) and 2008 (Orden, 2008) that developed them have just shaped the system as it currently functions and will be presented in depth in the next chapter.

The initiative for reform which in recent years has affected all of the subsystems indicates a concern for improving their structure, basically with respect to the relationship between the principal actors and their interests. In contrast, the same concern is not seen in regard to results and their impact on the economic and social fabric of the country. Once again a wide consensus is missing which would involve all the principal actors, both from the central state as well as from the autonomous communities, in the results of the system. As will be seen later, the educational and training levels of the Spanish population, despite advances made up to now, are still far from European averages and far from what is needed to transform the productive system of the country.

Up to here the causes which explain the present situation have been examined. In the following pages the functioning of the system in its current configuration will be presented.

II. The system of vocational training in Spain

Increasingly training tends to be considered as a system, that is to say, as a totality of related elements and norms which contribute to a certain number of persons acquiring competencies useful in their personal or professional lives. A system of training, in addition to offering a process of learning, also includes mechanisms for the recognition of what is learned, normally through degrees, diplomas or certificates.

Therefore a system of training includes, among other elements, mechanisms for the planning of training needs, resources for the organization of the training offered, mechanisms to guide the individuals, mechanisms for relationships with companies, norms for the certification and accreditation of the learning achieved, instruments to promote quality and innovation, and resources for coordination.

This chapter explains the principal elements of the Spanish system of vocational training and the keys to its functioning, with the aim of providing the reader with the general information necessary before dealing with the debates about the future evolution of this system in the knowledge society.

2.1. The basic texts and data

The system of Spanish vocational training is essentially regulated by the Qualifications and Vocational Training Act (Ley Orgánic, 2002). This law instituted the «National system of Qualifications and Vocational Training» and added to the already mentioned trend of seeing training as a system. In this case, this trend took a step forward because the law adopted a holistic perspective closely relating training with professional qualifications and the employment system.

The law defines vocational training as the totality of training activities which capacitate individuals for the qualified carrying out of diverse professions, access to employment and active participation in social, cultural and economic life. It includes the teachings of initial vocational training, actions for integration and reintegration in the labour market, as well as those actions oriented toward continuing training in companies, which facilitate the acquisition and continual updating of professional competencies.

In this way, the Spanish system, in its fundamental texts, is conceived as a comprehensive system of all types of training and closely tied to the labour market. Thus, it starts from a broad conception which recognizes the contribution of training to the enrichment of the individual and to social cohesion.

This law has been further developed with two royal decrees which establish, in fact, two subsystems: one of which regulates initial vocational training within the framework of the educational system (Real Decreto, 2006) and is under the Ministry of Education, Social Policy and Sport, while the other, training for employment, integrates the old occupational training and continuing training, (Real Decreto, 2007) and is under the Ministry of Labour and Immigration.

This recent regulation clearly adopts the dual objectives of integrating vocational training in Spain and orienting it toward the labour market, although in both cases the legislation faces important limitations. The desire for integration is reinforced by the systemic vision of all training, and progresses through the joint regulation of all the elements of the system. However, in practice a division persists between initial vocational training and training for employment, with an incomplete coordination between both systems.

At the same time, all the legal texts reaffirm the intention to orient the system of vocational training to cover the needs of the labour market in a broad sense, which benefits both the professional careers of workers and the need of companies for a skilled work force. Later the difficulties and limitations of this orientation will be seen.

The examination of some overall data before presenting the functioning of each of the two subsystems of vocational training will provide us with an overall perspective on the system which takes into account all the different types of existing programmes.

TABLE 2.1

Total number of students in the system of vocational training

Number of persons trained by sex 2006 (1)

PROGRAMME	TOTAL	MEN	WOMEN
Intermediate cycles (2)	**235,224**	125,015	110,209
Advanced cycles (2)	**218,319**	106,325	111,994
Total initial training	**453,543**	231,340	222,203
Social guarantee programmes	***45,924***	*30,521*	*15,403*
Continuing training - Demand training	**1,148,637**	665,550	483,087
Continuing training - Individual training permits (3)	**927**	504	423
Continuing training - Supply training: central state	**808,086**	406,697	401,389
Continuing training - Supply training: autonomous communities (4)	**481,592**	242,378	239,214
Continuing training – public administration (5)	**550,152**	276,883	273,269
Total continuing training (6)	**2,989,394**	1,592,012	1,397,382
Occupational training (7)	**188,312**	73,744	114,568
Workshop schools, craft centres, employment workshops (8)	**63,618**	30,975	32,643
Total occupational training	**251,930**	104,719	147,211
Total subsystem of training for employment (continuing training + occupational training)	**3,241,324**	1,696,731	1,544,593
Total system of training	**3,740,791**	1,958,592	1,782,199

Notes: (1) Data is provisional.
(2) Include distance vocational training and the data refers to the 2005-2006 course.
(3) Permits which ended during 2006.
(4) Estimated data on number of participants because of lack of data.
(5) Data refers to 2005 and distribution by sex is estimated.
(6) There is some possible duplication between the individuals who partipated in demand training and supply training.
(7) Lack of information on activities of the autonomous communities financed through their own funds or with other sources of financing, such as European structural funds.
(8) Distribution by sex is estimated because of lack of complete data.
Source: Elaborated by author from data from the Ministry of Education, Social Policy and Sports, the INEM and the Tripartite Foundation for Training at the Workplace, Ministry of Public Administration.

The number of persons trained, with all due caution given the limits of the data available, offers an image of the importance of the system of vocational training. The figure is over four million persons. To this data in table 2.1 should also be added, on the one hand, the training activities that the autonomous communities carry out with their own funds or with resources which come from the European Social Fund, and for which little aggregate information is

available, and on the other hand, the 5,828 participants in small programmes directly administered by the National Institute of Employment (INEM).

In addition, we could also add the 675,373 participants in the *teachings by special arrangements* (which cover artistic training and foreign languages) which also have a professionalizing objective. Of these participants, 376,267 are learning languages in the official language schools, and the rest are participating in training activities of an artistic nature. The 40,932 persons that are following a theoretical training in the framework of training contracts could also be added to this total, though normally this is a type of training which is weak. Finally, this group could also include all the adult vocational training, or at least a part of it, and non-formal activities which are generally carried out through private initiative. In other words, the professionalizing type of training, which mobilizes a significant group of persons and resources, represents approximately half of the educational system, including the university. Therefore, this type of training in its totality cannot be considered a marginal or peripheral system.

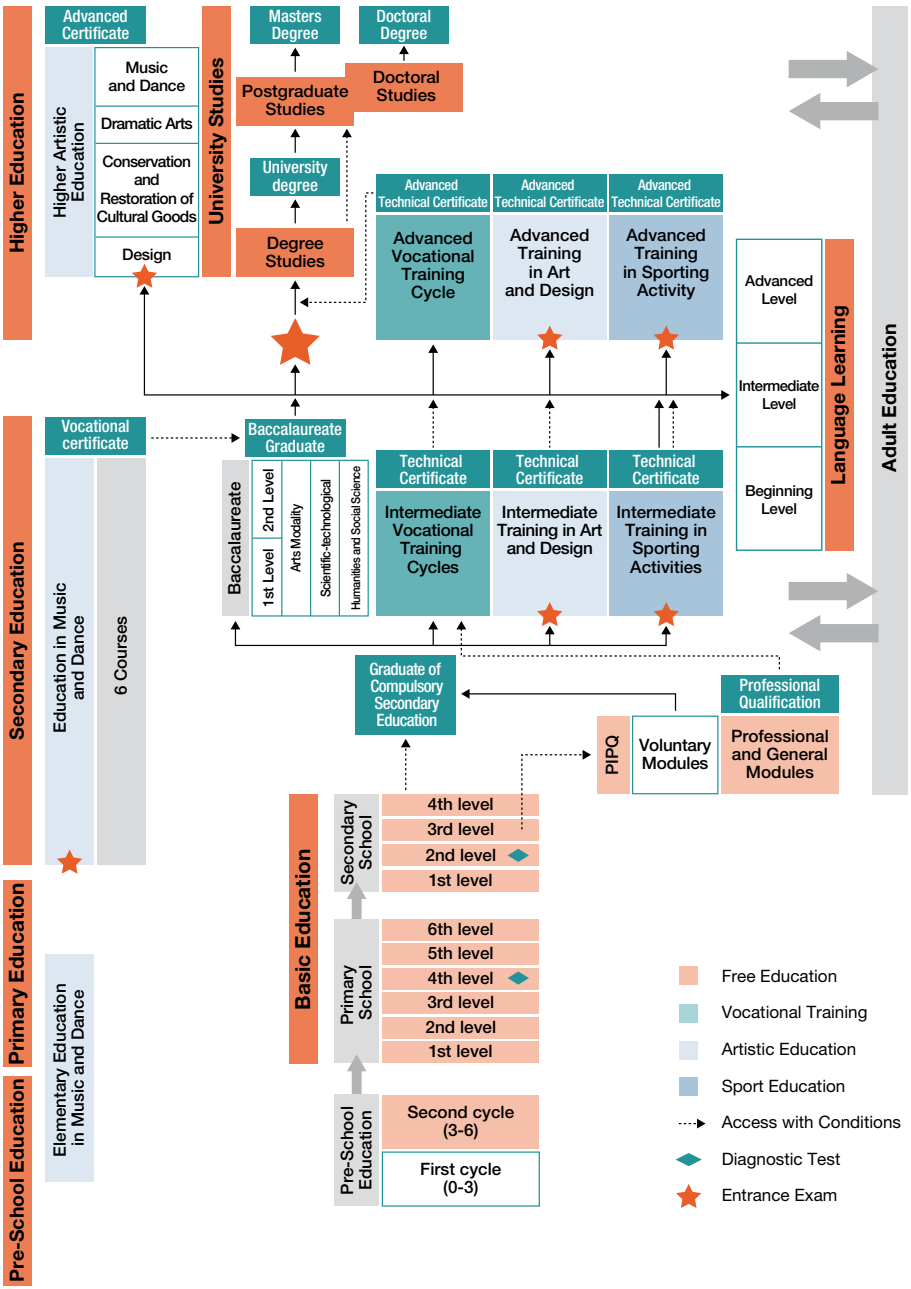
If the weight of each subsystem within the whole system is examined, it can be seen that initial vocational training occupies a reduced space in relation to the number of persons trained. However, if the approximate number of hours of training imparted is calculated, the situation is completely reversed. According to table 2.1, taking into consideration the number of persons, initial training represents approximately 12 percent of the total; in contrast, it represents approximately three quarters of the hours of training imparted. From this data it can be deduced that the learning that is acquired through the system of vocational training continues being grounded in initial training, in which a relatively reduced number of persons participate in intensive programmes which require intensive dedication in terms of time. In addition, the system is also capable of mobilizing a great number of people to update their knowledge through continuing training, although in a much less intense manner in terms of the number of hours involved.

2.2. Initial vocational training

The subsystem of initial vocational training forms part of the educational system, the structure of which can be seen in a schematic manner in graph 2.1. Fundamentally it is made up of the training cycles of vocational training, known more popularly as «FP» (from formación profesional), instituted after

GRAPH 2.1

The structure of the Spanish Educational system



Source: Ministry of Education, Social Policy and Sport.

the passing of the General Law on the Education System (LOGSE, 1990). As has been mentioned, the LOGSE introduced a fundamental change in the conception of vocational training in the sense that it modernized vocational training, abandoning the conception of it as a secondary path or second opportunity for students with fewer economic or intellectual resources, and replacing it with a path for the specializations and skills needed for integration into the labour market. Because of this attachment to the educational system, initial vocational training is under the regulation of the Ministry of Education, Social Policy and Sport, and the majority of competencies have been transferred to the autonomous communities (though less in the case of Ceuta and Melilla).

The structure of initial vocational training

Since the LOGSE (and as can be seen in graph 2.1 in green), initial vocational training is structured around two training cycles:

- Intermediate training cycles which lead to the technician certificate for the corresponding vocation and are integrated into post obligatory secondary education. These cycles constitute the path for vocational specialization for young people who, upon finalizing their compulsory studies of secondary education, want to join the labour market. They are designed to provide specialized and skilled labour to occupy jobs in direct production in industry or in service sectors.

- The advanced-level cycles, lead to the advanced technician certificate and are classified within non-university higher education. They constitute the possibility for a specialization by young people who, upon finishing the baccalaureate want to join the labour market. In contrast to the intermediate cycle, the advanced-level is designed to train future highly specialized technicians or mid-level management in companies in any economic sector.

Access to the intermediate-level cycles can be attained once the certificate of basic education has been obtained. This requirement, which insures a minimum level of knowledge and abilities, has contributed in great measure to the high quality level of these training cycles. The same has occurred with access to the advanced cycles, admission to which requires completion of the baccalaureate.

Though there were alternative criteria for accessing intermediate level cycles, it was not until the 2006 Act on Education (LOE, 2006) which introduced further flexibility in the criteria for access that these were more consistently used; this has led to an important innovation in the development of vocational training. Young people over 17 years of age with previous employment experience can take an exam to access the intermediate cycle, and those who are 18 or 19 years old, if they have successfully completed the intermediate cycle can take an entrance exam to access the advanced vocational training cycle in the area in which they have the related certificate. This path has facilitated the reincorporation into the educational system of many young people who had dropped out of school without having completed compulsory secondary education and who, after entering the labour market and realizing that they have limited skills want to improve them through a vocational training cycle.

The possession of a technician certificate permits students to access any of the different baccalaureates. The advanced technician certificate also allows individuals to enter the university in programmes which correspond to their vocational training. Taking advantage of this possibility is fairly widespread. Thus, a significant number of young people access the advanced cycles with the objective of subsequently continuing their studies in the university. In the 2004-2005 course, 8.3 percent of the students that were registered in Spanish universities came from advanced cycles of vocational training.

Both cycles have a flexible modular structure of variable duration, although in the coming years all will have an equal duration of two year-long courses. The innovation of accepting enrolment by modules and not only for complete courses has also given the training a flexibility, the results of which will need to be evaluated.

The introduction, accelerated with the application of the LOE, of these elements of flexibility between the different educational levels, between vocational training and the labour market and between general education and vocational education has resulted in a significant renovation of the basic structure of vocational training, while maintaining its coherence and simplicity. The presence of these values constitute one of the characteristics of the Spanish system which should be highlighted, particularly in relation to the educational systems of Spain's neighbours such as France, Italy or Belgium, with much more complex and diversified systems.

An additional defining characteristic of the vocational training cycles is that their curricular content is structured in two types of modules:

- Theoretical-practical vocational modules, aimed at developing a series of vocational competencies that have been defined in relation to determined jobs.
- Practical training modules, which are done in an outside workplace rather than in the educational centre, generally through internships in a company. The introduction, through the LOGSE, of Training in the Workplace [Formación en Centros de Trabajo (FCT)] has been an important innovation in the traditional educational culture of Spanish vocational training.

The internships in companies have contributed to opening the vocational training centres to businesses, to improving the relationship between the centres and the productive world, to habituating the teachers to having a relationship with companies and, above all, to facilitating the integration of young people into work once they have obtained their certification. Many young people are hired by the companies where they have done their internship. Training in the Workplace is a training module which is evaluated; it includes a school tutor and another workplace tutor who develop a work plan for the student which they supervise.

This work-linked training module does not reach the level of alternation of Germany's dual system, nor the programmes of training in alternation with employment of the French system, but it has contributed to overcoming the traditional isolation of training centres from businesses and is a recognition of the importance of on-the-job training as an aspect of vocational training. The internship represents 25 percent of the teaching time of a cycle, between 350 and 500 hours.

However, the quality of the internships and their integration into the curriculum of the cycle, particularly when they are done in small businesses or in little developed productive networks, are still far from the level desirable. Programmes of coordination and regulation through agreements with trade associations and business sectors such as those developed by the Barcelona Chamber of Commerce with their E+E programme, or the coordination of internships in the Basque Country or the local experience of the Lacetània Foundation in Bages County in Catalonia, all constitute examples of how, through Training in the Workplace, a fruitful collaboration between vocational training centres and businesses can be organized.

Finally, it is also important to point out that the vocational training cycles are organized by occupational families, which are large groupings by occupation or vocation, some of a more sectoral character and others more transversal but which cover the majority of vocational content in the labour market. Since the boost contributed by the General Act on Education in 1970, which incorporated many disperse specializations not included in the regulated training offer and placed under the control of the Ministry of Education the great majority of training programmes provided and regulated by other ministries, the Spanish system has maintained a centralizing tendency which tries to cover the great majority of specializations demanded in the labour market. In this sense, the LOE also was an advance in the regulation of teaching in the area of specialized artistic activities, language, sport and adult education and training. Prior to the LOE, these areas were considered to be *teachings by special arrangements* and their regulation was lacking. This regulatory tendency has meant that in the language of the sector the initial training dependent on the Ministry of Education is known as regulated training.

After the latest updating of the National Catalogue of Vocational Qualifications, there are 26 occupational families, which cover the primary sector, with farming activities and maritime and fishing activities; the secondary sector, with for example, chemistry, mechanical production, electricity and electronics, graphic arts and the tertiary sector, such as hostelry and tourism, socio-cultural and community services, health, etc.

Each occupational family groups diverse specialized cycles, directed at a series of occupations in the labour market. Today this includes 64 intermediate level training cycles and 78 advanced level cycles. Not all the intermediate cycles continue on to the advanced level; this is coherent with the modern conception of vocational training as a specialization aimed at the labour market and not as an alternative course of study to general education.

The characteristics and profile of initial vocational training

The establishment of the model of vocational training from the LOGSE beginning with the 2000-2001 course was gradual until the 2002-2003 course in the sense that it gradually substituted the old VET for the new cycles. If the individuals that had taken the new cycles were added to the students of the old vocational training during this initial period, a certain stabilization in the

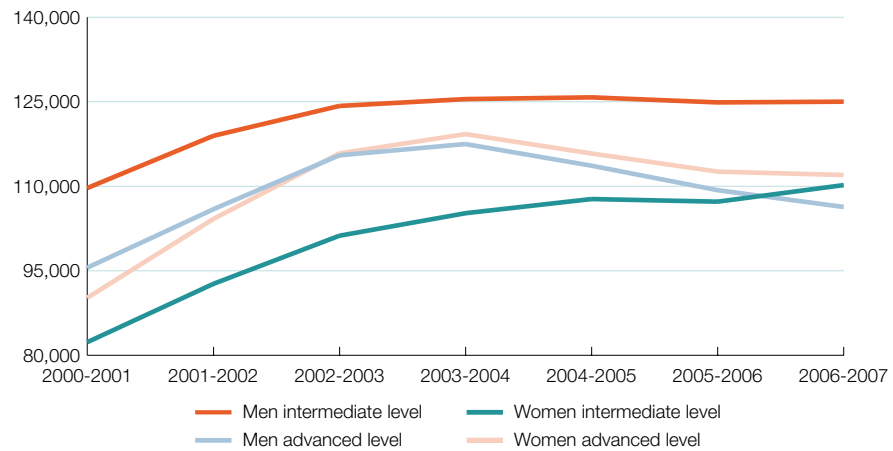
number of students during the years of the system in the 20th century can be see, with a slight reduction starting in the 2003-2004 course because of the effects of the demographic decline which has not been compensated for by the arrival, above all in the intermediate cycles, of immigrants. For the 2007-2008 course the forecast is for 464,403 students in the two cycles. Pending the most recent data it appears that the decline of recent years has stopped and that the number of students has stabilized.

As can be observed in graph 2.2, during these years a gradual increase in the number of women in vocational training has taken place. And in the advanced cycles there are currently even more young women than young men. The proportion of women in vocational training has gone from 46 percent during the 2000-2001 course to 49 percent in the 2006-2007 course.

The fact that initial training has resisted the effect of the demographic decline of the last decade, which has had a much greater impact on the baccalaureate, indicates that in recent years there has been a great interest among young people in vocational training. This increase in demand has been notable in some autonomous communities. Immigration has also had a positive impact,

GRAPH 2.2

Evolution of the number of students in initial vocational training by sex and level



Source: Ministry of Education, Social Policy and Sport.

as a greater percentage of young immigrants have chosen vocational training over the baccalaureate and university.

In the 2007-2008 course, there were 34,616 foreigners studying vocational training cycles, divided between public and private centres in almost equal parts, although with a slightly greater number in the public centres. Another factor which has contributed to growth in the number of students has been the return to studies of those young people that had dropped out before completing compulsory education and that were not studying. Current flexible measures facilitate the reincorporation of these young people into vocational training cycles.

However, as can be seen in table 2.2, the situation is not the same in all autonomous communities. Communities such as Asturias, Cantabria, Galicia, the Basque Country and the La Rioja have a more developed initial vocational training, with much higher enrolment rates that represent a significant percentage of the total school population; in contrast, in Madrid the percentage is below 18 percent in the intermediate cycle and in the Balearic Islands, Extremadura, Murcia and Melilla they are also below 18 percent in the advanced cycle. How well established vocational training is in the local labour market may be influencing these large differences between areas.

Demographic evolution, the situation of the local labour market, the number of immigrants and the prestige of vocational training generate uneven development among the autonomous communities, among which there are some which have seen a decline in their number of students, such as Asturias, Cantabria, Castilla and Leon and the Basque Country. But this data also reveals a lack of agreed upon objectives on the part of the autonomous communities regarding results which brings about a development of vocational training that is too differentiated among autonomous communities in Spain.

The comparison between the distribution of students enrolled in the two levels, the intermediate and advanced cycles, shows that among young people, particularly women, the advanced cycles arouse greater interest upon finishing the baccalaureate than the intermediate cycle upon finishing compulsory education. The advanced cycles play an important function among young people who have finished the baccalaureate and are deciding

upon their future, either as a path of entry to the university and a means of avoiding entrance exams and the scores necessary to enrol in a specific programme, or a means to join the labour market with a specialized vocational certificate at the level of qualification aspired to.

TABLE 2.2

Evolution of the number of students in initial vocational training by autonomous community

AUTONOMOUS COMMUNITY	TOTAL NUMBER 2000-2001	TOTAL NUMBER 2007-2008	% FOREIGN STUDENTS (1)	GROSS ENROLLMENT INTERMEDIATE CYCLE (1)	GROSS ENROLLMENT ADVANCED CYCLE (1)
Andalusia	59,761	89,415	4	26.5%	19.7%
Aragon	12,100	13,440	10	29.8%	26.1%
Asturias	13,258	11,125	13	30.7%	33.3%
Balearic Islands	5,614	7,322	12	22.3%	11.2%
Basque Country	28,887	25,633	8	30.9%	41.6%
Canary Islands	21,457	24,250	6	27.5%	23.0%
Cantabria	6,985	6,324	7	33.8%	26.7%
Castilla and Leon	26,836	26,619	6	29.7%	26.8%
Castilla-La Mancha	12,960	17,950	7	21.2%	18.1%
Catalonia	59,319	76,941	9	28.7%	27.9%
Valencia (Community of)	33,932	50,705	8	28.4%	22.9%
Extremadura	7,275	10,955	2	23.9%	17.9%
Galicia	25,269	32,275	2	32.2%	31.7%
Madrid (Community of)	43,314	47,668	16	17.8%	21.1%
Murcia (Region of)	10,820	12,547	9	21.7%	17.0%
Navarre	5,658	6,025	10	28.4%	26.0%
La Rioja	3,049	3,418	10	33.7%	25.1%
Ceuta	688	1,074	8	22.6%	33.5%
Melilla	574	717	9	21.1%	16.5%
Total	**377,756**	**464,403**	**7**	**26.6%**	**23.7%**

Note: (1) Course 2007-2008.
Source: Elaboration by author from statistical data from the Ministry of Education, Social Policy and Sport.

In contrast, there is less interest in the intermediate cycles upon finishing compulsory education. Later the possible reasons for this will be explained. But what is certain is that the poor results in compulsory secondary education impede a larger number of students from accessing the intermediate cycles of vocational training. The data from the Survey on the Transition from Education/Training to Labour Market Insertion of the National Statistics Institute (ETEFIL, 2005) indicate that when young people obtain the certificate of basic education or complete the baccalaureate the great majority continue studying, in contrast, those that drop out before completion of compulsory secondary education enter the labour market without any specific training.

This last group, if they had successfully complete compulsory education would have, in large proportion, gone on to an intermediate vocational training cycle and would have swelled the base of the pyramid of vocational training in a more rational way than currently exists. This is the reason why it is thought that an improvement in the results of compulsory secondary education would have positive effects on vocational training.

Initial vocational training is basically a public subsystem. As can be seen in graph 2.3, in the 2007-2008 course, 74 percent of the students in intermediate cycles and 78 percent in advanced cycles are enrolled in public centres, although there are many differences between autonomous communities. For example, in the Basque Country only 50 percent are in public centres while in the Canary Islands this percentage climbs to 95 percent.

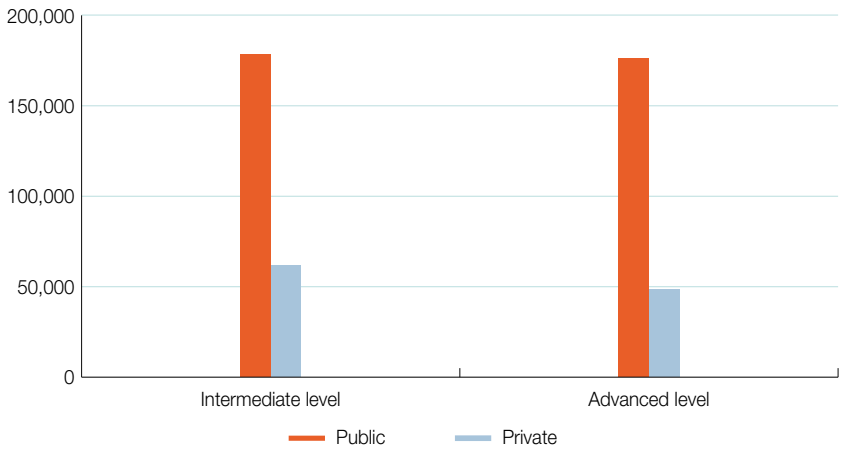
Vocational training is an in-person type training. In recent years some, primarily public, distance learning programmes have been organized, though with a very reduced weight within the overall subsystem. For the 2007-2008 course, only 3,419 students in intermediate cycles and 9,179 in advanced cycles were forecast for the distance programmes.

Other data worth commenting on is that the students in initial vocational training are much older than what is envisaged for entry into each cycle. In the 2006-2007 course, 48.8 percent of the students in the intermediate level cycles were older than 18 years of age and 58.1 percent of students in advanced cycles were 21 years of age or older. This data indicates, on the one hand, the delay in the completion of initial studies for many students, while on the other hand, it also reveals that initial vocational training is almost a training

GRAPH 2.3

Students in initial vocational training in public and private centres by level

Course 2007-2008



Source: Ministry of Education, Social Policy and Sport.

for adults and, increasingly for persons that are returning to the educational system after having been in the labour market. Said in another way, initial training is becoming more and more like the concept of continuing training. Some 10.5 percent of all those enrolled in intermediate cycles and 7.9 percent in advanced cycles gained access to the 2006-2007 course through entrance exams, although in the case of the Autonomous Community of Valencia this percentage was 20 percent and 30 percent respectively. This data can be seen in table 2.3.

As was mentioned in the previous section, the training cycles are grouped by occupational families. The distribution of the students in these families, which can be seen in table 2.4, permits us to identify two additional characteristics of the subsystem of initial training.

The first is the great differences in the distribution of students by sex in these families. Although it is true that overall there is equality between the numbers of men and women, with a slight predominance of women, above all in the advanced cycles, only four of the occupational families have a somewhat

TABLE 2.3

Percentage of students accessing the vocational training cycles through entrance exams, by autonomous community

Course 2006-2007

AUTONOMOUS COMMUNITY	INTERMEDIATE CYCLE	ADVANCED CYCLE
Andalusia	17.9	14.4
Aragon	14.2	12.8
Asturias	12.3	6.3
Balearic Islands	13.7	22.4
Basque Country	3	4,3
Canary Islands	0.4	0.1
Cantabria	8.6	5.1
Castilla and Leon	15.5	4.4
Castilla-La Mancha	14.1	11.1
Catalonia	2.4	5
Valencia (Community of)	20.2	29.6
Extremadura	10.6	15.1
Galicia	7.4	0.3
Madrid (Community of)	7.3	3.4
Murcia (Region of)	8.5	3.1
Navarre	10	18,2
La Rioja	11.6	14.8
Ceuta	21.7	27.6
Melilla	2.7	3.5
Total	**10.5**	**7.9**

Source: Ministry of Education, Social Policy and Sport.

equal distribution of students of both sexes – between 40 and 60 percent. In the rest of the cases, there is an overwhelming predominance of one of the sexes, although in the advanced cycles this imbalance is a little less extreme.

Young women aspire to have higher qualifications than do young men and they make great effort to complete their studies. For this reason there are more women in advanced cycles than men, struggling to conquer spaces that up to now were essentially closed to them. At the highest levels of qualification the gender differences are not as sharp; in contrast, among the less qualified

TABLE 2.4

Distribution of students in initial vocational training by professional families and sex

Course 2006-2007

PROFESSIONAL FAMILIES	INTERMEDIATE CYCLES			ADVANCED CYCLES		
	TOTAL	%	% WOMEN	**TOTAL**	%	% WOMEN
Administration and Management	**46,894**	20.2	76	**38,584**	18.1	73
Agriculture	**4,351**	1.9	16	**3,527**	1.7	23
Chemistry	**2,437**	1.0	63	**4,802**	2.3	56
Computing and Communications	**2,450**	1.1	50	**8,767**	4.1	37
Construction and Civil Work	**750**	0.3	6	**10,386**	4.9	32
Electricity and Electronics	**29,929**	12.9	2	**19,408**	9.1	6
Food Industry	**1,151**	0.5	47	**801**	0.4	53
Glass and Ceramics	**88**	0.0	52	**64**	0.0	38
Graphic Arts	**2,529**	1.1	38	**1,591**	0.7	46
Health	**31,345**	13.5	90	**24,129**	11.3	79
Hotel Industry and Tourism	**12,011**	5.2	44	**10,689**	5.0	69
Image and Sound	**15,772**	6.8	14	**23,085**	10.8	19
Installation and Maintenance	**10,030**	4.3	2	**7,819**	3.7	20
Maritime Industry and Fisheries	**1,157**	0.5	8	**1,127**	0.5	14
Mechanical Manufacturing	**21,916**	9.4	2	**5,794**	2.7	2
Personal Image	**16,618**	7.1	97	**4,201**	2.0	97
Physical and Sporting Activities	**3,819**	1.6	33	**7,570**	3.6	32
Sociocultural and Community Services	**4,784**	2.1	91	**22,774**	10.7	91
Textiles, Leather and Fur	**324**	0.1	95	**507**	0.2	83
Trade and Marketing	**11,181**	4.8	71	**11,078**	5.2	56
Transport and Maintenance of Motor Vehicles	**10,303**	4.4	3	**5,638**	2.6	9
Wood, Furniture and Cork	**2,814**	1.2	5	**461**	0.2	11
Total	**232,653**	**100.0**	**46**	**212,802**	**100.0**	**51**

Source: Elaboration by author from data from the Ministry of Education, Social Policy and Sport.

the stigmas associated with gender in the labour market are more visible. In the cycles aimed at occupations of higher qualification, women have fewer difficulties in aiming toward sectors of traditionally masculine domination, such as, for example, construction or production and maintenance, and young

men fewer difficulties aiming toward sectors with a greater feminine presence such as health or commerce.

It seems as if qualifications will compensate for gender discrimination. Both young men and women have no objections to aspiring to occupy advanced technical positions that are related to tasks of programming, management or coordination, in professions in which persons of the opposite sex predominate. This indicates that young people have more knowledge about the labour market and clarity about their professional options than expected. Even so, the gender differences in initial training are greater than those which really exist in the labour market. This circumstance makes one think that there is room for action to intervene in favour of a more egalitarian distribution.

The second identifiable characteristic in the distribution of students by occupational families is that, although the offer is structured around a wide range of families, just five of the families absorb about 60 percent of the students: administration, electricity and electronics, computer science and health in both cycles, and maintenance of motor vehicles in the intermediate cycles and socio-cultural community services in the advanced. The concentration of families is more marked among women, above all in the intermediate cycles in which only three of the families (health, administration and personal image) absorb 74 percent of the female students.

This data reveals a low level of specialization in initial training, structured based on the acquisition of competencies of wide transversal reach and very segregated by gender, in which the component of demand on the part of young people still has more weight than that of business, although, as will be seen in the following chapters, businesses choose their work force paying more attention to educational or vocational level than to excessive specialization.

Training centres and their management

The LOGSE incorporated an additional innovation of great significance for current vocational training. With the creation of Secondary Education Institutes or IES, the possibility of the same educational centre offering compulsory secondary education, the baccalaureate and vocational training cycles was created. This proposal was coherent with the integrative philosophy of secondary education, predominant in the field of Spanish education and, in part, also internationally.

The result has been that, despite resistance and initial problems of application, vocational training has acquired a new educational status, considered as a separate and alternative path to that of general education.

The consequent homogenization and equivalence of the vocational training teaching staff with that of basic education, the fact of sharing the centre with the baccalaureate, which has greater prestige as the normal path to university, and the elevation of the quality of the students and what is taught through the demand for a minimum qualification for entry have constituted, without a doubt, the elements which have contributed the most to enhancing the status of teachings which were considered of a secondary character in the collective imaginary for reason that have already been explained.

But not all the effects have been so positive. Although in the following chapters this issue will be taken up again, we can mention here that this integration has meant a certain loss of identity for vocational training in some training centres in which the generic image and educational dynamic of general education have dominated. In schools for the baccalaureate or compulsory secondary education which have incorporated some training cycles, often related to service sectors within a milieu of an undeveloped labour market, vocational training has gained little in importance and has not managed to consolidate itself as a strategy for specialization for young people upon finishing their studies. In contrast, the old vocational training centres that have incorporated an offer of a baccalaureate and compulsory secondary education are those that have most noted the positive effect of the strengthening of prestige and, at the same time, the negative consequences of a certain loss of identity. Possibly in the Basque Country, where vocational training has traditionally enjoyed a strong personality of its own and deep roots in the economy, these effects have been noted less.

Within a perspective of lifelong training and of integration of initial training with continuing training, surely it will be necessary to rethink what will reinforce the identity and specificity of vocational training understood comprehensively. This issue will be discussed later in greater detail.

The integration of the training cycles in the IES is not the principal problem of these schools. The lack of autonomy in the management of these educational centres and the rigidity of government performance criteria, notorious throughout the educational system, acquire a particular importance in the case of vocational

training. If it is difficult to manage a public school under these conditions, it is much more difficult for a vocational training centre which needs a greater dose of flexibility and adaptability to its environment. The greater degree of integration of the vocational training cycles in the educational system has also, in return, brought with it a brake on the evolution toward greater flexibility and adaptation to the needs of the labour market, despite all the advances that have already been mentioned previously.

Rigidity in the planning of training cycles, difficulties in adapting and making the curriculums flexible according to the demands of the local productive networks, difficulties in building a team of teachers according to the needs of the centres or obstacles to the demand from companies to organize training activities are some examples of the problems that the management of the centres have to face. In fact, few centres manage to overcome these difficulties, and very often only in a temporary manner. This rigidity in management is also reflected in the facilities and availability of resources, which are at more or less acceptable minimal levels, but in no case is the necessary technology available to train the qualified personnel the innovative policies of companies require.

The promise of the establishment of comprehensive vocational training centres, already planned for years in the national vocational training programmes, and finally incorporated into the 2002 Qualifications and Vocational Training Act and regulated since 2005 by a Royal Decree (Real Decreto, 2005), had raised hopes that they would be a possible solution to the management problems of the centres. These types of centres had to establish the innovative network for the whole system because they integrated both an initial range of training and continuing training for the employed, in addition to the complementary functions of accreditation of qualifications, training of teachers and promise of excellence. In addition to their strictly teaching functions, these comprehensive centres had to offer information and career guidance, participate in evaluations and processes of accreditation of the vocational competencies acquired through experience or non-formal training, and strengthen the relationship with the economic and productive world. However, three years later these centres continue without the specific regulations which would facilitate these developments.

An additional challenge that these centres have to face to improve the quality of training that they impart is the training of their own teaching staff. The preparation level of the teaching staff has consolidated at decent levels of quality in regards to theory, but there are gaps in regards to their professional experience in production in the specialties they impart. Many of the teachers came directly from the university during the period of expansion in the offer of vocational training in the 1970s and 80s, without having had sufficient contact with the labour market and with little pedagogical and vocational preparation to carry out their work as teachers. The result has been the transmission to the students of a professional training recognized as acceptable by companies but without the specialization and practical capacities that would satisfy the needs of those same companies. In general, the time spent in workplace internships is not sufficient to counteract these deficiencies.

Programmes for initial qualification

Along with the positive contributions of the LOGSE to vocational training, there is one aspect which was left without resolution and it has only been with the passage of the General Act on Education (LOE) sixteen years later that it has finally been dealt with. This is the situation of young people who, during all those years, never obtained a Certificate of Basic Education. With justification, the LOGSE closed their access to vocational training, eliminating the first level of vocational training existing until then, but did not offer to these young people any other sound way forward.

Social guarantee programmes were created which, without having clear objectives, specific regulations and, above all sufficient financing, left to the initiative of autonomous and local governments and social institutions the task of trying to place these students. The result has been that during all these years the Spanish educational system has dumped hundreds of thousands of young people without any professional preparation on the labour market, between 30 and 35 percent of each generation, and it continues to do so.

In some areas these percentages are even much higher and can be more than half of a generation. This is a very serious problem, as with an employed population with such a composition, it is difficult to achieve objectives of competitiveness, quality and qualification to confront the challenges of a globalized economy,

and it surely constitutes one of the explanations for the qualifications problems of the Spanish economy which will be analyzed later.

The LOE deals with this issue through the creation of Programmes for Initial Professional Qualification (PCPI), which are under the control of educational administrations. The PCPI are offered as a path for young people that did not obtain a Certificate of Basic Education. These programmes have three objectives: acquiring competencies corresponding to level I of the National Catalogue of Professional Qualifications, facilitating social and labour insertion, and increasing generic competencies so that individuals can continue their studies within the framework of the educational system.

Each of the three objectives corresponds to a type of training module, at the end of which students will obtain an official academic certificate which recognizes the competencies achieved within the framework of the National System of Qualifications and Vocational Training. Those that pass the third type of training module, aimed at recuperating basic educational levels, whether simultaneously to other modules or after, will obtain a Certificate of Basic Education and will be able to continue their studies at other levels. These programmes will take place in public or private schools or in collaboration with other local public or private institutions; they have yet to be developed and we will have to await their final regulatory adjustments to confirm their effectiveness in confronting one of the most serious problems in the Spanish educational system.

The fundamental problem is the high rate of school failure in Spain, well above the average in other European countries. This is the real reason which explains the low number of young people that enter the intermediate vocational training cycles. For this reason, independent of the final form given to these programmes for initial professional qualification, it will be difficult to rectify a situation of such negative consequences for the future of the country and which is a burden to the development of vocational training. In any case, it would be a good idea if the final form of these programmes took into account the positive experiences in dealing with these young people accumulated in the management of the social guarantee programmes which have been carried out in recent years in different autonomous communities and through diverse initiatives of local government and social institutions.

In short, the subsystem of initial vocational training, put into place through the LOGSE and consolidated with the LOE, sets out a simple, modern structure,

recognized in the labour market, with flexible paths, but which has yet to deal with some of the major challenges of training in the knowledge society and which suffers from certain structural deficits that make its future development difficult. Among the aspects of this subsystem which need to improve are found, basically, its small size, lack of integration with continuing training, a lack of identity, a teaching staff with little specialization and the absence of instruments so that vocational training centres can efficiently manage their adaptation to the training needs of their environment.

2.3. Training for employment

The second subsystem has been called, unfortunately, «training for employment», as if initial training was not also oriented toward employment, instead of insisting on the concept of continuing training so that it could be situated closer to the strategic guidance which this type of training requires.

The integration of occupational and continuing training

The subsystem of training for employment integrates, at least formally, what was before known as occupational training, aimed at retraining unemployed workers, and continuing training, aimed at the employed. This integration is still very recent, regulated by the Royal Decree of March 23, 2007 (Real Decreto, 2007), and as a result both old subsystems still persist. In addition, the integration proposed by the mentioned Decree is quite complex, which makes an accurate description of the operation of this subsystem of training for employment difficult at this time.

From the start, it should be clarified that in contrast to the subsystem of initial training, which has a consolidated historical trajectory, the subsystem of training for employment still has to develop many of its elements. Currently, it is more a mechanism of financing of training activities. The description which follows will corroborate this.

Training for employment is under the supervision of the Ministry of Labour and Immigration though it is managed by the autonomous communities with the exception of the Basque Country (pending an agreement) and Ceuta and Melilla. This supervision favours, on the one hand, seeing training for employment as within the orbit of active employment policies and close

to the labour market, and, on the other hand, establishes an institutional differentiation with the subsystem of initial training dependent on the Ministry of Education, Social Policy and Sport. This institutional differentiation does not aid the coordination between the two subsystems, although significant means for collaboration between the two ministries have been established.

This dichotomy is reproduced at the level of autonomous communities, where training for employment tends to be administered by the departments with authority on matters of employment, while initial training tends to be administered by the departments of education. This dual dependency of both subsystems constitutes one of the principal obstacles for a more harmonious development of training from a comprehensive perspective.

The transfer of the management of training to the autonomous communities is quite complex given that there exists no consensus between the central government and its partners in the autonomous communities on what should be the role of each in the subsystem. In fact, the autonomous governments of Galicia and Catalonia brought actions arguing the unconstitutionality of various state regulations which were intended to regulate this subsystem. The application for review of the state regulations was finally recognized, though only partially, by the Constitutional Court (Tribunal Constitucional, 2002). Consensus on this issue has still not been reached and it is one of the pending issues of greatest urgency if the subsystem of training for employment is to be consolidated.

Behind the disagreement is found the debate on the priority to be given to territorial needs for training – and in this case it is the autonomous communities which would have to assume the full powers that the respective statutes of autonomy grant them, as happened with the subsystem of initial training - or to the sectoral dimension and the framework of labour relations – and in this case the social partners and state sectoral institutions would have to maintain an important regulatory or organizational role in the training available. The definitive solution to this problems lies in defining a model which works adequately, shared by all those with authority in the matter, a model on which a consensus has still not been reached.

The Royal Decree which regulates, for now, this subsystem is still a prisoner of the inertia of the previous subsystems and of the different sources of financing

(European Structural Funds and contributions made for vocational training through the Social Security system), and has established some very complex operating mechanisms which on many occasions give the sensation of constituting more a juxtaposition to the previous mechanisms than a true integration into a single training subsystem. In some ways, the regulations from this Royal Decree can be considered transitory, awaiting more complete and consensually agreed upon regulations.

The regulations establish four types of training initiatives:

- Demand training, referring to training activities of companies and individual training permits.
- Supply training, which refers to training activities directed primarily at employed workers as well as training oriented principally at unemployed workers.
- Training in alternation with employment, which integrates both training and work in a mixed process.
- Actions of support and accompaniment, defined as those aimed at improving the effectiveness of the subsystem.

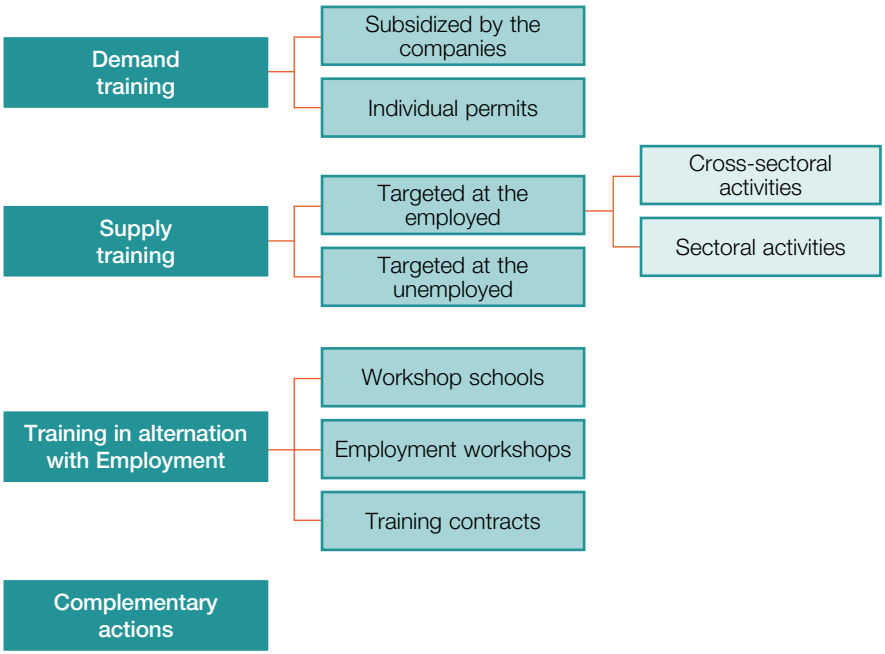
As can be seen, in supply training an artificial distinction is maintained between the unemployed and employed which is only conditioned by the use of the term «primarily» when the intent is to abolish just this distinction which greatly complicates administration in the local sphere, above all in areas that are scarcely populated.

The four types of training can be aimed at all the employed and unemployed, although there are certain restrictions. Public employees can also have access to this training through government established plans. In addition, to facilitate social and labour market integration among disadvantaged groups, certain groups are given priority, such as for example, women, young people, persons over 45 years of age, people with disabilities, workers in small and medium-sized firms, unskilled workers, the long-term unemployed, persons at risk of exclusion, victims of terrorism and gender violence, etc.

In what follows the functioning of each one of these four types of training initiatives will be detailed, as can be seen in graph 2.4.

GRAPH 2.4

Outline of the structure of the subsystem of training for employment



Demand training

Demand training is called such because the direct beneficiaries (companies and workers) must solicit its financing. The initiative for the organization of demand training falls on businesses according to their training needs, with the participation of workers' representatives, and its financing is organized through a system of allowances to businesses from the contributions to Social Security which businesses and workers pay.

Firms can plan the training activities they see as adequate given the training needs of their workers, although they must previously inform the workers' representatives, who have a period of 15 days to issue a report. In the case of a conflict, procedures for its resolution are established through Joint Sectoral Commissions for training. Once this requirement has been completed, companies have to communicate, using a telecommunications

system, the activities they want to undertake to the Tripartite Foundation for Training in the Workplace no less than seven days before their initiation, with the aim of facilitating inspection on the part of the corresponding bodies. Companies can carry out the training directly on their own with their own personnel or they can contract the services of outside entities or specialized centres.

Once the training activity has taken place, the company may notify the Tripartite Foundation through the same telecommunications system of its completion and the costs involved, and deduct the total cost from its following monthly Social Security payment. Companies have a limit on the deductions available for the costs of training, which depends on the size of the company and the amount contributed to the social security system the previous year.

Firms of 10 workers or more will have to provide private co-financing of the costs deducted for training activities in a percentage proportional to their size (see chart 2.1). Co-financing is understood to mean the contribution of the difference between the costs of the training activities and the total allowance to the firm. This co-financing is normally covered by the payroll cost of the workers during the hours dedicated to training within working hours. In addition, there exist some maximum economic modules for the calculation of costs of training which have to be deducted and which, in principle, cover the direct costs and leave an acceptable margin for the administrative costs.

This information, control and monitoring system for the demand training activities on the part of companies presents, at first sight, a certain complexity, though it is not so complex once it is applied with regularity. In practice, however, the system scares many businesses, particularly small and medium-size ones, which have few resources to organize all the red tape generated. Although the process has improved with respect to previous systems it still has a certain rigidity, above all the telecommunications mechanism, so its elimination would enormously simplify this red tape.

The result is that the great majority of large companies in Spain use this demand mechanism, but the proportion goes down considerably among small and medium sized companies. For example, 96.6 percent of companies with 5,000

CHART 2.1

Maximum percentage of the contribution for vocational training that can used as a subsidy and of co-financing, according to the size of the company (1)

SIZE OF THE COMPANY	PERCENTAGE OF THE CONTRIBUTION	PERCENTAGE OF CO-FINANCING
From 1 to 5 workers	420 euros	0
From 6 to 9 workers	100%	0
From 10 to 49 workers	75%	10
From 50 to 249 workers	60%	20
From 250 workers or more	50%	40

Note: (1) Companies make a contribution for vocational training with their contributions to social security. The first column refers to the percentage of this contribution that companies can use as a subsidy to cover the costs of the training activities they do. In the case of companies of 1 to 5 workers a fixed quantity is established because the contribution made is very small.
Source: Tripartite Foundation for Training at the Workplace.

workers or more used the system of allowances to train their workers during 2006. For companies with 100 to 249 workers this percentage went down to 55.3 percent, and for smaller companies, of 10 to 49 workers, it was 16.5 percent. For the smallest with less than 10 workers the percentages were between 7.8 percent and 2.8 percent, as can be seen in table 2.5.

The companies did not manage to spend all the credit available to them. The medium sized companies spent, approximately, half of the credit, and the large companies, two thirds. This data indicates that despite the rapid expansion of the system companies are still far from covering their training needs, even the largest, and it raises the need for reflection on the orientation of the system with the aim of encouraging the companies to invest even more in training.

The data that the Tripartite Foundation for Training in the Workplace provides permits us to get a picture of the reach of this type of training in Spain. The data reveals a significant growth in the number of persons trained by the system of demand through the allowances from Social Security (see table 2.6).

During 2006 23 percent more persons received training than in 2005, and in 2007, 36 percent more persons received training than in 2006. This data shows the progressive consolidation of this training path. In 2007, while 56.7 percent of the individuals trained were men, women received training at a proportion higher than their percentage in the employed population and this is a growing

trend. The percentage of women receiving training in 2007 was 43.3 percent and their participation in the employed population was 41.9 percent.

TABLE 2.5

Training companies and ratio of available credit for training by size of company

Year 2006

SIZE	COVERAGE	NUMBER OF COMPANIES	%	RATIO OF CREDIT AVAILABLE
1-5	2.8	33,738	37.9	76.1
6-9	7.8	11,418	12.8	66.8
10-49	16.5	29,556	33.2	57.1
50-99	40.6	4,846	7.7	55.0
100-249	55.3	4,545	5.1	52.6
250-499	69.7	1,542	1.7	55.6
500-999	74.9	675	0.8	58.2
1,000-4,999	88.4	490	0.6	62.4
+4,999	96.6	85	0.1	66.7
Total	**5.7**	**88,961**	**100**	**60.0**

Source: Tripartite Foundation for Training at the Workplace.

TABLE 2.6

Workers trained, by size of company

Year 2006

SIZE	WORKERS TRAINED	%
1-5	47,481	4.1
6-9	24,633	2.1
10-49	161,043	14.0
50-99	98,895	8.6
100-249	137,433	12.0
250-499	97,764	8.5
500-999	92,770	8.1
1,000-4,999	207,630	18.1
+4,999	280,750	24.4
Total	**1,148,637**	**100**

Source: Tripartite Foundation for Training at the Workplace.

Regarding the profile of the individuals receiving training some data is presented in table 2.7. Regarding age, 40.7 percent were between 26 and 35 years of age. As age increases the age groups are under-represented in relation to their weight among the employed population. Even so, 20 percent of the individuals trained were more than 45 years old. By levels of qualification the trained were in the majority persons already with qualifications: 36.8 percent were managers, degree-holders and mid-level management, 41.4 percent were workers with qualifications and 21.8 percent had no qualifications.

The great majority of businesses which use the system of allowances do so as part of groups of businesses, above all small and medium-sized companies. This possibility, regulated by the law, permits businesses to share and delegate to one of them, or to a third party, the management of the overall process. In this last case, the organizing entity is responsible for the process and cannot subcontract to another entity the coordination of the procedure. In 2007, of the 137,048 companies which initiated the paperwork for allowances, 98 percent did so as part of some group system, often between businesses of the same corporate group.

As a result of differences in the involvement of businesses in training, 59.1 percent of workers trained through this process are employed in companies of 250 or more workers; however, 34.6 percent of employees in companies of 10 to 250 workers also use these allowances. The coverage regarding the total

TABLE 2.7

Age and sex of workers trained

Year 2007

AGE AND SEX	TOTAL	PERCENTAGE
16-25	**168,040**	10.8
26-35	**635,255**	40.7
36-45	**447,440**	28.6
46-55	**246,496**	15.8
+55	**63,404**	4.1
Men	**886,081**	56.7
Women	**676,515**	43.3
Total	**1,562,710**	**100**

Source: Tripartite Foundation for Training at the Workplace.

number of workers that are eligible under this mechanism of allowances is calculated at 8.7 percent (see table 2.8).

Regarding the distribution of training by sectors, the service sector at 11.4 percent has one of the highest rates of coverage, along with commerce and industry.

By communities there are also important differences (see table 2.9). For example, the three communities with the highest rate of coverage in demand training are Madrid, with 11.8 percent, Navarre, with 10.7 percent, and Asturias, with 10.2 percent. In contrast, those with the lowest coverage are La Rioja, with 4.5 percent, Castilla La Mancha, with 5.4 percent, and the Canary Islands, with 6.3 percent.

It should be taken into account that a good part of continuing training is done through online means or through distance learning, or in a mixed form, both in classroom learning and distance learning. Thus, in 2006, 35 percent of training activities were not totally in classroom. The average number of hours of training per course in 2006 was 28.1. Around 15 percent of workers receiving training during that year did more than one course.

The training content is very transversal and generic, in the majority of cases dealing with aspects of the management of human resources, the prevention of occupational risks, basic computer use, attention to clients, food safety, sales techniques, commercial management, product knowledge or safety

TABLE 2.8

Rate of coverage of workers trained by sectors

Year 2006

SECTORS	RATE OF COVERAGE
Agriculture	1.2
Manufacturing	8.3
Construction	3.7
Commerce	9.1
Hotel and Restaurants	6.5
Services	11.4
Total	**8.7**

Source: Tripartite Foundation for Training at the Workplace.

TABLE 2.9

Territorial distribution of persons trained and rate of coverage

Year 2006

AUTONOMOUS COMMUNITY	PERSONS TRAINED	%	RATE OF COVERAGE
Andalusia	183,262	16.0	9.0
Aragon	31,297	2.7	8.4
Asturias	27,277	2.4	10.2
Balearic Islands	27,531	2.4	7.9
Basque Country	60,449	5.3	9.4
Canary Islands	38,171	3.3	6.3
Cantabria	11,223	1.0	7.1
Castilla and Leon	49,556	4.3	7.8
Castilla-La Mancha	26,507	2.3	5.4
Catalonia	208,416	18.2	8.5
Valencia (Community of)	103,236	9.0	6.8
Extremadura	17,541	1.5	8.4
Galicia	58,459	5.1	8.4
Madrid (Community of)	248,510	21.7	11.8
Murcia (Region of)	30,737	2.7	7.3
Navarre	19,621	1.7	10.7
La Rioja	4,364	0.4	4.5
Ceuta	821	0.1	7.6
Melilla	679	0.1	9.0
Total	**1,148,637**	**100.0**	**8.7**

Source: Tripartite Foundation for Training at the Workplace.

and security. These themes take up 56.1 percent of the total time of training activities done. This all points to companies using the training system to provide those competencies which are more difficult to learn at work, which require few hours to learn and which do not demand much training structure or investment. The retraining of personnel with basic deficits in training seems to be practically outside of the system.

With respect to individual training permits, it is employed workers who are eligible for soliciting the permits and the companies which grant them. The company can obtain an allowance for the cost in salary of the permit,

with certain restrictions, and as a supplement to the company's total credit for training. Although this mechanism is not often used, it has set out an interesting position on the rights of the individual to receive training. During 2006 2,036 permits were solicited, but only 927 were used, with an average duration of 196.6 hours of training per permit.

Supply training

The mechanism of demand training is complemented with supply training, which is much more complex because it involves the social partners among many other actors and responds to two principal motivations: on the one hand, the participation of the social partners in the management and provision of training and, on the other hand, bringing training to small and medium-sized businesses that do not utilize the mechanisms of allowances for demand training.

This type of training is called supply training because the initiative for its organization does not come directly from the applicant for training, as in the previous case (the company or the worker), but rather it comes from intermediaries, whether they are the social partners, government agencies or social entities and private collaborators, who organize an offer of training which they submit for approval for a grant from the overseeing mechanism. Supply training is aimed at both the employed and the unemployed, though generally through different initiatives.

Although the powers for the management of training are transferred to the autonomous communities, the State Public Employment Service (SPEE) and the social partners reserve the organization of a set of activities at the state level. In addition, the transfer of management is supervised in such a detailed manner by the SPEE that the organization of training activities is submitted to a huge number of centralized regulations and criteria which complicate their management, and at times make the adaptation of the programmes to local necessities difficult, a principle which, in theory, guided and justified this transference of powers to the autonomous communities.

Thus, the organization of this type of training takes place at two different levels: at the central state level and the autonomous or regional level. The central state reserves some parts of the budget for the organization

of training for workers employed by the state, specific collectives with special difficulties, agreements with the armed forces and other institutions administered by the state, and the training of the immigrant population in their country of origin. The rest of the activities are organized at the level of the autonomous community.

Although the intention is that training for employment is the same for everyone, in reality different procedures are applied if the training is aimed at employed or unemployed workers. The training plans aimed primarily at the employed, both at the central state level or the level of the autonomous community can be of a sectoral or cross-sectoral character. Cross-sectoral training has as its principal objective the training in competencies common to various sectors, and its management is reserved for the trade unions and business associations most representative in their respective fields. The sectoral based plans are aimed at covering the training needs of a specific sector and their management is also reserved for trade unions and business associations, as well as the organizations and institutions most representative in each sector and the joint bodies involved in collective negotiation in the sector.

As can be seen, the model of the Spanish subsystem of training for employment, particularly in the sphere directed at employed workers, establishes the key role of the social partners as principal actors in the management, organization and provision of training, closely tied to the framework of labour relations and collective bargaining. This model has some great advantages but also some disadvantages, as has been seen in the analysis from an historical perspective.

In reality, business associations and trade unions, whether through their own means, as is the general case on the part of the trade unions, or through agreements with entities dedicated to training, as is the case of many business associations, are the ones that distribute the majority of the resources available for organizing training activities according to the needs of companies, workers and economic sectors.

In this way, if a company finds the mechanism of allowances for demand training too complicated, it can turn to the mechanism of supply training, either through a related business association or through agreements with workers' representatives, with the aim of some of its employees participating

in training without the company having to be responsible for the administrative procedures to justify the training activity. For many companies this road is more comfortable, involves less commitment and adapts better to their possibilities, above all in the case of small and medium-sized firms. A disadvantage is that this training path depends on the training offered by the entities which administer the training.

This mechanism has allowed training to rapidly reach a great number of small companies dispersed across the country, and has also created a large market for the distribution and provision of subsidized training. The regulation of this market so that criteria of equity and efficiency are followed is highly complex. In every sector and in every part of the country, each one of the most representative trade unions and the business association of the same character compete to offer training activities to companies and workers; these are activities directed at both the employed and the unemployed.

In practice this means a lack of coordination and a duplication of resources, as all the organizations concentrate on those activities that are most demanded and which are most profitable, and leave aside those for which there is less demand or which require a greater investment in material and facilities. No organization alone has the organizational capacity to provide a wide range of training offers throughout the country, which means that the diversity and quality of what is offered declines as one moves away from the areas of greatest economic concentration.

Regarding the offer for continuing training, there is no recent consolidated information which integrates the activities at the central state level and those at the level of autonomous communities. From the partial information available, it can be stated that this offer does not differ that much from demand training, although it tends to be training of a longer duration, with more active participation from women and less-qualified collectives, and also includes a greater number of persons that are following more than one training activity.

The programming of the action plans for the unemployed corresponds to the autonomous communities. This mechanism, in which trade unions and some business associations also participate, is more open to the provision of training through other entities, whether public, particularly local governments, or

private or other types of social organizations which have training centres included in the registry of collaborating centres. In theory, these training activities have to lead to obtaining an Occupational Aptitude Certificate according to the National Catalogue of Professional Qualifications. The first Occupational Aptitude Certificates were published in the Official State Gazette during the month of August, 2008.

In the field of training for the unemployed, the policies of autonomous governments have followed different models. In some cases, the formation of a network of training centres in which courses aimed at the unemployed are offered, run by the community itself, has been promoted, as for example in the Community of Madrid. In other communities the creation of ad hoc organizations have been promoted, as in Andalusia, through the Andalusia Foundation's «Fondo de Formación y Empleo» [Fund for Training and Employment] and through the exemplary network of local consortiums initiated by the autonomous government of Andalusia with the participation of municipalities and the social partners. Other autonomous communities have distributed subsidies among collaborating centres, among which, in some cases, initiatives from municipal governments play an important role, as in the case of Catalonia.

The beneficiaries have to be unemployed persons registered in employment offices, which theoretically permits training to be integrated into the measures taken to improve the employability of the unemployed with a comprehensive focus to orient and deal with the individualized problems of the unemployed. But in reality, and with differences among autonomous communities, there is still a long way to go to achieve a comprehensive, integrated management of employment policies based on a comprehensive and individualized approach toward the unemployed.

There is little statistical information available about these types of training, as the integration of data from the autonomous communities and state administration is deficient and is elaborated with delays. Nevertheless, using data from 2006 it can be deduced that supply training for the unemployed has been primarily directed at women (61 percent of the beneficiaries), with courses that have an average duration of 350 hours, the longest being 800 hours. The majority of the participants (58 percent) are between 25 and 45 years of age, while 13 percent are older than 45.

All supply training, both that directed at the employed and that directed at the unemployed, has some economic modules assigned per hour and per person trained which regulate the subsidies granted, similar at this time to those for demand training. Until the year 2007, training for the unemployed was regulated through the Employment Training and Integration Plan (FIP) of state character and co-financed by the European Social Fund. Starting with the Royal Decree that regulates the subsystem (Real Decreto, 2007), the FIP Plan has been simplified, but the mechanisms of financing continue being similar, therefore there continue to exist monitoring procedures and control over and justification of subsidies that are complicated and opaque. The criteria that the autonomous communities use to approve petitions for training activities on the part of the organizations that provide these services are not very clear and the communities themselves are still prisoners of the bureaucratic processes of the FIP Plan.

As can be observed, both demand training as well as supply training pivot around a mechanism for the distribution of subsidies for the financing of training activities in which the social partners occupy a key position.

Training in alternation with employment

Training in alternation with employment constitutes the third leg of the subsystem of training for employment. Contrary to the tendencies in other European countries, such as for example, France or Holland, in Spain this leg is largely undeveloped and basically encompasses the programmes of workshop schools, craft centres and employment workshops, as well as the training activities from training contracts.

The programmes of workshop schools and craft centres are two types of very similar programmes which were important innovations when they were created. Aimed at young people under 25 years of age, they came into existence in the middle of the 1980s at a moment when the unemployment rate was very high, to recover the historic and artistic patrimony of the country through the learning of disappearing crafts related to patrimonial restoration. Since then, they have evolved into a resource for young people with low skill levels and consist in the offer of a position which integrates paid work and training in the same work position. They are very attractive programmes because of the labour relations implied, but they are also very

expensive and have been progressively losing their innovative character, making it advisable to rethink the place of these programmes within an updated strategy for employment policies.

In 2006, 26,732 training places were offered in workshop schools and 3,450 in craft centres. The evaluations made related to these programmes (Sáez, 2004) indicate acceptable results with respect to their capacity to improve the employability of young people in the labour market, but also point out that they are more effective with disadvantaged collectives and, as a consequence, not as a generalized measure for the insertion of young people into the labour market.

Regarding employment workshops, it made sense in the most difficult years of the employment crisis to offer work to the unemployed older than 25 years of age with difficulties for insertion in the labour market, accompanied by a type of occupational training from municipal governments and social organizations, with the aim of offering a solution to emergency social situations. Today this programme needs to be reorganized in-depth and with totally different instruments to comprehensively serve the cases of greatest difficult for insertion in the labour market. In 2006 this programme offered 32.698 places.

The training actions of the training contracts are also examined in this section and their cost can be discounted through the contributions to Social Security. The training contract is aimed at young people, generally those under 21 years of age, so that during the work day and outside of the company they dedicate a minimum of 15 percent of their time to theoretical training related to their work position. However, this theoretical training tends to be inconsistent, as curiously, 96 percent of the training is through distance learning.

The option of using work as a training element, which is the strategic basis of training in alternation with employment, promoted in the European Union and established in many neighbouring countries, has not managed to take root in Spain. The programmes commented on have a limited coverage. The deployment of Programmes of Initial Professional Qualification called for in the Act on Education for young people that have not obtained the Compulsory Secondary Education Certificate can be a good opportunity to rethink all of these programmes and use the methodology of alternation in a more

consistent manner for those collectives that dropped out of the educational system. The experience in other countries, indicates that it possible, through work, to construct alternative routes to acceptable qualifications (France and Holland, for example) and leave the doors open for a flexible return to other levels of vocational training. The recent success of the entrance exams for access to vocational training cycles among workers demonstrates that this return path is possible.

Complementary actions

The fourth part of the system is composed of complementary actions to provide support and greater efficiency to the training. These measures emerged with the positive intention of opening a line of subsidies to promote studies, programmes, instruments and methodologies that would be employed to improve the quality of the training activities financed by the subsidies in the other action lines, although in reality it has become a mechanism for distributing more subsidies, at times without clear criteria and of doubtful utility. It is enough to consult the data base with the list of subsidies granted to see the lack of impact of this measure (the lists can be consulted at www.fundaciontripartita.org). The result is that Spain is surely one of the countries that spends the most on doing studies and financing the development of training programmes, although at the same time it is also one of the countries with the least quality information about its own system of training.

The so-called «complementary actions» in the vernacular of the sector could be radically transformed into a programme for the systematic evaluation of the quality of the subsystem or aimed at financing the function of the observation of the training needs of the different sectors and regions.

The quality of training for employment

Up to now, the basic mechanisms of financing and operation of training for employment have been described. As can be seen, it is a subsystem based on the private provision of training activities, with a strong presence of trade unions and business associations, and financed through mechanisms for the distribution of subsidies from public funds, a part of which come from funds

collected from the contribution for vocational training that businesses and workers make to Social Security.

One of the characteristics of this subsystem is that the economic resources are dedicated fundamentally to current activity, achieving a high degree of efficiency, and reaching a significant number of trained individuals. However, this advantage at the same time leads to the drawback of a lack of investment in training facilities, an issue that has repercussions on the quality and consistency of the training imparted. The subsystem of training for employment reaches many workers and companies, but it imparts training which is not consistent in number of hours, in technical content and in quality. The majority of training activities are focused on the learning of generic competencies of a transversal character and not specific technical training for a specific position.

In fact, it is an open system, based on the initiative of the institutional actors which participate in it, in which the selection of the quality of the training and the professionalism of the teaching staff corresponds to the market. In addition, the whole system lacks a mechanism for accreditation and certification of the competencies acquired. From the perspective of a structured system, based on private and market criteria, the mechanism of certification is what ensures, or at least encourages, quality in the overall subsystem. The lack of this mechanism deprives the subsystem of a key factor for its proper functioning and is detrimental to overall quality. For now only a certificate of assistance is given to those who participate in training activities for employment, whether it is demand or supply training.

Regarding solutions to the problems of quality, there is a constant tension on the subsystem between those who support imposing a control on the content through the application of Occupational Aptitude Certificates as a structuring element for the training offered, in detriment to the great dynamism that the subsystem has, and those who are contrary to this form of control, but who do not propose any measures to assure the establishment of some minimum quality criteria.

2.4. The regulatory system

In the previous sections the basic functioning of the system of training structured into two subsystems has been described. This section will deal with

the more generic aspects of the relationships among the different institutions that intervene in the regulation and management of the overall system.

Five institutions play a key role in the regulation and coordination of the system: the sectoral conferences on education and work, the national and autonomous regional councils for vocational training, INEM and the State Public Employment Service (SPEE), the Tripartite Foundation for Training at the Workplace, and the national and autonomous regional qualifications institutes. In what follows, the role of each one of these institutions will be analyzed, and at the end some general reflections on the overall coordination of the system and the relations between the state and autonomous governments will be made.

The sectoral conferences

Coordination between the autonomous communities and the central state administration is produced through sectoral conferences of both of the overseeing ministries, those of education and labour. These are the real bodies for negotiation and coordination in which all the autonomous communities are represented at their highest levels and which, according to the dynamics of each ministry, acquire greater or lesser importance and fluidity. The lack of an overall agreement on the objectives of the system and on the relationships between these two governing spheres has generated an excessive importance for this instrument of coordination, which too often has to take on negotiations over important decisions related to the distribution of resources or on the elaboration of reform processes without other elements of reference other than the pure tactical relations of the moment, very much influenced by the immediate political situation.

The General Council for Vocational Training and the Autonomous councils

The second space for coordination of the overall system with the participation of representatives from the two subsystems is constituted by the General Council for Vocational Training, a consultative state body in which the principal state and autonomous regional institutional agents involved in training (central and autonomous governments, business associations and trade unions) are represented. Its principal objectives are: first, report on all matters related

to vocational training referred to by the government; secondly, propose all measures that can improve the system, and finally, elaborate and propose to the government the approval of the National Vocational Training Programme and evaluate and control its subsequent execution. In other words, within its advisory powers is the preparation of strategic planning for the system.

The Council elaborated two National Vocational Training Programmes that were intended to be the bases for the articulation and overall planning of the system. The first covered the period from 1993 until 1996, while the second went from 1998 until 2002. Since 2002 there is no programme that underpins the strategic planning of the system. Although the degree of compliance with these two programmes was unequal, they played an important role in the strategic orientation of the system and helped to introduce a comprehensive and integrated vision of the most essential elements. In any case, the Council is a space for debate which in the past has contributed, with sometimes very heated discussions, to the preparation of consensus between all the parties involved. The current situation of deadlock can also be noted in the dynamic of recent years in the Council.

At the regional level of autonomous communities, councils for vocational training of tripartite character have also been created, with the participation of representatives from the ministries responsible for education and employment. The level of activity of the autonomous councils is more or less a function of the dynamic in each community. In the majority of cases they have followed the same example in the elaboration of plans for vocational training for each community, with the aim of setting out objectives and laying out the principal measures that have to be followed. The impact of these plans is unequal, but in any case, they reveal a certain tendency toward the constitution of autonomous systems of vocational training with their own dynamic, which creates a dual challenge.

On the one hand, this evolution is positive because it sees vocational training at the autonomous regional level as a system and grants it its own political strategy with a comprehensive vision. This will help in defining objectives that are coherent with the educational and economic policies of each region, and will not limit their role to an administrative one delegated by the central government. Advancing toward autonomous systems of vocational training will make the most of the decentralization of state powers by integrating

them in the social and economic context of each autonomous community and, therefore, increasing their ability to respond in a specific manner to the local needs of each region. On the other hand, there is also the risk that each autonomous community will become isolated and 17 different systems will be generated, which would take away from the capacity of each one to act.

As a result, the root of the problem does not lie in the evolution of the autonomous communities in shaping autonomous systems, but rather in the difficulties of linking these regional systems in a wider state system. The autonomous communities fear the proposals for coordination, because every time this issue comes up it is to try to limit their prerogatives on matters of training. At the same time, the central government is concerned with and distrustful of the initiatives made at the autonomous regional level without the existence of a common framework which assures responsibilities and commitments and avoids the duplication of resources.

The capacity at the state level to lead a participatory process for the coordination and articulation of the autonomous systems agreed upon by all the actors is key for the immediate future of the Spanish system of training. The debates in recent years in the midst of the sectoral conferences on matters of training are a clear indicator of the tensions related to leadership that the system suffers.

The lack of a coordinating framework and an agreed upon programmatic strategy for the whole system makes having clear objectives that allow the evolution and attainment of goals to be measured even more complicated. This problem is reflected in the difficulties that the principal actors have, from the state government to the autonomous regional governments and including the social and economic partners, in obtaining commitments that can be evaluated in terms of results and impact for each one of the measures and decisions that are put into effect.

INEM and SPEE

The third institution of reference and key piece in the subsystem of vocational training for employment is the INEM, on the path to becoming the State Public Employment Service (SPEE), which is trying to construct a new identity and function in what is called the National Employment System.

Thought of as an agency for managing employment policy, INEM took on the management of important funds coming from the European Union during the mid-1980s, which delayed its adaptation to the decentralization processes that the Spanish state of autonomous communities was commencing at that time. The creation of the subsystem of continuing training at the beginning of the 1990s, managed through the FORCEM Foundation at the initiative of the social partners, again left the reform of the institute up in the air.

Traditionally, INEM has gone beyond its powers as management agency and has taken on the principal weight of employment policies in an integrated conception which includes the management of passive (unemployment benefits) and active policies. The transfer of the management of active policies to the autonomous communities has altered its functions, which had been omnipresent. The recent regulation of the subsystem of training for employment has permitted INEM to recover its functions, which have been reinforced by its growing influence over the Tripartite Foundation for Training at the Workplace, inheritor of the FORCEM Foundation.

Currently INEM is the principal state administrator of all training for employment, in its four focal points of activities, whether directly or through the Tripartite Foundation for Training at the Workplace.

The role that INEM or SPEE will have to have in the organization of a state system depends on its capacity to lead the process that can no longer be based on bureaucratic control and the justification of subsidies, but rather on the capacity to generate consensus, achieve a shared coordination and promote processes of innovation, quality and the capacity to formulate objectives and evaluation criteria, within a relationship of shared responsibilities with the autonomous communities.

The Tripartite Foundation for Training at the Workplace

The Tripartite Foundation for Training at the Workplace is another of the pillars of the system, in this case of the subsystem of training for employment. Continuing the work of the old FORCEM Foundation, which was created under the first agreements on continuing vocational training in 1992 between the social partners to manage the subsystem, the Tripartite Foundation has been progressively ceding its initial leading role in the hands of trade unions

and business associations to greater control on the part of the SPEE. In fact, currently, the Tripartite Foundation is a supporting body to the SPEE for the management of training for employment aimed at employed workers.

In the new plan, after the integration of occupational and continuing training in the subsystem of training for employment, the Tripartite Foundation plays a completely subordinate role to the SPEE, which is the real manager of the whole subsystem. Today, the Tripartite Foundation administers the telecommunications system for allowances for demand training by businesses and the justification process for the allowances, as well as the official announcements for the financing, through subsidies to the trade unions and business associations, of the plans for supply training at the state level.

The transfer to the autonomous communities of powers in matters of continuing training for the employed provoked the creation in many communities, in the form of consortiums or other legal solutions, of bodies of a tripartite character to administer these new powers. The situation today is very complex because of the participation of multiple actors and entities in the administration of training for employment which, despite the objectives of integrating the old subsystems of occupational and continuing training, has, in reality, continued with practically the same existing entities as before.

Trying to simplify things so that the reader can understand the basic structure of the system, it can be stated that the mechanism for the administration of demand training depends on the state Tripartite Foundation, although the autonomous communities, through their specialized bodies, have powers for the monitoring, control and evaluation of the training activities of businesses with headquarters in their territory. Supply training at the state level is also administered by the state Tripartite Foundation, and the supply training at the level of autonomous community is under the responsibility of the autonomous communities, in collaboration with institutions of a tripartite character that have been created at the regional level.

It is in the monitoring and control of training activities where the duplication of powers between the different administrative levels can be most clearly seen. In this field the European Commission, Social Security, the State Treasury, INEM, the Tripartite Foundation and the autonomous communities can all intervene, generating confusion and considerable legal uncertainties among

the beneficiaries of subsidies. This multiplicity of actors does not aid in providing the necessary confidence for the smooth operation of the system. In addition, the existence of joint sectoral and territorial commissions of bipartite character must be mentioned; they, in theory, should be elements which provide dynamism to the vocational training in their field of action but in reality they play a very bureaucratized and not very transparent role of support to the administering bodies of continuing training.

The institution of qualifications

The fifth institution which has coordinating functions in the system is the National Qualifications Institute (INCUAL). This institution, which has a technical character, was created in 1999 and is currently situated under the supervisory authority of the Ministry of Education, Social Policy and Sport. The INCUAL has as its principal objectives defining, elaborating and maintaining up to date the National Catalogue of Professional Qualifications and the corresponding Modular Catalogue of Vocational Training, as well as providing support to the General Council for Vocational Training. In fact, the INCUAL is under the functional supervision of the Council, which acts as its board of directors.

The National Catalogue of Professional Qualifications (INCUAL, 2008), is one of the key pieces in all the system, constituting the backbone of the integrated system of Qualifications and Vocational Training. Through this catalogue the most important professional qualifications for the Spanish productive system are identified and described in function of the competencies needed for the exercise of specific professions with the objective of organizing them into professional families and levels. The catalogue constitutes the basis for the elaboration of vocational training and its certification and details the content of vocational training associated with each qualification, based on an articulated modular training structure.

Thus, the catalogue constitutes the central axis of the whole system and facilitates the transition between the different subsystems, and between the catalogue itself and the labour market. This conception is quite modern and allows all the training content of the system to be reconstructed based on the professional competencies demanded by the labour market, essential

for developing a modern vocational training system in the context of the knowledge society.

The catalogue, which is in an advanced phase of construction with more than 400 qualifications now established and published in the Official State Gazette, can be consulted in the database of the INCUAL on the Internet (www.Mepsyd.es/educa/incual/ice_incual.html). The qualifications have been developed by work groups formed by experts from the training and productive sectors, complemented by a consultative phase with external experts. Experts from the autonomous communities have also participated in the process of construction of those qualifications most relevant to their regions.

In fact, various autonomous communities have created their respective qualification institutes that collaborate with the INCUAL in the task of constructing the catalogue. If there were a more solid consensus over the whole training system, it would generate greater synergy among the different qualification institutes and advance the use of the catalogue. The collaboration of all the autonomous qualification institutes in a network, respecting the personality of each one and at the same time profiting from their respective resources, would really permit placing them in the centre of the system as the principal motors for renovation and innovation in the adaptation of the system to the changing needs of the productive fabric. Instead, today they occupy a secondary place despite the good intentions of official texts.

Finishing the catalogue will allow another, long awaited, phase to be initiated, the design of a system for the recognition, evaluation and accreditation of competencies. The objective is to create a mechanism capable of recognizing and ultimately accrediting the competencies acquired by individuals independent of the means used to acquire them (formal training, non-formal training or informal experience). In the following chapters the importance of this mechanism for the future of the vocational training system will be analyzed.

2.5. Innovation, evaluation and coordination in the system

After describing the structure and operation of the system of training, as well as the institutions involved, what remains in this chapter is to look at the way in which the system is coordinated and the development of some of the complementary functions such as guidance, quality, innovation, observation and evaluation. These functions, although they are explicit in the regulatory texts, have not been fully developed, and until there is a comprehensive agreement it will be difficult to consolidate them in an effective manner.

Innovation and evaluation

Innovation and experimentation have been entrusted to the sectorally specialized «national reference centres», but without their connection to the rest of the subsystem or with the training structures at the level of autonomous community being clear. Surely the Basque Country is the autonomous community which has committed the most to the creation of mechanisms of quality assurance with the implantation of a quality management system called «Kalitatea Hezkuntzan», which accredits the quality of training centres.

An important factor for detecting aspects which have to be improved, which therefore allows for innovation, is to have mechanisms of observation for the gathering of information on the system. This data serves as a base for establishing objectives and orienting the actions to be taken.

The INEM established some time ago an observation function, the National Institute of Qualifications (INCUAL) also has among its functions that of observation or analysis, particularly related to qualifications. In fact, many autonomous communities have created programmes or entities dedicated to this function, given the lack of information available for planning training at the local level and the level of autonomous community. In other words, until now there was no formal programme available which connected all the different observation modules in a network with the aim of consolidating resources and covering all the informational needs for decision-making of the different actors.

The gathering of information on the different operating parameters of the system and their diffusion is an aspect which has to be improved. The little

information available is very disperse and not easily comparable and, in some cases, not very trustworthy for lack of clear statistical criteria and confusion over both the data itself as well as the criteria in administrative management and the elaboration of this data. For example, it is very difficult to find such fundamental information as how many persons have been trained in a year, because much of the data corresponds to the management of administrative criteria related to the announcements of subsidies which do not necessarily follow the annual calendar. The necessity of creating a reliable statistical system has still not been dealt with. Such a system would involve both the central government as well as the governments of the autonomous communities and would provide all the actors in the system, independent of their area, the information necessary to make the decisions that correspond to each one.

However, the advances that the National Statistics Institute (INE) have made have to be recognized as it has incorporated training into its statistical plans and created special modules which contribute information on the transition from school to work, although much remains to be known, such as, for example, the levels of insertion into the labour market among young people according to training programme.

Thus, the function of observation is still in an initial phase of assuring that regular and reliable information about the system is available, but has not entered into a phase oriented toward the production of a network of information useful for decision-making, as European level training institutions advocate (Homs, 2001).

Similarly, at the state and autonomous governmental levels a weakness in the deployment of systematic programmes for the evaluation of training programmes and activities can, in general, be seen. Within the Tripartite Foundation systematic annual evaluations have been carried out but they have never been published, something which would contribute to transparency and good governing within the system. The Higher Evaluation Council of the Educational System of Catalonia has put into effect an ambitious programme for the evaluation of initial vocational training (Consejo, 2008), and the Evaluation Institute of the Ministry of Education, Social Policy and Sport has plans to take action in this area, but there is no overall permanent mechanism for the evaluation of the whole system.

The function of guidance is organized through the Vocational Guidance Services for Employment and Assistance for Self-Employment (OPEAS). This service is made up of a state programme which each autonomous community has tried to adapt to its needs, but it presents a strong methodological rigidity which makes its application difficult. In the great majority of cases, this service is outsourced through collaborating entities which provide the service in collaboration with local employment services.

Despite a certain breadth in the coverage of this type of service, the lack of flexibility in the methodology which is imposed in a centralized manner impedes its adaptation to the different needs for guidance in function of the different types of users. This coincides with the conclusions of the evaluations made on the impact of these services (Sáez, 2004). According to these evaluations, although the guidance service appears to work well in guiding those with the greatest need for guidance, the lack of flexibility appears to limit its ability to successfully provide guidance to the range of users who may be in need of the service.

Coordination

As has been commented on, one of the weaknesses of the training system is the difficulty in organizing and coordinating the overall system. Three focal points of coordination can be defined:

- The relationship between the two ministries which have control at both the central state level and the level of autonomous communities over the two subsystems, the ministries of education and employment.
- The relationship between the central government and that of the autonomous communities.
- The relationship between the social partners (business associations and trade unions) and the governments at central state level and the level of autonomous communities.

Regarding the first of these points, from a global perspective, the overall system of training in Spain pivots on two other close systems and they have a great deal of influence on the overall shape of the vocational training system. On the one hand, the educational system takes on the regulation and management of one part of the system of training, that of initial vocational

training, and on the other hand, the employment system regulates and manages training for employment. This dichotomy strains the whole training system and makes its internal coherence, the coordination of the overall system and its development difficult. It is evident that vocational training has to have a close relationship with the educational system which it has historically been a part of. It is also evident that training has to be closely related to the labour market and, therefore, also with the policies that intervene in this area. In fact, a part of training came into being as one of the most important active policies for employment.

As vocational training acquires a key role in the knowledge society, and its size, complexity and importance grow, it will gradually gain in autonomy in its relation to the two systems that engendered it. It is not strange then, that today the need to consider vocational training as its own system which requires its own regulatory institutions is raised. Although some countries, such as France, the United Kingdom and Germany have tested different formulas to overcome this dilemma without finding the ideal model, the future evolution that is being considered at both the central state level and at the level of autonomous communities sees vocational training as an autonomous system.

Regarding the second point mentioned, the transfer of the great majority of powers in educational matters and in the administration of active policies to the autonomous communities has left a great part of the responsibilities for the practical functioning of the system of training in their hands. In a simplified manner, it can be stated that the state has reserved the power of overall regulation of the system for itself and the autonomous communities have taken on the responsibility of management. Although this must be qualified as in matters of initial training the autonomous communities also have broad regulatory capacities (for example, in defining the 35 or 45 percent of the curriculums of the vocational training cycles according to whether they have a co-official language or not) while in matters of training for employment they have powers to develop their own systems of training, as the Basque Country has tried, though with evident budgetary limitations.

Because of the manner in which the process of transfer of powers to the autonomous communities happened, more the fruit of situational political negotiations than obedience to a pre-established plan, the central state has

yet to assume its new role, as was explained previously, above all in relation to the subsystem of training for employment, where important coordination and leadership failures have appeared throughout the subsystem.

It must be said, however, that the autonomous communities have dedicated their efforts to primarily assuring the daily management of the important transfers of power that they have received in recent years; hence the design of their own comprehensive policies, with a more strategic vision on matters of vocational training have been quite recent. Almost all of the autonomous communities have created councils on vocational training in which the social partners and the governmental departments involved in training are integrated and which constitute a good example of heading toward a closer collaboration between the two subsystems of training.

On this second point the relationship between the central government and the governments of the autonomous communities has to stabilize through more regulated and predictable channels and be less dependent on the political situation. The relationship between the state and autonomous communities must be on a more contractual basis, for example, through contracted programmes, in which the rights and responsibilities of each party are specified, and based on a general consensus over the objectives to be reached at the central state level as well as the objectives and commitments of the autonomous communities. In this way a more transparent and legally solid outline of a relationship would be generated and one not based on the constantly open negotiation between both parties.

But on this point there is another factor which appears and blocks the evolution of the system of training in Spain which constitutes the third focal point: the relationship between the state and autonomous governments on one side, and the social and economic partners on the other. This new factor complicates finding adequate solutions.

The relationship between trade unions and business associations and government follows a different dynamic and one not exempt from complexity. One of the strong points of the Spanish system of training is its tripartite character, with a strong involvement of the trade union and business partners at all levels. These social partners are present in all of the nerve centres of the system:

- In the subsystem of initial training, the social and economic partners participate through school councils, at both the central state level and level of the autonomous community, and in councils for vocational training in the case of those communities in which such councils depend on the department of education.

- In the subsystem of training for employment, the Spanish model is practically one of tripartite co-management between the social and economic partners and the state and autonomous regional governments. The trade unions and business associations form part of, not only the consultative coordinating bodies, but also the managing councils of practically all the bodies, both regulative and administrative, of the subsystem, at both the central state level as well as in the majority of autonomous communities. For example, they are present in the General Council and in the State Public Employment Service (SPEE) and form part of the Board of the Tripartite Foundation for Training at the Workplace. They also form part of the Tripartite Commission for Continuing Training though they do not constitute part of the General Council of the National Employment System, the managing body for the overall employment system at the state level.

- The trade unions and business associations are also the most important direct suppliers of training activities at both the central state level and the level of the autonomous communities. This dual function as interlocutors in the management of the system in their roles as social partners, and at the same time as promoters and organizers of training activities in their roles as actors in training and direct recipients of subsidies, is practically unique in all of Europe and converts them into the key actors in the whole system.

The important involvement of the social partners is one of the factors that has most contributed to the development of the subsystem of training for employment by boosting its credibility among companies and workers, although this has also generated a conflict of interest that does not help the future evolution of the system.

The blockage of an agreement to develop the integrated subsystem of training for employment has a lot to do with the tensions between the central

state government and the governments of the autonomous communities, and between them and social interlocutors on the state level. The current situation is a mix between a specialized model functional at regional levels, where the central state plays a role as regulator, controller and evaluator, while the autonomous communities take on the function of executors (similar to the French model), and a model of a federal type, where both levels come to an agreement to create a shared regulatory and administrative structure for the whole system (similar to the German model). The participation of the autonomous communities in the General Council for Vocational Training and in the Tripartite Foundation is closer to the federal model while, in contrast, the INEM model of management is closer to the French model.

III. The European vision of training

In this chapter European training policy and its influence on the Spanish system will be examined. Europe has contributed to the Spanish system and has had an influence on its configuration. As was seen in the previous chapter, the Spanish training system cannot be understood without taking account of the influence of the European Union on both economic as well as conceptual aspects. Possibly also for this reason, it is in Spain where the effects of European training policy are most obviously seen. Other European countries already had more advanced systems in place prior to the training policies that the Delors Commission impressed on the construction of Europe. In Spain, in contrast, the majority of the ideas, experiences and orientations that were used in constructing the Spanish system of training coincided with Spain's entry into the European Community.

If we look at some of the most frequently used indicators for measuring progress in matters of education and training toward the 2010 objectives in Europe, and we compare them with the countries of the three European models of training that have been mentioned (German, France and the United Kingdom), and with Italy for its similar economic level, it can be seen that Spain still has some work to do. Spain has to invest in education to reach the European average; it has to stimulate young people to continue studying after compulsory education and also must provide an opportunity to young people that do not complete compulsory secondary education.

In contrast, on matters of continuing training Spain is above the European average, although it must be admitted that the method for calculating this indicator, through a survey which looks at the training activities completed during the last four weeks, is probably favourable toward the situation in

TABLE 3.1

Comparative European indicators on education and training

INDICATORS	SPAIN	GERMANY	FRANCE	ITALY	UNITED KINGDOM	EU-27
Total public spending on education as percentage of GDP (2005)	4.23	4.53	5.65	4.43	5.45	5.03
% population between 18 and 24 years of age that has not completed secondary education and is not doing any other type of study or training (2007)	31.0	12.7	12.7	19.3	13.0 (1)	14.8
% population between 20 and 24 years of age that has completed, at minimum, post-compulsory secondary education (2007)	61.1	72.5	82.4	76.3	78.1	78.1
% population between 25 and 64 years of age that participate in education and training (2007)	10.4	7.8	7.4	6.2	26.6 (2)	9.7
% of young men and women that pursue a vocational training, in relation to the total in secondary education (2006)	45.1-40.2	64.9-53.2	48.8-37.3	71.1-49.4	40.6-42.8	57.0-46.3

Notes: (1) Data from 2005.
(2) Data from 2005 and provisional.
Source: Eurostat. LFS.

Spain due to the time limits of the training activities which are a result of the tendering system for supply training programmes.

The objectives for 2010 are: reduce the rate of school dropouts to no more than 10 percent; that the percentage of persons from 25 to 64 years of age that have, at minimum, completed secondary education is above 80 percent and that the rate of participation in lifelong learning activities reaches 15 percent. As can be seen in table 3.1, in all the countries there is still a long way to go.

3.1. European training policy

The Spanish system of training cannot be analyzed in isolation from the rest of Europe, not only for the already mentioned influences of European policy, but also because Spain forms an integral part of a shared strategy

with the other 26 members of the European Union on matters of vocational training.

Practically since the beginning of the European Economic Community (EEC), education and training have been one of its priorities. According to article 150.1 of its founding treaty, the Community has powers over matters of training with the aim of promoting a European policy that reinforces and completes the actions of member states in this field, respecting the clear responsibility of the states in all which is related to content and the organization of training. In the area of training, the Community was given a somewhat broader mandate than over educational matters. Education remained to a great extent in the hands of member states. The European Commission has take action within the limits of its powers. By means of a solid discourse on vocational training, the Commission has provided many resources to European training programmes and has guided member states toward reforms and innovations which are, with the objective of promoting the European dimension of training, slowly leading national systems toward a common orientation and shared objectives. This impetus directed at a European training policy was especially strong from 1985 to 1995 under the presidency of Jacques Delors.

The training policy of the European Union takes form through cooperation with member states and in the financing of training programmes. Through the open method of coordination, with which the member states voluntarily commit themselves to coordinating policies by defining measurable objectives, and to establishing monitoring systems, the European Commission plays a role as promoter, through analyzing the challenges, proposing objectives and goals, and launching proposals to achieve the objectives. With unequal results according to the field, this method of coordination has generated a dynamic of close collaboration among member states which favours the adoption of measures and agreements of a European-wide reach.

The action of the European Union during all these years can be synthesized into four major approaches. First, the role that the European Union itself has played as a space of reflection and innovation, in other words, as a *think tank*, must be highlighted. Secondly, it must be said that the European Union has under taken actions directed at creating a European training area. These actions accelerated after the constitution of a single European

market. Third, coordination efforts which have also increased since the definition of the Lisbon objectives in 2000 also have to be highlighted. Finally, it must be remembered that European programmes of financing have also been very important in providing support for the realization of the set objectives.

The European conception of training

Through documents, reports, meetings of experts and statements, the European Union has been placing the most innovative aspects of the debates on training on the table. In all its activities it has always insisted on the importance of training and the need to increase its levels and quality among the European population. The Union has always been conscious that a better trained population would boost the European economy, and that a population with higher levels of training would also be the best investment for constructing Europe and for establishing ties between Europeans and their states.

The debates and issues that have characterized European training policy have been numerous and have had a lot of influence on different member countries. Among others, we can highlight the following:

- The diffusion during the first years of the Union of the training model of Germany and northern Europe based on apprenticeship and the benefits of training in alternation with employment; as a training model it had a lot of influence on other countries.
- The importance of the push that the Union gave to lifelong training, understood as the periodic upgrading of knowledge and competencies of the adult population, and the need to adapt the systems of initial training to a conception of training throughout life.
- The reorientation of the educational systems, based traditionally on pedagogical objectives, to introduce a focus on competencies more oriented toward results and not as much toward processes.
- The emphasis on the necessity of involving the social and economic partners in the framework of social dialogue, and also the importance of involving local agents in training policies.

- Insistence on the application of new technologies in training and the support of *e-learning* also forms part of the European experience on this theme.

- More recently, the attention given to the importance of non-formal and informal training and the search for methods to recognize competencies acquired through these paths.

Today all of these concepts form part of the vocabulary and common knowledge of all European countries, and it can be stated that there does exist a European way of understanding training. In the majority of countries, but above all in those of southern and eastern Europe, the European influence on their systems of training can be easily detected.

The participation of Spain in the Union has allowed it to form part of this space for the circulation of ideas which have contributed to a great degree to the training of experts and senior personnel in the Spanish system of vocational training. The institutional relations between senior civil servants from the countries of the Union, together with the personal relationships that have been developed, have contributed to generating the incentives for innovation and the mechanisms of cooperation among the systems of different states.

The European dimension of training

In addition to proposing ideas since its beginning, the European Union has worked to strengthen the European dimension of training. Even the states less willing to cede competencies to the Union, including on matters related to training, have accepted that the Commission take responsibility for the European dimension. This concept, ambiguous and of unclear content initially, was centred around programmes of interchange among states to improve their mutual knowledge, and on programmes to boost the learning of the different European languages. It is here where the well-known Erasmus programme emerged and, later, the Leonardo da Vinci programme, which have given such positive results in promoting student exchanges, the learning of foreign languages and the promotion of a European citizenry.

A primary element of the European dimension of training lies in **mobility**. Thus, this European dimension of training received a strong boost with the establishment of the three axes upon which the European single market was constructed: free circulation of capital, goods and persons.

To promote the free circulation of persons a European area for training and qualification had to be constructed with the aim of facilitating the mobility of individuals and workers. Barriers to the recognition of degrees, certificates and qualifications had to be eliminated among European countries and training offers of a European wide dimension promoted. Previous experiences promoted from the European Centre for the Development of Vocational Training (Cedefop) to establish correspondence between the degrees, certificates and professional qualifications among European states had demonstrated the difficulty of an initiative of these dimensions. More than 25 years have had to pass between the first attempts to construct European degrees and certificates and define direct correspondence between the degrees and certificates in vocational training of the different countries and the recent conception of the transparency of qualifications which has prevailed in the latest debates, so that each country can understand the existing qualifications of other countries. In the end, all these efforts have culminated in the European Qualifications Framework (EQF), which will be dealt with in a separate section.

The European Leonardo da Vinci programme (Decision, 1999) has been and is the principal instrument of action to promote the European dimension of training. Created in 1995, in 2007 after two periods of programming, it was integrated into a broader transversal program of Lifelong Learning. The Leonardo da Vinci programme promotes the interchange of students, teachers of vocational training and young professionals, whether to complete their studies or to do on-the-job training in companies in other countries; it also promotes the development of innovative projects in collaboration with public and private partners from different countries and the support of thematic networks on vocational training. The objective is to contribute to professional mobility in Europe, strengthen the quality of training, the interchange of best practices and the transfer of innovations. According to the data from the latest evaluations of the Leonardo Programme, the results and impact are positive (WSF, 2007). Participation in a Leonardo project

aids the personal and socio-cultural development of the participants, and widens their perspectives because of its international perspective.

After various evaluations and criticisms over the dispersion of resources and the lack of efficiency, the efforts of the European Commission to simplify, integrate and improve the management of the different European programmes led to the creation, in 2007, of a single programme that would gather together all the activities in the area of education and formation. This is the Lifelong Learning Programme 2007-2013 (Decision, 2006), of which the Leonardo Programme is a part.

Currently, this macro-programme includes the old Comenius programme for grade schools, the Erasmus programme for higher education, the Leonardo da Vinci programme for vocational training and the Grundtvig programme for adult education. The Jean Monnet programme for stimulating teaching, research and reflection on European integration in higher education institutions throughout the world also should be added to this list. The budget for the whole programme of lifelong learning for the period of 2007-2013 is seven billion euros. This figure gives us an idea of the dimension of the programme and of the important resources dedicated to it.

These programmes have evolved from a more centralized management in the European Commission and its *task forces* toward a decentralization in which member states have a growing function through their national agencies (www.mcu.es/cooperacion/CE/Internacional/UnionEuropea/LeonardoDaVinci.html). In addition, the programme has been gradually incorporating the training systems of each country as an additional offer for young people that want to experience a stay in another country of the Union. The objective for 2013 is to arrive at a figure of 80,000 placements annually throughout the Union. The other aspects of the programme dedicated to the interchange of professional staff and, above all, to the realization of common projects between countries still remain as sporadic activities initiated but without becoming fully incorporated as additional tools to stimulate innovation in training practices.

In the Spanish case, the problems of integrating the European programmes (not only the Leonardo programme) into the dynamic of the system are also related to the fact that representation in the European sphere is in the hands of the state although the majority of the executive capacities for the organization of

actions constitute powers of the autonomous communities. In general, though with some exceptions, the autonomous communities do not take sufficient advantage of the European programmes to develop a coordinated policy to encourage innovation and quality in their training systems.

If the first element of the European dimension of training is mobility, the second is the promotion of **lifelong learning**. This is the central slogan around which the European Union wants to promote improvement in the level and quality of the training of its citizens with the aim of advancing toward the Lisbon objectives.

Cooperation between member states through the European Union is based on the creation of a European area for lifelong learning which acts to improve the quality of basic education, promote the application of new technologies in education and training, modernize and improve the quality of higher education, promote the convergence of higher education systems and promote the teaching of foreign languages. In addition, European lifelong learning policy aims to strengthen adult education through improvements in the effectiveness and equity of the educational and training systems, with the establishment of benchmarks for the acquisition of the key competencies for lifelong learning, with the promotion of the recognition of non-formal and informal education, and with the development of mutual information systems and monitoring processes. A separate section will be dedicated to the strategy of the European area for lifelong training.

European coordination on training matters

Coordination has constituted the path for achieving the objectives on matters of training. Now it is the member states, with the support of the Commission, which decide on the guidelines and work objectives and how to conduct the monitoring. As a result of this cooperation various initiatives have emerged which currently constitute the benchmarks for the actions of member states.

For example, in 2002, the Barcelona European Council approved a detailed work plan, called «Education and Training 2010» (Decisión, 2006), to achieve the concrete objectives that the European systems of education and training had approved in 2001. It was developed in compliance with

the Lisbon strategy in the field of education, in which it was proposed that by the end of 2010 the Union «become the most competitive and dynamic knowledge based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion» (http://ec.europa.eu/education/policies/2010/et_2010_en.html).

The Lisbon strategy, approved in 2000, constituted the European reaction to the realization that Europe was losing its position on the world scene in the face of international changes resulting from economic globalization and the appearance of newly emerging countries. Investment in education and R+D was behind that of other world blocks, such as the United States and Japan. If Europe did not want to lose the world race and wanted to maintain the European social model, it would have to invest much more in innovation and education. For this reason, education constituted one of the pillars of the Lisbon strategy and triggered a new drive for European education and training policy.

The work plan «Education and Training 2010» set three objectives: improve the quality and effectiveness of educational and training systems, facilitate everyone's access to education and training and open up education and training to a wider world. These three objectives are broken down into thirteen concrete measures, with a series of indicators to monitor performance according to a precise timetable for action and with biannual reports in order to assess implementation.

The monitoring report for the plan elaborated in 2008 (Consejo Europeo, 2008) highlighted the advances and the delays, and pointed out the need to accelerate the reform of national systems in order to achieve the targets for 2010. The high rates of school abandonment, the low participation in lifelong training activities on the part of older workers and the unskilled, and immigrants' lack of qualifications are of concern. Advances have been made in defining integrated strategies, particularly in preschool education, in the national qualifications frameworks and in the validation of non-formal and informal learning. But at the same time, many countries still do not give sufficient support to innovative initiatives or invest enough in education and training.

In its conclusions, this monitoring report insists on the need to widen the knowledge base of the population, and in that way increase capacities,

particularly technological and scientific ones. The report also calls for a solution to socioeconomic disadvantages to maintain social cohesion, insists on the utilization of the potential of immigrants, the need for improvement in the quality of teaching, an increase in investment in education and training to, at minimum, approach the percentage invested by the United States, and the need to encourage innovation and creativity and improve the management of training systems.

In the same year in which the work plan «Education and Training 2010» was approved, 2002, the Copenhagen Declaration was made (Copenhagen, 2002) by the ministers of professional training together with the European Commission. This declaration concretized the aims of European cooperation in the field of vocational education and training. It constituted the culmination of the initiative that began at the meeting of Directors-General in vocational training at Bruges (Belgium) and known as the Bruges-Copenhagen process and has led to a series of initiatives that reinforce the European dimension of training:

- One of the initiatives was the creation in 2005 of The European Network on Quality Assurance in Vocational Education and Training, integrated by 22 member states, including Spain. The network promotes the Common Quality Assurance Framework and strengthens cooperation among member states on VET.

- Another initiative was the Resolution of the European Council (2004) on strengthening policies on matters of lifelong guidance. The Council insisted on the need to promote quality guidance services open to all the population at any age and point in their lives, and with the participation of all agents involved in training, education and employment in each country. It also asked that member states carry out reviews of their current national services and strengthen them in all areas.

- A third initiative was constituted by the definition on the part of the European Council (2004) of common criteria for the identification and validation of non-formal and informal learning. The development of lifelong learning implies giving value to all the knowledge and competencies that a person possesses, independent of the place or form in which they have been acquired. This is an enormously complex theme and will be dealt with

later. Today, the Union is progressing in establishing common criteria for dealing with this issue.

- Finally, the fourth initiative, and surely the one that has and will have the greatest impact on national systems, is the aim to create a European credit transfer system in the field of vocational education and training in connection with the European Qualifications Framework, which will be dealt with in the following section.

In general, the form of Union action is based on the construction of a consensus around the generation of benchmarks. Member states and the European Commission need to adapt their actions to these benchmarks and periodically report on advances on this matter. This work method gives mixed results. In many cases the advances are very slow and unequal among countries, but in general the ground is being prepared for more substantial achievements when more favourable political conditions exist for a greater commitment from member states. Even so, EU action does have an impact, although more in some countries than others, on the evolution of the national systems of vocational training. As can be seen, the scope of coordination among member states on matters of vocational training is extensive and involves relevant issues. Without intervening in the core of the national systems, these initiatives for coordination shape a large collaborative area which over time will have an impact on the construction of a common decentralized area for vocational training.

The number of persons involved as representatives of each member state in the different programmes and initiatives simultaneously in place, the frequency of meetings at different levels up to that of the directors-general for vocational training and of the competent ministers, the commitments made in statements and resolutions, the volume of resources mobilized and the procedures for joint work, constitute a network of factors so dense that it can be stated that the national training systems are currently interconnected at the European level.

3.2. The European qualifications framework and instruments for mobility

As was mentioned in the previous section, the mobility of individuals and workers constitutes one of the pillars for the construction of the single market. Toward this aim a series of instruments have been developed which reinforce the European dimension of training, with progress towards building a European area for lifelong learning and qualifications.

The principle instruments are:

- The European Key Competencies Framework, which describes the capacities necessary for lifelong learning.
- The Europass, a direct service available to European citizens to assess their skills and competencies, which is supported by a network of national centres which provide information.
- The European Qualifications Framework for lifelong learning (EQF), the European Credit Transfer System (ECTS) for higher education and the European Credit Transfer System for Vocational Education and Training (ECVET).

The European directive of 1993 related to the rights of students to reside in other European countries and the recommendation from the European Quality Charter for Mobility should also be added to these instruments. These two documents are aimed at eliminating barriers to mobility related to education and training. In addition, the European directive on the recognition of regulated professions (2005) simplified the procedures of the previous system, too complex and bureaucratic for the recognition of regulated professional qualifications.

In what follows, these instruments will be described so that the ambitious European system that is being created for the recognition and transfer of credits among the different member states can be analyzed in more detail.

European instruments for lifelong learning

The first instrument for creating a European area for training and qualifications is the definition of the **key competencies** for lifelong learning, which was approved

in 2006. This definitive document defines competencies as a combination of knowledge, skills and attitudes that are «necessary for personal fulfilment and development, social inclusion, active citizenship and employment» (www.europa.eu/scadplus/leg/en/cha/c11090.htm).

The frame of reference establishes eight key competencies: communication in the mother tongue, communication in foreign languages, mathematical competence and basic competencies in science and technology, digital competence, learning to learn, social and civic competencies, a sense of initiative y entrepreneurship and cultural awareness and expression. For each one of them, all considered of equal importance, a definition and description is established of the relevant essential knowledge, skills and attitudes. With this frame of reference the intention is that all member states ensure that all their citizens can have access to this minimum common educational knowledge at any age.

A second important instrument is called the **Europass**. The initial basic idea of the Europass was to create a passport or portfolio that shows the training history and acquired qualifications of the individual. In relation with the Europass, in 2004 a series of documents elaborated at the European level were grouped together:

- The Europass CV *(Curriculum Vitae)*: conceived to highlight the competencies of individuals. It can be obtained digitally through the website at www.europass.cedefop.europa.eu/europass, and more than 3000 persons do so daily.

- The Europass Mobility document: «is a record of any organized periods of time that a person spends in another European country for the purpose of learning or training», independent of level and validated by two centres, one in the country of origin and the other in the host country, connected to the network of national Europass centres.

- The Europass Diploma Supplement: is a document that complements a university degree or advanced vocational training diploma and which describes the characteristics and content of the degree or diploma in terms of the competencies acquired.

- The Europass Certificate Supplement: has the same aim as the previous document but for persons who hold an intermediate level vocational training

certificate. Neither of these supplements guarantees the recognition of the degree, diploma or certificate nor can they substitute for it. They can be obtained through the network of national Europass centres.

- Finally, there is the Europass Language Passport: this serves to present the linguistic and cultural competencies acquired.

In addition to the National Europass Centres that are connected together, there are other networks of centres with similar functions, such as the National Reference Points, Euroguidance centres, NARIC network for the recognition of academic degrees, the EURES network for employment and the network of the Council of Europe, with whose collaboration the Europass supplements documents were designed, and the Ploteus web (www.europa.eu.int/ploteus), which offers information on all of these issues.

A third important instrument for the creation of a European dimension of training is the **European Qualifications Framework** (EQF), which also constitutes the most ambitious step toward creating a European area of qualifications, after many years of failed attempts (which did at least manage to prepare the groundwork for the establishment of the current EQF).

The European Qualifications Framework for Lifelong Learning consists of a system of eight reference levels which provide a common reference framework for all member countries' national qualifications systems. It serves to improve understanding and compatibility among the qualifications systems of different countries. The objective is that in the year 2012 all the individual national certificates of qualification will carry a reference to the corresponding level of the EQF. Member states have until 2010 to establish the correspondence between their systems and the EQF.

These eight levels include all the qualifications obtained in general education and vocational training both through initial training and lifelong training. The levels are described in terms of learning outcomes, which is a way of overcoming the diversity of models, institutions and national systems. Learning outcomes express what a person knows, understands and is capable of doing when he or she finalizes the learning process. In this way, defining learning through an indicator such as the duration of studies is avoided. Three categories of learning outcomes have been established, knowledge,

skills and competencies, understanding that qualifications constitute a combination of these categories.

The full range of qualifications from any system can be adapted to the eight levels. However, it is very likely that the establishment of these levels will not resolve all the conflicts over the criteria that each member state uses to classify qualifications, particularly in regard to levels 3 through 5 which correspond to a wide variety of training and qualifications which are not always easy to differentiate by level. In addition to the eight levels, some criteria related to quality assurance have been designed to assure accountability in the process of the system's application.

In any case, the EQF is intended to be a reference not only for mobility and the recognition of degrees, diplomas, certificates and qualifications, but also for the labour market and companies in the establishment of their systems of internal qualifications, and at the sectoral level within the framework of collective bargaining or as an instrument for the mechanisms of hiring and management of personnel.

The application of the EQF starting in 2012 will not be free of difficulties given the heterogeneity of the concepts and structures of the respective national qualifications frameworks. But difficulties will also emerge a result of the very concept of building a mega-framework of classification, as it introduces elements of institutionalization and at the same time of flexibilisation in qualifications that will generate new tensions in the conception of lifelong learning.

The credit transfer system

Parallel to the approval of the European Qualifications Framework, the Commission has been working on the design of a system for the transfer of credits (called the European Credit System for Vocational Education and Training or ECVET) which is currently in process for approval. The objective is for member states to use this system starting in 2012 in the area of education and vocational training to effect the validation, recognition and accumulation of the results of individual learning acquired in a formal, non-formal or informal context. It is hoped that states will

promote experimentation in the system, spread its use and ensure quality in its implementation.

The European Credit System for Vocational Education and Training is intended to facilitate the recognition of learning outcomes in different learning contexts or in training abroad. The system is structured on the basis of defining learning units understood as components of a qualification and as made up of the knowledge, skills and competencies necessary to obtain that specific qualification. A qualification is made up of various units, so a person may obtain a qualification with the accumulation of units obtained in different countries and in different training contexts, whether formal or not.

The mechanism of the ECVET consists in the evaluation of units of learning outcomes obtained in a determined context and country, and if the evaluation is positive said units can be transferred to another context and country. In this other context, the competent body can proceed to the validation and recognition of the learning outcomes as part of the requisites for the qualification the individual intends to obtain. The units of learning outcomes can be accumulated with the end being the accumulation of all those necessary to obtain the qualification according to national, sectoral and regional regulations. Each competent body defines the procedures and guidelines necessary to effect the evaluation, validation, accumulation and recognition of units of learning outcomes.

For this mechanism to function it is necessary to have diverse bodies that recognize their mutual competence to evaluate, validate and recognize qualifications through established collaborative protocols. For this the proposal recommends that member states promote European partnerships and networks among competent bodies.

A system of points complements the mechanism, as each competent body confers a determined number of points for each qualification and distributes them among the units proportionate to their weight in the overall qualification. These points can be transferred from one country to another, always associated with the recognition of a determined unit of learning. As an agreed upon benchmark for points, it is proposed that 60 points be the equivalent of the results that one would achieve in one year of full-time formal vocational training.

The ECVET mechanism, in phase of approval and experimentation, opens up a new stage in the construction of a European area for training and qualification. Its implementation will not be easy, both for the complexity of its operation as for the institutional resistance on the part of national systems.

Raised, at first, as a method for the transfer of learning outcomes in the context of intra-European mobility, no one can ignore the possibility that it will be gradually integrated into national systems. This possibility begins to concern those in charge of the national systems and the social partners, as the ECVET is conceived as an open mechanism, in which any actor, whether private or public, national, regional or local, can intervene with the aim of establishing agreements for the transfer of credits for learning outcomes. This could cause problems for the national systems, above all among those that have a greater degree of centralization in matters related to the recognition of qualifications.

Even so, the dynamic that is being put into place with the ECVET system, together with the EQF, is quite positive because it accelerates the process of the development of national qualifications frameworks, based on learning outcomes and with mechanisms for the recognition of qualifications. Independent of the results of the establishment of the ECVET system at the European level, the transformations that it is provoking at the national level constitute its main asset and the base upon which the future European area of training and qualifications can be consolidated.

A system of cumulative credits structured on learning outcomes and not on degrees or certificates is one of the conditions for consolidating open systems of lifelong training, but this also opens a deep debate about the current institutionalization of training systems.

3.3. Effects on national systems

As has been seen throughout this chapter, the European dimension of vocational training cannot be reduced to the subsidies from European Social Funds to finance vocational training courses for employment or continuing training. The Spanish system of training, as with other member countries, with all its independence and specific personality, is increasingly more connected to the EU and other member countries and

forms part of a common process of acquiring commitments to advance in the construction of a European area of training and qualifications. The process has already acquired considerable dimensions and there is no longer any turning back.

We still do not know what impact these European mechanisms will have on mobility, which is still, overall, at a low level, but what is evident is their progressive impact on national systems, although some countries try to conceal it.

From the Spanish perspective, the European dimension of training raises three issues which must be mentioned:

- Spain has been and is a good European student, as it strives to evolve following European guidelines; but it also has little weight in the elaboration of those guidelines, perhaps because there are still gaps in its coordination of the different fronts opened up and in the planning of its interventions aimed at taking on a more active and leadership position in some of the specific actions. To assume this position Spain will need more and better human resources that can adopt a European perspective and that will dedicate professional efforts to participating in leading in the task of constructing a European area of training and qualifications.

- In Spain, as in many other European countries, the integration of the European dimension in the national system is weak, and it could even be said that it constitutes a mere appendage within the context of the overall operation of the system. Although there are many persons within the system interested in the European question, the repercussion of the Community dimension on the operation of the system is very limited. As has been seen, the possibilities to use European initiatives on issues of, for example, quality, direction or innovation, are considerable and could be taken advantage of to develop internal institutional mechanisms for quality, innovation and direction of the country's system of training.

- Lastly, it will be important to find an agreed upon and coordinated formula for the involvement of the autonomous communities in European issues, as in the end it will be them that will have to apply and integrate the European dimension into the daily operation of the system within the framework of their powers.

IV. Vocational training and the labour market

The fundamental reason for vocational training is to offer individuals the opportunity to learn the competencies that the labour market requires; this includes the skills that workers need and that are needed by all the public and private organizations that develop activities that have an economic dimension. In addition, vocational training must respond to the training needs of professionals and the self-employed, as well as to society's future capacity for the creation of new companies. In other words, vocational training has to anticipate the present and future demands of a labour market in constant evolution and in a competitive context.

At the same time, as has been said in earlier chapters, the modern conception of initial vocational training is that of taking persons that are leaving general education and providing them with a specialization for the labour market. Therefore, vocational training in its most comprehensive dimension is also conditioned by the demand for training from young people and adults.

Thus, vocational training also constitutes an institutional system with its own corporative dynamic. The system moves among different forces: individual demand for training, the demand for skills from the labour market and its own corporative inertia.

It is in this context where the relationship between training and the labour market must be analyzed and explanations found regarding the adjustments and lack of adjustments between the two, although always with the understanding that the system of vocational training only makes sense if it is oriented toward the labour market.

The disjunction between training and the labour market when taken to an extreme generates harmful imbalances for the system, for the population

and for the economy. Training systems that are out of touch with the labour market and that become an additional route for the development of personal competencies within the framework of an educational system closed in on itself rapidly lose any prestige they have for the lack of job opportunities they generate for their users and for not contributing to economic development, as can be seen in the situation of training systems in some developing countries (ETF, 2005).

But the opposite situation also produces negative effects; if the systems are completely subordinate to the requirements of the labour market, as has been proposed in some cases by international bodies, they will have difficulties in recognizing and covering the long-term needs of the economy. In addition, political problems over the management of the system will arise as a result of popular pressure to improve the capacity of the population to integrate into the labour market.

The difficult balance between both situations is not found in the middle, but rather in the capacity to offer the acquisition of competencies that will facilitate integration into the labour market and the development of economic activity to the maximum possible. This task is not easy, as today's labour market evolves rapidly and often in unexpected ways.

In developed societies the labour market is largely unpredictable and opaque, and not only in periods of crisis. Therefore, it is always difficult for a person that wants to work to know where and in what moment there is a company looking for a worker of his/her characteristics. The same occurs for business owners; when they are in need of a new worker often they do not know where to find one.

This characteristic of current labour markets explains the constant complaint of businessmen that say they cannot find adequate workers, and that of workers who maintain that they cannot find work although they are in a time of strong job growth. This difficulty affects young people more, as they initiate their first contacts with the labour market without previous experience and do not know how best to move. In advanced societies, the transition from school or from unemployment to work is always problematic.

The reality of this situation has led to active employment policies and especially measures for vocational guidance becoming permanent and structural measures

for the better management of the labour market. These measures gradually transform into a new axis for the basic policies of the welfare state, and not only as a means to confront moments of crisis. In advanced societies, individuals require differing degrees of informational support and guidance to facilitate their transit through the labour market.

If the formal qualification, as one of the principal axis of the labour market becomes problematic, training as the principal route for attaining skills and that qualification also becomes problematic. Detecting the skills that will be needed by the productive system in order to guide the system of vocational training in its provision of the training necessary is not a simple task, and trying to predict the future evolution of the labour market even less so.

For this reason, modern systems of training have mechanisms of observation to follow the evolution of the labour market and interpret its needs. This concept, the so-called «observation function» (Homs, 2001), is still not present in the Spanish system of training, which has a deficient, disperse, unsystematic structure, lacking in coordination for the production of information on the evolution of the labour market and the skills it needs. As a consequence, there is still much work to be done in coordinating available sources of information from the National Statistics Institute and from statistical centres of the autonomous communities. In addition, there are statistical teams from the Ministry of Labour and Immigration and the Ministry of Education, Social Policy and Sport as well as their equivalents at the level of autonomous communities. This coordination is vital so that the principal actors that have to make decisions over the system of training in all areas, at the state level, at the level of autonomous community and at the local level, can do so based on systematic and reliable information.

Nevertheless, the information, however abundant and rigorous it may be, is of little use if it comes to the key actors when they have already made their decisions, or if it is not provided in an adequate format. The new observation networks elaborate the information and are responsible for transmitting it in function of the moment and needs of the principal actors.

In addition, the actors, based on their position in the system of training, have different needs for information. The minster or secretary for employment of the Ministry of Labour and Immigration does not need the same information to

decide on the general objectives of state training policy as the directors general of the employment services of the autonomous communities need to decide on the distribution of the budget for training among the different territories or centres. Neither does the director of a centre who has to decide on the type of training programme to offer for the next year need the same information that a trade union or business association needs to provide advice on the planning of training needs in their area. The observation function of a training system has to be capable of providing information at the right moment to all these different actors.

At the local level, at a training centre, for example, the information that an observatory can offer, can serve as a reference, but direct contact between the centre and its local «clientele» with the aim of planning an offer of training adapted to local needs would be much more useful.

In Spain, certainly, none of the principal centres for the production of information have the capacity by themselves to develop the complex methodologies for the forecasting and detection of training needs indispensable for providing all the actors of the system with the necessary information. Only through networking can they efficiently complete this observation function.

4.1. The labour market in Spain

The characteristics of the Spanish labour market constitute a good indicator of the skills needs of the economy. There are three principal characteristics from the last 30 years which contribute information in this sense: high rates of unemployment, high employment volatility with very brusque changes of cycles and low skill levels.

Regarding the first characteristic, the Spanish labour market has historically been characterized by its difficulty in providing employment opportunities to the whole population. In some periods this difficulty was attenuated through emigration of large sectors of the population to Europe and America, elevated percentages of under-employment and the acceptance of low income levels. But in the last quarter of the 20th century, with higher expectations for internal development and with the beginning of the transition to democracy, the historic employment difficulties in Spain resulted in high unemployment rates, which dominated throughout this whole period.

GRAPH 4.1

Quarterly Employment Trend

Years 1976-2008. (In thousands)

Source: Elaborated by author from the EPA.

The number of employed during the mid-1970s was not exceeded in a consolidated manner until the second quarter of 1996, as between the fourth quarter of 1992 and the second of 1996 it was again below the limits of the first half of the 1970s after a few years of growth. Starting then, employment grew continuously until the last quarter of 2007, when the effect of a new crisis was felt. This evolution in employment can be seen in graph 4.1.

The behavioural norms, of both the business class and the active population, and particularly that of new generations that integrated into the labour market during these years, developed in conditions of surplus labour. Some of those norms, such as for example, seeing the job as no longer a job for life, or the precariousness of contracts, or the lengthening of schooling, have sunk such deep roots in the behaviour of economic and social actors that they are today essentially institutionalized and, in some ways, form part of the socio-cultural framework of the Spanish labour market. The demands for training and skills from the population and businesses are influenced by this critical perception of employment.

During the years of high unemployment rates, initial vocational training, occupational training and the overall educational system played a role in retraining individuals faced with the lack of demand for workers from the economy. This recourse to education and training led to a significant increase in the levels of education of the population. In such circumstances it was difficult to guide individuals based on demand in the labour market, as this demand was very weak.

This situation repeats itself in all countries and periods in which the demand for workers on the part of business is less than the existing supply in the market. In such periods it is difficult to develop systems of vocational training. However, starting in the middle of the 1990s, the development of the subsystem of continuing training accompanied the strong growth in demand for skilled workers on the part of business and this contributed to consolidating the modernization of initial training, as was explained in the chapter dedicated to a review of the history of the evolution of the system of training.

In addition to the historically high levels of unemployment, the second characteristic of the Spanish labour market is the volatility of cycles, in other words, the ease with which in just a few months the economy passes from the destruction of employment to its creation, and vice versa. This is disorienting for the training system and the population, as no one knows what to expect as the demand for skills changes with the economic cycle.

Since the 1970s, the length of economic cycles in Spain have been quite short, around five years, with the exception of the most recent which has lasted nearly 13 years. Therefore, the training system does not have time to adapt to the new short-term demands of the labour market. This fact, plus the inertia of a system of vocational training not given to sudden restructurings and the predominance of generic over specialized training, provokes a constant distance between the demand in the labour market and supply from the system of initial training.

One might ask, however, if this distancing in the Spanish case constitutes a difficulty or not in delivering the skilled workers that the market demands. If there is to be a better match between supply and demand, this would require a highly versatile system, capable of predicting changes in the course of the labour market and adapting to them rapidly, because if not the system

would always be maladapted, behind the evolution of the labour market. Given that the Spanish system of vocational training does not possess this versatility and is not capable of reacting rapidly to the changing needs of the labour market, its conception of basic vocational training, little specialized from an occupational perspective, does not represent a serious difficulty for providing the skills demanded by the labour market.

In this context, companies have become accustomed to «doing the qualification in-house», in other words, recruiting personnel with a specific level of basic education and with certain aptitudes and attitudes needed for the work, and constructing the occupational skills they need through the informal transmission of accumulated experience in the productive process of the company. The co-workers of the newly recruited employees and mid-level management play an important role in this procedure.

Finally, the third characteristic refers to the low skill levels of the Spanish productive fabric. As was seen in previous chapters, 49.6 percent (in 2007) of the Spanish population from 25 to 64 years of age only completed the first stage of secondary education (compulsory secondary education), in comparison with 29.2 percent in the broader European Union. The Spanish productive model has historically not been very demanding on matters of qualification, although this must be qualified as the Spanish labour market has suffered a shortage of skilled workers at certain times and an excess at others.

4.2. Skills management and the labour market

In part, as consequence of the characteristics of the labour market, Spain has undergone a change in the model of management of the workforce and its skills, which has had important repercussions on training needs. In concrete, Spain has gone from a model of management of an unskilled workforce to one of a skilled workforce. Below the implications of each of these models will be examined in greater depth.

From the management of an unskilled workforce to that of a skilled workforce

Until the 1980s it can be said that there existed a model of management for an unskilled workforce in Spain (Homs, 1987). The economic boom of the

1960s overwhelmed the structural rigidity imposed by the Francoist regime and facilitated disorderly growth through the management of an unskilled workforce which emigrated from the countryside to the city. The incipient clandestine trade union movement was more concerned with organizing under the difficult conditions of the dictatorship and in attending to wage and hiring demands than in dealing with issues related to skills and qualifications. The serious delay in Spain on educational matters and in the establishment of a welfare state also did not favour the development of the European model for the management of a skilled labour force.

Businesses had to improvise the skills of their industrial workers to face the great need for personnel generated by the strong economic expansion of those years. They started with a preindustrial labour force, basically agricultural, with very low levels of basic education, lacking any professional skills, with no type of vocational training, and which acquired skills directly from experience.

In those years the Spanish path to skills and qualifications which traditionally dominated during the first stages of industrialization and which still maintains a strong influence today was consolidated: the company solution. In other words, each firm, directly through work, generated the skills that it needed with the support of middle management and more experienced personnel. This resulted in rigid skills, adapted to immediate needs, not really transferable from one firm to another, not formally recognized, and dependent on the quality of the work and the demand for quality within the company or its position in the market.

When Europe was constructing a model for the management of a skilled workforce, based on a trained workforce, Spain was improvising a model of management for an unskilled workforce based on direct on-the-job training. This was, therefore, the management of an unskilled workforce on the part of managers, who in general, were also not formally «qualified», and in the context of increasingly conflictive labour relations which, among other consequences, gave priority to commitment to the firm as a factor in promotion to mid-level management.

This situation changed with the crisis of the mid-1970s. The reaction of companies trying to adapt to the new competitive conditions led to innovation

in the areas of market strategies, product policies, the organization of work and also workforce management policies.

Regarding the organization of work, qualifications and workforce management, the process of change was so intense and deep that we can speak of the appearance of a new model for workforce management in Spanish businesses starting in the 1980s. This change consisted in a demand, on the part of business, for a workforce with a complete education plus vocational training of intermediate or advanced levels to cover the jobs in production (Homs, 1987). In the formal part of the economy, greater internal and external competitiveness led to a reorganization of production strategies and accelerated investment in technology which provoked important changes in the organization of work.

In some sectors, which had been labour intensive until then, the significant investment in technology considerably reduced the weight of labour costs in the final unit cost of the product, leading to the establishment of a new policy of labour management based on versatility, on flexibility and on higher skills. This was the case, for example, in the textile industry (Homs, 1988). In Spain, in other sectors, for example the automotive industry, a clear restructuring of the organization of work with the enrichment of some jobs took place based on the incorporation of quality control, simple maintenance and the organization of assembly islands and work groups in important parts of the production chain. In the case of the chemical sector, the automation of new facilities required higher skill levels for plant operators and new relationships with technical personnel. This led to a crisis in the traditional hierarchy in the sector, centred on mid-level management (Homs, 1989).

In other industrial sectors similar tendencies were produced, such as in machine tool production, or in services such as banking and commerce (Homs, 1987). All these constitute examples of the new model that was taking shape and which principally affected the largest companies which had important investments in technology, a favourable market situation and a competitive strategy to face competition from outside the Spanish economy.

The new model could be considered skilled workforce management and incorporated the same characteristics that had been repeated in other European

countries, although new tendencies were becoming evident that were pointing toward a different model, one of so-called competence management (Kern, 1988), of which more will be said later and which was also later introduced into the productive fabric of Spain. Thus, Spain has gone from a model of management of an unskilled workforce to a model of competence management.

In the 1990s, the model of a skilled workforce was consolidated, although limited to the scope of large firms and to highly competitive small and medium-sized businesses, as well as to determined sectors. At the other extreme were the small companies in the hidden or semi-hidden economy, very labour intensive, whose competitiveness in the market was based on maintaining a differential in labour costs and, therefore, they tried to maintain at all cost the previous model of management based on an unskilled workforce.

Some companies, though they largely follow a model of management based on a skilled workforce do so in an ambiguous manner as certain of their economic activities may still be managed through a model which relies on an unskilled workforce (for example, in construction and textiles). Thus, there is an interrelationship between the two models of workforce management. Nevertheless, the model of a skilled workforce has ended up being imposed culturally, though with significant contradictions and difficulties.

Management of a skilled workforce

In Spain, the supply of young people trained in the middle of the employment crisis during the second half of the 1970s and the beginning of the 1980s played an important role in the process of change toward the model of skilled workforce management.

In the period from 1975 to 1990 an important process of substitution in the labour force took place, practically unique in all of Europe, and which can be divided into two phases: The first, between 1975 and 1985, was a phase of serious crisis in which almost two million jobs were destroyed. The second, between 1985 and 1990 was a phase of expansion where exactly the same number of jobs was recovered.

Thus, in the first phase, the reaction of companies to the crisis was to reduce the work force. However, the workers affected were not always those that presented the most problems in retraining. In these conditions, training was not used in the majority of situations, either to retrain the remaining personnel or to adapt to the new productive situation. Business instead reorganized jobs as a way of adapting the characteristics of their personnel to the new necessities of production.

But during this period in which businesses made a great effort to modernize, their labour forces aged considerably. These were also 10 years of internal reorganization of company labour forces, with virtually no hiring externally.

The policy of cutting the workforce reduced the rigidity caused by the previous model of an unskilled workforce, incapable of adapting to technological innovations. However, the social costs, both collective and individual, were very high. It must be remembered that the generation that was cut from the workforce in those years was the same generation that had been involved in the great industrial development of the 1960s.

In addition, if this business policy was possible in a moment of significant decline in production, it was not so easy to maintain it in a phase of expansion. Because of this, in the later phase, from 1985 to 1990, the problem of the limited skills of the workforce became worse and new policies began to be developed based on developing a skilled workforce, whether through vocational training or the reorganization of work with greater attention paid to the qualifications of the workforce.

In the second phase, which began with the change in the trend in the labour market beginning in 1985, when an improvement in economic markets was consolidated and the modernization of businesses speeded up, a period of strong growth in the creation of employment began and there even appeared, strangely enough, some tensions in the labour market for the intensity of the new recruitment of manpower. Even so, this phase of expansion coexisted with a high rate of unemployment (more than 20 percent) and with a general situation of surplus labour. For certain businesses there now began to appear some difficulties in hiring workers because of the lack of adequate manpower due to the intense sectoral and occupational changes that had taken place in the previous years (Toharia, 2004; Garrido, 1991; García Serrano, 1995; Fina, 2000; Cuadrado, 2002).

The combination of high unemployment rates and the difficulties some business sectors have in hiring skilled manpower will be a constant throughout the evolution of formal qualifications in Spain. The rapidity of the changes, the lack of development of vocational training, inertia in the behaviour of the population leading toward the extension of schooling, the lack of attractiveness of the working conditions offered in the labour market in a situation of surplus labour and the increase in «discouraged» workers among the unemployed, who find themselves having to adapt to precarious labour in the hidden economy are factors which explain the apparently contradictory coexistence of a high level of unemployment and a lack of qualified manpower.

However, the most important characteristic of this second phase is that in the moment in which businesses returned to the outside labour market they found themselves with a totally different labour force than the one they had cutback in preceding years. A labour force in which young people with high educational levels (general secondary education, vocational training and university studies) were abundant and with a different culture in regards to work. It must be remembered that these were the years in which young people trained in the new vocational education and training programmes of the General Act on Education entered the labour market.

The hiring of these young people, brought about by government policies to promote employment and financed with European funds, introduced a rapid generational change in companies with strong contrasts, due to the inexistence of an intermediate generation that would have been incorporated between 1975 and 1985, but was not because of the freeze in the workforce. The massive incorporation of young people into the Spanish productive system, without the existence of this intermediate generation that would have acted as a bridge and assured a more nuanced transition, meant a real and deep rupture with the whole prior culture of work (Kruse, 1990).

The new generation, with a much more complete basic training and with a more competitive attitude, revealed a greater capacity to adapt to the changing processes that businesses were living. This, together with the development of new concepts of production, generated an important transformation in the policies of workforce management. Companies began to demand skilled labour with formal qualifications in their hiring policies.

The importance that the existence of abundant manpower with intermediate and advanced training had in the precise moment in which companies across the board turned again to hiring must be insisted upon. This circumstance introduced new perspectives in the analysis of the relationship between education and employment and on the influence exerted by the supply of educated and trained persons from the educational system in the shaping of the human resource policies of business (Béduwé, 2003).

The skills potential that young people contributed to businesses was, in many cases, well above what the organization of work offered at that moment. The *boom* of the «new economy» had still not yet happened. In other words, at that moment, the supply of skilled manpower acted as a stimulus for organizational change, as different studies of that period have observed, as in the case of the requalification of workers in the chemical sector or intermediate personnel in sectors undergoing strong expansion, as for example the commercial distribution of food products (Homs, 1993).

The new model of workforce management was based on much more selective hiring policies, favoured by the surplus labour available in the labour market. Businesses required minimum levels of general secondary education with initial vocational training, generally of intermediate level, for any basic job in production. In addition to work experience, businesses began to use continuing training as an element determining qualification for work, and, in general, professionalized the criteria for promotion, which came to be based more on professional competencies. Mobility and versatility were also characteristics of the new management model.

Thus, both from the demand side for skilled workers as well as that of the supply of skilled workers, for an important sector of the Spanish economy significant pressures for a change in the organization of work could be seen, leading to a rethinking of Taylorist organization and with important repercussions for the skill levels of the workforce and on management.

Nevertheless, the changes could not be seen across the board in all companies, as was mentioned before. Until well into the 1990s we cannot speak of the existence of a general discourse, whether on the part of business or trade unions, centred on a new approach for labour relations. Even so, the strategy of workforce management was now evident in businesses and

in vital economic sectors, as numerous empirical studies of this period have confirmed (Prieto, 1988).

Diverse factors can explain this difficulty. The rapidity of the changes perhaps impeded the social and economic actors from having sufficient time to become conscious of what was happening. In addition, the traditional weakness of intermediary organizations and institutions in the labour market in Spain also made the spread of the changes, collective decision-making and the development of resources that would facilitate innovations within business more difficult.

The dominant discourse on the modernization of the productive structure was almost exclusively centred on the need for technological innovation to make up for the backwardness that Spain has traditionally suffered from. To this discourse was later added the promotion of the design and commercialization of Spanish products in foreign markets, and the improvement of quality. Aspects related to human resources and improvements in the organization of work only appeared later, in a limited form and in reduced circles that were encouraging new models of management.

In this way during those years a skills model was built that has lasted until today and which can be categorized as a «home made» model made by business, from an abundant labour supply with a high learning capacity developed through compulsory and post-compulsory secondary education, but not very specialized in regards to the specific needs of each firm. From this base, companies construct the skills they need. As specialization is generally produced in the final phase of the integration of young people into the firm, Spanish companies have become accustomed to not demanding excessive specialization in the outside labour market, but instead a determined learning capacity.

In function of what they find in the labour market, according to the moment in the economic cycle and the training supply in each historical moment, Spanish companies have learned to distinguish between the capacities that general basic education, secondary education, the baccalaureate and university studies offer. What is currently most available in the market are individuals who have a secondary education, though not backed up by a certificate, and individuals with some university level studies, though also not backed up by a degree or diploma. Industrial businesses prefer to look for personnel with vocational training, above all with advanced training, as such

individuals already possess the baccalaureate. Since this profile is scarce among the supply, businesses can, as a second option, turn to candidates with a baccalaureate if the specialization needed is not very high, or to persons with university studies although they have not completed their studies.

As young people have tried to obtain higher degrees or certificates to better face the difficulties of the labour market and to place themselves in better professional positions, university degrees have become more abundant in the labour market. The result is underemployment for individuals with higher levels of education and training based on their taking positions below the level of qualification they obtained in the educational system (Oliver, 2003). The supply of labour contributes to maintaining entry level wages low and reduces discrimination between levels. The difference in entry level salaries between a young person with vocational training and a young person with university level studies is quite small (ANECA, 2007).

Business is not very insistent in its demand for a high level of specialization, as they construct the skills they need either from levels of learning or through broader specializations such as those offered by the educational system. In this way, a certain symbiosis is produced between the not very specialized educational and training supply and the not very exigent demand for specialization which feed off each other.

Unstable and difficult to find jobs and not very demanding of specialized skills schematically sums up the manpower requirements of the Spanish productive system. Starting in the last years of the 20th century the dynamic of the labour market introduced new elements that have to be taken into account.

4.3. The skills needs of business

The lengthening of the last economic cycle of strong employment growth, between 1994 and 2007, has generated a new situation, to the extent that it has coincided with the integration into the labour market of smaller generations, born starting with the crisis of the mid-1970s.

The creation of more that 8,400,000 jobs during this period exhausted the Spanish labour market and required the importation of foreign labour in many sectors and for many skill levels.

During the period of expansion of recent decades, the skills model underwent a major upheaval. The Spanish labour market was incapable of supplying the manpower necessary with adequate formal qualifications, and the productive fabric had to again improvise the skills needed with an immigrant labour force with low or even inadequate skills in some cases. All the advances achieved in the preceding decades, with the construction of a skilled workforce through consolidated educational levels and complemented by specializations within the workplace, were threatened by a reduction in the quality of services or final product.

The most exemplary case is that of the hotel and restaurant sector, where, to avoid an increase in wages, businesses have hired immigrants with minimal skills and often with only elementary knowledge of the language. This situation illustrates the degree of fragility of the previously constructed model, the shortcomings of the system of training in its responsibility for the production of the skills necessary for the productive fabric and the shortcomings of this in maintaining the criteria of quality and professionalism that seemed to have been consolidated, at minimum, in the competitive sectors of the economy.

The Spanish labour market is also characterized by low efficiency in the use of skilled manpower. Some studies calculate for Catalonia, a loss of talent of 22.72 percent (with an even higher loss of talent among women – 28.31 percent). This calculation of loss of talent is obtained by summing up the number of persons with higher studies that are inactive, unemployed and underemployed (CIREM, 2007).

The capacity of the training system to supply a greater number of persons with intermediate and advanced level qualifications will be key in the transformation of the skills model, as the current model has clear limitations. In what follows these limitations and some possible ways to overcome them will be examined with more detail.

The low level of qualifications and the lack of intermediate level qualifications

In comparison with the skills model that dominates in Europe, Spain presents an overabundance of manpower with little skills or low-level formal qualifications and a lack of manpower with intermediate level formal qualifications. In graph

4.2 we can see how the figure which represents the skills models of the 27 countries of the European Union and the figure which represents the Spanish model are total opposites. The member countries of the Union have, on average, 23.2 percent of the population between 25 and 64 years of age with a low educational level, which corresponds to primary school education and the first cycle of secondary education (in other words, compulsory secondary education). In contrast, in Spain this proportion is 42.4 percent, practically double. The most spectacular data is the weight of the intermediate levels, those which correspond to the second cycle of general education and vocational training, which in Europe is the largest groups making up 48.9 percent of the population (almost half) while, in contrast, in Spain the number is 23.1 percent (les than half the European average). Spain has a higher percentage of its population at the advanced level (34.5 percent) than the European average (27.8 percent).

In other words, in Europe the qualifications level of the productive system sit on a base of a workforce with intermediate level qualifications, while in Spain it is based on a combination of low and advanced qualifications. One might think that this situation is due to the historical inheritance of low skills, constructed over very elementary educational levels, but if we construct the same graph with only the population between 25 and 29 years of age, the same situation appears and the differences with Europe are even greater. For this age group, Europe has 16.2 percent with low levels, 50.5 percent with intermediate levels and 32.9 percent with high levels. In contrast, Spain again presents the hourglass figure: 33.1 percent possess low level qualifications, 26.7 percent intermediate levels and 40.3 percent high levels.

The trend is the same for the European average as for Spain: decline in the low levels and growth in the others, but with greater intensity in advanced levels than in the intermediate. The difference, however, is the structure of this distribution. Among the recent Spanish generations the same schema as in the overall population continues being reproduced. An excessive percentage of young people with low levels of education and training continue entering the labour market.

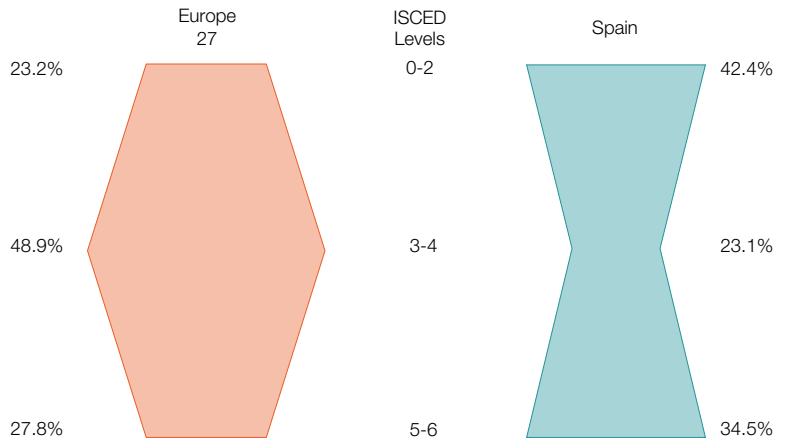
If this is compared to the situation in other European countries, such as Germany, France, Italy and the United Kingdom, the differences remain. All these countries have more than 40 percent of the employed population with an intermediate level of qualifications, and in the case of young people

GRAPH 4.2

Skills models in Europe and Spain

Year 2007

PERCENTAGE OF THE EMPLOYED POPULATION OF 25 TO 64 YEARS OF AGE BY EDUCATIONAL LEVEL



Source: Eurostat. LFS.

this percentage is even slightly higher. The case of Germany is even more striking, with 67.4 percent of young people having intermediate level qualifications. While in regards to young people with higher qualifications, just as in Spain, France and the United Kingdom have a percentage above 40 percent. Germany and Italy, in contrast, are around 20 percent.

In other words, Germany, with 28.1 percent of the employed population with higher qualifications, can maintain one of the strongest economies in Europe and the world, because 60.5 percent of the employed population has very solid intermediate level qualifications. This reveals a high level of efficiency and productivity in its productive fabric and in its system of vocational training.

Therefore, the Spanish problem is not principally one of an excess of individuals with higher qualifications, but rather the incapacity of the system of training to encourage and produce primarily intermediate level qualifications, basically a result of the large number of young people that do not obtain a certificate of completion of compulsory secondary education, and that therefore, cannot continue studying.

TABLE 4.1

Employed population of 25 to 29 years of age by educational level and country

EDUCATIONAL LEVEL (ISCED 97)	EU-27	GERMANY	SPAIN	FRANCE	ITALY	UNITED KINGDOM
0-2	16.2	10.6	33.1	12.6	27.0	14.0
3-4	50.5	67.4	26.7	42.7	55.2	43.7
5-6	32.9	22.0	40.3	44.7	17.7	41.6

Source: Eurostat.

The sum of the population with intermediate and advanced level qualifications represents 76.7 percent of the total of the employed population in Europe, while in Spain this total is 57.6 percent of the employed population. The difference is found then, in this difference of almost 20 points. In other words, although there are a high percentage of persons with higher studies in Spain, the general skills level of the population is comparatively low.

Faced with this situation, as we saw above, companies have used manpower with higher degrees or certification (that which is available), instead of demanding a greater supply of manpower with intermediate level formal qualifications; this has given rise to an inefficient skills model and with resulting low productivity. However, it is necessary to qualify this last statement, given the spectacular leap the Spanish economy has made in the last 30 years, as probably the abundance of professionals with high learning capacity, propelled by their higher qualifications, explains at least in part, the capacity for adaptation to change and the growth that the Spanish economy and society has lived through during all these years.

In Spain, the change in the skills model has been made more difficult by the characteristics of what has been the dominant productive fabric up to now, which has a dual structure, with some highly competitive sectors in international markets and others of low productivity and very labour intensive that have played a leading role in the strong growth of recent years. The highly competitive sectors, when they need more skilled personnel, use manpower with advanced level qualifications, while the low productivity sectors do not need skilled labour and hire either young people leaving the educational system without any formal qualifications or immigrant labour which arrives without any recognized qualifications.

This situation has worked in the context of a surplus supply of labour, but since the beginning of this century the limitations and dangers of this model in a context of a disappearing surplus of labour in the labour market, due to population crisis and strong growth in employment have been confirmed. If the intention is to encourage a change in the productive model to one that is based more on the highly competitive sectors, the qualifications of the manpower available in the labour market would be a fundamental variable in its success. Clearly, in the Spanish labour market there is currently not a sufficient supply of qualified manpower to sustain a new period of employment growth if it is be based on skilled jobs.

The growth in manpower with formal qualifications cannot be based on the continuing growth of advanced level qualifications, which have already reached a certain level of saturation, but will rather have to be based on the growth of intermediate level qualifications, in other words, of the baccalaureate and the intermediate cycles of vocational training.

In response to the question about the level of adequacy of the vocational training system to the skills needs of the labour market two conclusions can be made in summary form. The first is the verification of a lack of individuals with intermediate level qualifications in the labour market, fruit of a mutual adaptation between a low demand for formal qualifications on the part of the productive system and the lack of supply from the training system. The factor that can aid in overcoming this limitation of the system of education and training is an improvement of results in compulsory secondary education which would lead to a substantial increase in the number of young people who accede to intermediate level training cycles. The second conclusion is that the system faces the challenge of improving the adequacy of the training offer to the needs of the labour market, through the introduction of measures that will allow for the adaptation of this offer to the changing conditions of the market. This is the issue that will be dealt with next.

The adequacy of the education and training offered to the needs of the market

The little specialization in initial vocational training has, as we have seen, both advantages and disadvantages. The behaviour of the Spanish labour market means that these disadvantages can be overcome with the closer involvement of business in the education and training offered.

A key aspect in this sense is the continual adaptation of content to the changes and evolution of the skills requirements of the productive fabric. To attain this better adaptation is not a question of trying to alter the current content, but instead of formalizing the process of adapting the skills needed to accede to employment, reducing it to the concrete needs of the job. This could have positive effects on both business productivity and on the working conditions of the newly hired.

This increased efficiency in the process of adaptation of content can be approached from different perspectives which will be explained below.

A first strategy could consist in increasing the period of on-the-job training for students in vocational training cycles and spread on-the-job training to all the vocational training programmes, both initial as well as employment training, with the aim being that students will have a longer period of apprenticeship in companies and can therefore acquire the competencies specific to a concrete job. For their part, businesses could provide specialization, based on their needs, to the students before their hiring.

A second option is the initiative of the Basque government with the programme «Ikasi eta Lan», through which they offer significant subsidies to companies that hire students while they are learning under conditions which permit them to combine study and work; in this way the programme facilitates a dual process for learning the competencies of the specific job. The evaluation of this programme and its possible establishment throughout the country would be an important change in the transition from traditional occupational training in Spain.

A third route could consist in bringing initial vocational training closer to occupational training, in a way that it would provide continuing training from a cycle of initial training plus an adaptation with an occupational module, in collaboration with a specific company with the aim of assuring the incorporation of the young person into the job. This option would require overcoming the institutional and administrative barriers that are delaying the establishment and spread of integrated vocational training centres, and in such a way that the centres could offer both subsystems of training and have a much closer relationship with employers.

In any case, all of these strategies necessitate a much closer relationship between companies and vocational training centres. To achieve this type of relationship the intermediary bodies between the business associations and trade unions will

have to be strengthened. These training centres and public institutions promote and coordinate the supply and demand for vocational training. The promotion of these types of collective bodies over possible individual interests, as direct providers of each component of training, would facilitate coordination on the ground of the training offered and its adequacy to the needs of business.

A fourth course of action consists in improving the vocational guidance that is offered to young people and their families. Young people choose their training specialty in function of many parameters, among which stand out perceptions about future professions. Thus, young people choose those specialties which they think provide more options and avoid those which they believe have no future. This perception is based on different sources, from stereotypes spread by the media and by public opinion, to experiences acquired in immediate circles, whether with family, friends or in the local environment.

The professions with little attraction because of their working conditions or their poor social image, or those that are perceived to have little future have serious difficulties in filling all the places in their respective training courses. That is how the reduced number of students in the textile family or in construction can be understood although the capacity for absorption on the part of the labour market is much greater than the number of young people who obtain the corresponding certificates. Improvement in guidance and in knowledge of the labour market on the part of young people and their families would permit a greater match between the supply and demand for training.

In fifth place, the real integration of occupational and continuing training in a single subsystem of continuing training, directed at both the unemployed and the employed would also aid in better matching supply and demand. In this sense, the high number of employed persons with low qualification levels constitutes an important challenge for the subsystem of continuing training, which now that it has gotten a significant number of participants needs to prioritize content which will improve individuals' skills in proportion to the direct needs of jobs or of professional expectations. This challenge is in total contradiction with the fact that companies do not spend all of the subsidies available to them for organizing training for their employees and is also in contradiction with the training that is imparted in companies, directed basically at improving attitudes instead of knowledge and skills.

In this way, one of the priorities of the subsystem of training for employment has to be getting adult workers with low levels of basic education, both unemployed and employed, to follow a programme of retraining that will complement their basic education and provide a solid base of training so that they can adapt to the technological and organizational changes which will occur in the coming years. This requires the design of specific training programmes for this collective, both in terms of content as well as methodology, and the application of a certification and recognition mechanism in the labour market that will make these programmes attractive. Returning again to the recourse of disregarding a complete generation with low skill levels by substituting it for a more educated and trained population of young people, as was done in the past, will not be possible in the future because of a lack of young people in the labour market. But, in addition, this solution is costly and socially unjustifiable in a society which has the tools and sufficient elements in its system of training to opt for the route of the retraining of the weakest collectives in the labour market.

Finally, the massive arrival of new immigrant workers raises a new challenge for their integration into the system of training. Immigrants also need their skills to be built upon a complete education at different levels plus a specific vocational training to avoid returning to the period when skills were constructed in the workplace without adequate levels of basic education.

In the coming years the children of immigrants will be entering secondary education. With all probability, if compulsory secondary education is not improved and cultural patterns related to education and integration into the labour market of the parents of these children not strikingly affected, the indicators for continuation of post-compulsory studies will not improve or will worsen. This would lead to the worst foreseeable scenario for promoting change in the Spanish productive model. In contrast, if secondary education improves and Spanish and immigrant youth continue studying after they complete compulsory education it would be the best opportunity to fill the existing skills gap. For this to happen something more than offering places in schools will be necessary: there will have to be an improvement in the quality of the teaching and the active involvement of the society to change the cultural patterns toward education and the integration of the new generations into the labour market.

The adequacy of the training supply to the needs of the productive system is more a question of the accessibility of training to new collectives and of institutional reforms in the area of the relationship between supply and demand than a question of changing content, which despite its importance is a comparatively minor issue.

It must be taken into account that in a scenario in which it will be necessary to mobilize a greater number of persons with intermediate and advanced level qualifications with the aim of giving impetus to a new productive model, the principal manpower reserves available are young people that did not finish compulsory secondary education, young people that are underemployed but with formal qualifications, women with qualifications, underemployed immigrants and adults with a lot of job experience but with low educational levels. The most rapid path, and surely the least costly, to generate higher qualifications levels and strengthen the adaptation of the system of training to the demands of the labour market is to introduce the necessary changes so that these collectives can participate in the system of training in a way which strengthens their position in the labour market.

V. Learning professional competencies

Today, the relationship between the educational and training systems and the labour market is based on competencies. In the developed countries in the 1980s, a major innovation was produced in the field of training with the reorganization of the educational and vocational training systems, until then constructed around the attainment of pedagogical objectives, into systems for the training of competencies understood as the learning of capacities and skills. From putting the emphasis on educational processes the systems are now prioritizing learning outcomes. This innovative conceptual change is one of the elements which have permitted all the training systems to evolve and adapt to the new social and economic conditions which have emerged in recent decades.

The concept of competency emerged in the 1960s, incorporating the objective evaluation of learning and the debate about linguistic competencies contributed by Chomsky's theories. The coincidence of the maturation of this concept in the educational field and the development of the concept in the field of human resources management transformed concepts about learning and the orientation of systems of training (Wynne, 1997).

5.1. From skills to competencies

Starting in the 1980s, diverse European countries, such as the United Kingdom and France, began to use the concept of competencies as the basis for a new way of managing the workforce called the «competency model» which introduced innovations with respect to the previous model of Fordist management (Kern, 1988; Boyer, 1998; Friedmann, 1964) of the organization

of production (Stroobants, 1993). Businesses began to follow practices which tended toward a management of the workforce based on personal capacities and skills. The aim was to mobilize the intelligence of the worker and in that way go beyond the systems of classification by categories which homogenize workers and which do not allow for the recognition of their personal capacities. The objective was to improve the management of workforce skills through the analysis of specific jobs, to flexibilise them in a context of changing technology and permit the recognition of the capacities of the individuals that occupy a specific job.

Before going into a definition of what is understood by competencies and dealing with some important implications of the debate around this concept, the changes in the organization of work facilitated by the appearance of a new way of understanding it based precisely on competencies, will be described.

Changes in the organization of work

Upheavals in world markets and technological innovations led to increased competitiveness and changing regulations in markets. This, combined with a new type of workforce with much higher levels of education, provoked a reaction in business strategies. As a consequence major transformations in the content of work emerged. The management of these effects, such as on internal communication and the spirit of service, required new aptitudes and attitudes at work.

With technology taking on many of the tasks of the worker, managing incidents has become one of the keys to productivity. The worker is no longer evaluated based on the execution of set tasks, but rather for his/her capacity to correctly resolve in the minimum time possible the incidents of all types that continue being produced in the productive process. In this context work transforms into the expert action of the individual in the face of incidents. It is the worker who has to mobilize his/her capacities, in relationship with other agents, to resolve the challenges that arise from unforeseen events. The initiative of the worker is key in this new work context (Zarifian, 1999).

This raises a new relationship with learning from experience. Seniority is no longer the principal source of experience, but rather the professional enrichment of having experienced and correctly solved incidents. In contrast,

routines constitute an important obstacle to the acquisition of this new type of experience. It is not only about having experienced incidents, but rather having «confronted» them, in other words, having analyzed their components in a critical and systematic manner, and having been capable of generating preventative action to anticipate new incidents. To do this requires both greater learning capacity as well as intellectual aptitudes, normally developed in educational systems.

In a situation in which there are many incidents, young people with higher education levels can learn more quickly than mature workers, accustomed to routines and traditionally excluded from the resolution of incidents in the framework of the Fordist model of the division of work.

In addition, although an information and communication system among the workforce that participates in the productive process has always been necessary, the function of communication as an essential element of work has only been recognized very recently. The Fordist organization mediated the internal communication of the organization in a system of vertical transmissions of orders or of pre-established criteria. However, the quality of interactions within the workforce was gaining in importance as a means to improve organizational performance. The interactions and communications within a work team, within a department, between different departments, between divisions and related departments, among different professionals, between the company and its clients or between the company and its suppliers are all essential to ensure the quality of the products and services or compliance with delivery deadlines (Stroobants, 1993).

In this context communication cannot be reduced to a simple «automatic» coordination of operations or a simple transference of information. An enriched conception of communication brings with it a new form of organization of work. The experiences of quality circles, of semi-autonomous groups or problem-solving groups follow this transformation of the concept of communication. It is not only a question of aptitudes for communication or a company's communication policy, but rather the organization of the process of communication upon which the organization of work and incidents management is based. But this reorganization requires specific communication aptitudes that previously had not been valued.

Finally, if under the Fordist conception work had been related to the concept of «producing» a good or service, work will later be progressively conceived as a service, apart from the process of terciarization of the developed economies. Whether in agriculture, industry or services, work means offering a service. The production of service is essential for modern production, it is what gives meaning and belonging to both the work and the worker. It is expected that the worker provides a service to the client, and this requires certain skills and attitudes that were not traditionally valued nor, therefore, did they form a part of the training process of the worker.

These transformations convert work into something less linear and less homogenous. Now direct communication from the supervisor to the subordinate is no longer necessary, as more time is dedicated to establishing criteria in coordinating meetings. Work is carried out more in teams, in networks and in structured form based on projects. Competitive success continues being assured collectively, but there is a greater involvement of the subjectivity of each individual. For this to work the new concepts of production require a new type of worker, more capable and disposed to mobilize his/her personal subjectivity (Iribarne, 1987). What are increasingly valued in the labour market are organizational capacities, capacities for communication, ability to work in teams and problem solving capacities. Aspects which before were considered to belong to the personal sphere of the individual are now integrated into what the employer expects the worker to contribute in the workplace. Young people that integrate into the labour market with more education and with a more individualized personal trajectory are more likely to have this new profile of personal competencies.

The strategy for human resources management will increasingly turn on how to mobilize the subjectivity of workers. As a result, new instruments, new techniques and new proposals will be necessary to motivate, define, recognize, reward and organize individual capacities. And it is here where the concept of competency or competencies appears most adequate for the construction of the new model for human resources management.

Although it has been a number of years since these transformations in work became widespread and consolidated, and though the discourse on competencies today dominates in human resources management, these changes are still of an unstable and ambivalent character. Perhaps this is because they have still

not matured sufficiently, or because there still does not exist a definitively established alternative model for the organization of production, or because the very characteristics of the changes, oriented toward a greater individualization and subjectivity of the organization, make it difficult to construct a single model and demand a more heterogeneous, more decentralized model, of greater prominence in business solutions, but more difficult to transfer and spread.

It is in the context of these transformations where the current popularity of the concept of competency and its application to the world of work and training has to be understood. Now is the moment to define what is understood by competency.

The concept of competency

Among specialists there is still not sufficient consensus over the standard definition of the term competencies (OECD, 2001; Rope, 1994). The reasons for this lack of consensus are diverse. In the first place, the different national systems of labour relations have generated concepts which are not always in agreement. Secondly, the difficulty of translating key concepts which are rooted in the culture of work in each country into other languages (the terms skill and competency have different meanings in Germany, France and the United Kingdom) does not help in achieving this consensus. In addition there is a lot of confusion related to the use of the concept of competency in the development of programmes, policy or mechanisms for training and professional mobility. Despite all this, in recent years a process of convergence over the concept can be observed as collaboration increases between international teams in the elaboration of European mechanisms related to competencies.

For the purposes of this study the concept developed at the end of the 1990s by the French author, Zarifian, has been used. He proposes an approach from various dimensions which is close to the concept as used in Spain (Zarifian, 1999).

- A first dimension conceives of competency as the initiative and the responsibility that individuals adopt before the professional situations that they face. This dimension places emphasis on the fact that it is individuals that accept, and therefore, take initiative and responsibility at work. Without this act of volition on the part of individuals success at work is not possible.

From this perspective, competency depends on individuals and on their willingness to mobilize their capacity to take initiative and the necessary responsibility to assure determined results.

This focus constituted an innovation with respect to the concept of skill: work conceived as an action that has to produce a desired result and not as a series of norms to execute. Now we no longer talk about a job but rather a professional situation before which the worker has to take responsibility and initiative. These situations are not totally foreseeable, and therefore, although the competencies necessary to properly deal with a particular situation can be defined, competency (in singular) can never be reduced to the sum of competencies (in plural).

Competencies (in plural) are understood as each one of the capacities that have to be mobilized in a particular professional situation. The lack of a correct understanding of the distinction between competency and competencies has caused the failure of many tools designed for the management of competencies and many training programmes. Competency has to be understood as the overall capacity of the individual to assure a particular result.

• A second dimension conceives competency as practical intelligence regarding situations, which is based on acquired knowledge which is transformed with the increasing diversity of situations. This dimension puts emphasis on what is mobilized and not on who is mobilized. It is a «practical intelligence», in other words, the capacity for an understanding of situations, which are transformed in turn, by the action of that same intelligence. This intelligence is based on knowledge, understood not only from a cognitive perspective but also comprehensively, as accumulated by a diversity of situations and not by repetition.

The acquisition of competency is through the experience of a diversity of situations which the individual comes to comprehend. This conception is much more interesting and contributes a more realistic and complete vision than that provided by the concept of skills, in the sense that it better defines the conditions and proportions in which both knowledge and practical experience are integrated. This way of conceiving the acquisition of competencies opened a heated debate, which has still not ended, about the function of the system of training. The system of

training not only has to develop the intelligence of students, but also their practical intelligence.

- The third dimension refers to the ability to mobilize networks of actors around the same situation, to share challenges and accept areas of co-responsibility. This third focus contributes the collective dimension inherent in all work processes. It is individuals who mobilize competencies, but the collective competency of a network of actors is required to achieve a satisfactory result. Work is no longer conceived as an individual action based on a relationship between a person, tool, machine and product, but is now understood as a collective relationship between a network of individuals who interact to achieve a particular result.

  However, in the context of labour relations, co-responsibility has its limits, and this is the aspect that currently has generated the most difficulty in the application of the competency model. Mutual distrust between workers and management constitutes one of the most significant obstacles for the development of the competency model.

  At the same time, co-responsibility is constructed in relation to a professional identity. This is one of the weak points of the competency model, as the skills model offered a clear professional identity through degrees and certification and professional categories. The competency model must also build a referent to professional identity without which it will be difficult to mobilize co-responsibility. Trying to supply this identity by a merely corporative relationship, which considers the worker as «practical intelligence joined to the corporate image of the company» is a weak solution, as can be seen in the instability of innovative experiences in the field of human resource management.

This way of understanding competencies sums up well the limits and the strengths and weaknesses of this new concept, and it permits us to understand the great number of elements which integrate it, some of which already formed part of the previous *status quo*, while others are truly innovative. Hence, it is not strange that the concept has generated controversy.

The competency model is, in fact, a rupture with respect to the institutional status quo of the qualification. But that it is a rupture does not mean that both concepts are antagonistic or that one is a substitute for the other (Pardaise, 1987).

In Spain, as was seen in earlier chapters, the debate about competencies coincided with the period of greatest development of the model of management of a skilled workforce in the 1980s. For this reason, the controversy that took place in other countries around both concepts was not as intense here in Spain, and they were both integrated into a single vision to improve the skills of workers and adapt the system of training to the emerging needs of the productive system. The lack of a tradition of the concept of skills helped in conceiving competencies as a new strategy to improve the skills of workers. In addition, the concept came from Europe, where the message on the need to invest in vocational training also came from.

The concepts of skills and competencies, as ways of designating human capacities at work or the requirements of a profession, should always be used in a complementary manner. The fact that currently more accent is placed on competencies should not negate the importance of skills. Skills better express the professional potential of an individual, while competencies, in contrast, better express the capacity to achieve particular professional results.

Both concepts are complementary although certainly we must avoid any confusion between the two. A potential skill without practical competence makes no sense, although it is possible for a person to be sufficiently prepared for a task or professional function, but not capable or not wanting to mobilize this capacity before a particular professional challenge; thus the individual would not acquire the necessary competence. In contrast, in the opposite situation the complementary nature of the two concepts is clearer. It is necessary for a competent person to be skilled, in other words, to have the skill necessary. Competence cannot be improvised, it is not intuition, but rather requires a systematic preparation. From this perspective it could be said that competence includes skill.

Competence could also be defined as the mobilization of skill, adding to skill the capacity to obtain determined results (Homs, 2002). Competence is what gives significance to skills, what they should approach, and skills are necessary to achieve competence. Skills put the emphasis on the preparation of a person to complete a task, without a specific focus on the result. In contrast, competence puts the emphasis on the result without a focus on how the necessary skills were acquired. Putting emphasis on one or the other concept should not make us forget the necessary complementarity of both concepts in achieving the professionalism of the worker.

Today it is completely inconceivable that professional competency could be built basically on experience without prior systematic training, as was done under the earlier model of unskilled workforce management, which was dominant in Spain until the 1980s.

Something very different is to re-evaluate what has been learned through experience as constitutive elements of competencies, and re-evaluate work as a source of learning. Systemic theories applied to work provide a new dimension on how adults and organizations learn. The new concepts of learning organizations, intelligent organizations, learning process, etc. began a new debate in the 1990s which is still going on and which has accompanied training systems as they transform into systems of lifelong learning (Argyris, 1992).

The impact of the debate on competencies

The debate over new concepts which the focus on competencies conveyed, despite initial sceptical perspectives, became part of the field of vocational training when, in the United Kingdom during the Margaret Thatcher government, a system of vocational training was constructed based on competencies which was in turn adopted by European authorities in their discourse.

The debate about competencies was structured from various perspectives. First, and from the perspective of training, the progressive acceleration of technological innovations, especially in the field of new communications technologies and their influence on other sectors, motivated the need to renovate the content of vocational training. Secondly, the spread of basic secondary education in Europe to the great majority in the new generations required the adaptation of educational systems. Almost all the countries of Europe initiated reforms of their systems and the upgrading of vocational training. In Spain, this period coincided with the debates over the LOGSE. Finally, the application of systemic theories and constructivism in pedagogy (Coll, 1991) contributed to rethinking curricular development on a broader basis than the simple transference of knowledge, putting an emphasis on aptitudes, attitudes and values.

This vision of learning connected better with the approach on competencies, which permitted addressing learning, which was still too dependent on academic

knowledge, from a more dynamic perspective. The importance conceded to curriculum development in the LOGSE reform (Coll, 1986) provides a good example of this change of concepts.

In order to facilitate the integration of new graduates into the labour market, particularly in the context of increasing unemployment, it has been important to look for ways to better adapt training to the requirements of the working world. One solution to this problem has been found in competencies, which help adapt training to the demands of the labour market and at the same time, provide an explanation for difficulties integrating into the labour market.

The offer of a complementary occupational training, directed at the acquisition of the competencies that the educational system had not offered, came to form part of all employment policies in the different European countries. In Spain, the FIP Plan completed this mission in part, offering occupational training to individuals that had left the educational system so that they could adapt to the specific needs of the labour market. For new generations, the demand for competencies was perceived as an additional obstacle added to the long years of training before they could gain access to skilled work.

This debate about competencies has had a significant impact on many aspects that shape the labour market, from the hiring of personnel and management of human resources to collective bargaining processes.

In the hiring process, in a period of surplus manpower with, to a great extent, certified qualifications, the possession of a diploma has stopped being a sufficient qualification for employment. Under much more demanding hiring procedures, diplomas play a role of discriminating educational levels and capacities, but lose force as a demonstration of specific knowledge. The possession of a degree or diploma does not assure the company that the individual will make a good professional. Companies no longer ask for prepared individuals. Such individuals can be easily found in the labour market. What they are looking for are «competent» individuals, in other words, individuals who have sufficiently demonstrate the capacity to solve problems in competitive conditions and that are prepared to deal with the «eventualities» of the workplace.

On the part of the worker, hiring based on competencies was perceived with a certain frustration as it devalued the effort made in training to acquire a formal qualification which, subsequently, was only demanded as a necessary

but not sufficient condition, given that the final criteria to get a job followed reasons that seemed subjective and for which there was no instrument for certification.

From the perspective of human resources management, the introduction of competencies as criteria for management meant an important change in mentality by breaking the relationship between training, workplace, category, seniority and wages. Young workers found in competencies an opportunity to see their greater capacity for learning and adaptation to change recognized. In contrast, older workers, with lower levels of initial training, saw competencies as a threat that left them helpless in relation to the traditional elements in defence of their qualifications: position, occupational status and seniority.

In addition, competencies put emphasis on certain elements of professionalism which until that time had been ignored and which workers had become accustomed to not developing or to negotiating over in exchange for better wages. Competencies were now demanded from workers as elements of professionalism without any changes in wages. Young workers, in contrast, without a previous Fordist experience, were more predisposed to incorporate competencies into the capacities they offered in exchange for the agreed upon salary, though it must be taken into account that conditions in the labour market did not leave them much room for negotiation.

In regards to collective bargaining, the position of trade unions has been ambiguous. On the one hand, the competency model is based on human capacities and therefore it offered an opportunity for the trade unions to see the totality of the contribution of workers in their professional tasks finally recognized. On the other hand, they were mistrustful of a model which reinforced the tendency toward the individualization of labour relations and took importance away from the trade union role in collective bargaining.

The competency model broke the *status quo* of formal qualifications in companies and forced a renegotiation of the recognition of the contents of work, which not only included the relationship of the worker with the company, but also relations among workers, something which always produces tensions with trade union representation as well as in the relationship of workers with their representatives. This is the reason for those lengthy periods of discussion

and negotiation over the new systems for the regulation of competencies in Spanish businesses. An example of this was the delay that was produced in the updating of employment categories, which finally had to be imposed be setting a deadline to force the social interlocutors to come to an agreement.

As can be seen, the debate was intense and passionate and still drags on in some academic areas, in which some authors warn about the risk of greater inequalities in the labour market and the lack of equal opportunities (Marín Artiles, 2005; Guerrero Serón, 2005; Crouch, 2001). In the end, what is the contribution of the competencies approach?

5.2. Learning competencies

The debate about competencies in the management of human resources has involved an examination of the educational system and training strategies, and has coincided with the evolution of the same concept in the educational field, applied above all to the evaluation of what is learned and subsequently in the definition and organization of learning processes.

The application of the concept of competencies to both the workplace and to education has led to prioritizing results over processes in both the educational and well as working sphere. This has generated a profound change in educational systems and controversy among different models.

The application of competencies to training

The liberal English model took the lead in the debate with the organization of a system of vocational training based on National Vocational Qualifications (NVQ), in other words, on the certification of professional competencies regardless of the process involved in their acquisition. The more school-based systems, such as those of France, Italy or Spain, adapted to this new concept, seeing in competencies an opportunity to better adapt their training systems to the changing demands of the labour market. Finally, the dual systems, such as Germany, have incorporated the concept, though not without certain resistance, because in their conception of training based on learning through apprenticeship, process and result practically coincide and, therefore, it is difficult to evaluate the innovative contribution of the competencies approach.

The application of the competencies approach to vocational training has also meant an important transformation of systems of vocational training with respect to the definition of the content of training, the form of organizing training and its evaluation.

Replacing training content, through the substitution of the themes which define the educational objectives, for training in competencies implies a process, not without contradictions and debates, which the different European systems of vocational training are carrying out at various speeds. In the Spanish case, the certifications corresponding to the intermediate and advanced training cycles are associated to professional competencies that students have to command upon finishing their studies, but the curricula of certificates are still described in function of the subject matter of the content.

The National Institute of Qualifications (INCUAL) has gone a step further in this sense through the definition, in the framework of the National Catalogue of Professional Qualifications, of training modules for each competence unit that forms a qualification. The modules are defined by capacities and criteria for the evaluation of these capacities, which will facilitate the work of the Ministry of Education, Social Policy and Sport when the vocational training certificates are upgraded based on competencies.

The redefinition of training content in terms of competencies is a complex task which requires the participation of experts trained to identify the competencies necessary in order to carry out particular professional functions. The identification, training and mobilization of experts for each one of the qualifications requires time, effort and considerable organizational capacities. Most of the educational systems in Europe are working on this now.

This process is reinforcing the orientation of vocational training toward the labour market, and the collaboration between professionals and experts in training contributes to a closer relationship between training and the productive and economic fabric. In fact, one of the most valuable aspects in the elaboration of benchmarks for the competencies in each country is the immense field work that has to be carried out. As a result of this effort, there is improved identification of training needs, a greater number of technicians, experts and trainers trained in this methodology and the learning of competencies in the field of training and in companies has managed to spread.

Typologies of competencies

The elaboration of a methodology to detect competencies requires a prior definition of concepts and taxonomies of competencies with the aim of being able to identify them in professional contexts. There is no consolidated consensus on a general taxonomy of competencies. In general, each body creates its own classification in function of the aim of its methodology and the aspects which are considered to be priorities. Thus, diverse classifications can be found with different structures which can create some confusion, as similar criteria are sometimes used to describe different groups of competencies.

Core competencies or basic competencies are the names that tend to be used to define the group of competencies not specific to a concrete job, but which are important in defining the competence demanded by the labour market. These terms tend to refer to generic competencies of an elementary character, fundamental for personal realization and social integration, as well as for an active citizenry and employment.

For example, the European Union, as we have seen in previous chapters, has defined eight basic competencies for lifelong learning which each individual will have to dominate in a knowledge based society and which provide great flexibility to the workforce so that it can adapt more rapidly to the constant evolution of a world characterized by increasing interconnection. Along the same lines, the OECD has launched the Programme for the International Assessment of Adult Competences (PIAAC) to evaluate the competencies of adults, following the example of their now known PISA programme which evaluated the learning outcomes of 15 year old students.

The name of **social or transversal competencies** is reserved for that group of competencies of a personal nature which are related to the capacity individuals have to communicate, take initiative, work in a team or resolve problems. These aptitudes are also generic and common to many types of professional functions and are related to the requirements that the new organization of work demands, as was explained above. The intention is for training programs to teach these competencies alongside of the specific or technical competencies of the different professions.

Technical or specific competencies tend to be reserved for defining the group of capacities directly related with a productive or service function of a particular profession.

In a more traditional way, there exists a general agreement to classify competencies according to their relationship to «knowing» (or knowledge), «knowing how» (or aptitudes) and «knowing how to be» (or attitudes) (CEREQ, 2001). However, the British and Irish, with their own concepts, difficult to translate to other languages, have managed to influence the concepts used in the European Qualifications Framework (EQF) to classify European qualifications in such a manner that this system does not follow the previous criteria for classification of a more French influence. The EQF, as was seen in previous chapters, is constructed on what the English have baptized with the acronym KSC *(knowledge, skills and competencies)*. This innovation has led to some confusion between the concept of competencies reduced to attitudes (basically of responsibility and autonomy), and competency understood comprehensively as the capacity to mobilize KSC (knowledge, skills and competencies).

Even so, these differences are seen more in the sphere of specialists and academics than in common use, as in common usage an agreement persists to understand competencies as the totality of knowledge, skills and attitudes.

Measuring competencies

The principal practical problem from the focus on competencies is their measurement, as by definition competencies refer to observable results and therefore the context in which it is possible to evaluate the mobilization of competencies which an individual claims to possess for the execution of a particular task has to be defined. This has led to changes in the conception of the evaluation of education and training, up to now based on classic written exams. The focus on competencies instead requires using practical exams, where an evaluator can confirm the capacities in action of the individual. This can be through some combination of demonstrations of performance, evidence of past experience, tests of skills, simulation exercises, realization of projects or particular tasks, etc. These methods are costly and require mobilizing a great deal of human and organizational resources.

In the professional sphere, things are even more complicated as verification requires observation in the context of the exercise of the tasks of the profession so that the capability of the individual to mobilize professional competencies can be confirmed. Some business sectors argue that the certification of the professional competencies of an individual can only be carried out within the firm and by the firm, or that in any case it must be professional bodies which certify the acquisition of competencies, and not training bodies that are distant from professional practice.

This raises the problem of the transference of competencies from a concrete workplace to the global labour market and control of the processes for the evaluation of competencies, and the general validity of the competencies of an individual. Trade unions and public agencies, in contrast to business, generally defend more comprehensive and institutional mechanisms.

In addition, the loss of competencies is also an issue, as not using them reduces the capacity of the individual to mobilize them at a given moment, in addition individuals need to keep their competencies up to date with technological changes or innovations in their specific field.

The adaptation of training systems to competencies.

The introduction of the competency system to initial training is evolving more slowly than was expected because of the weight of tradition in the classical organization of training. In fact, in many cases the only change has been in terminology with little impact on the real organization of what is learned; this has been the case up to now in Spain. Despite this, the depth of the transformations from this change in paradigm should not be underestimated and therefore certain difficulties caused by this innovation are to be expected.

The classic vocational training systems are prepared, above all, to transmit knowledge, whether cognitive or practical. The British, Irish and German systems tend more toward transmitting practical knowledge in vocational training, while the «Latin» systems, in contrast, tend to give greater importance to theoretical knowledge. However, the fundamental question that the incorporation of the perspective of competencies raises for systems of vocational training, above all in the more Latin conception, is: how is the training of professional skills and attitudes to be organized in a training centre?

The learning of competencies is an action closer to the English concept of *training* than to the classic concept of vocational training as transmission of knowledge. It is the development of the capacities of individuals, in as real a context as possible, so that they can execute the competencies demanded in the exercise of a profession or trade. This is a radical change in the organization of vocational education and training and means, at minimum, the introduction of several key elements: One is the need for a space as close as possible to the real context of production to train competencies. Another is changing the learning process to transform it into a new cycle which includes the elements of knowledge necessary to analyze and interpret work situations, knowledge of methodologies to resolve them and the development of the capacities to do so. In addition the system will have to evaluate the results under the conditions demanded by quality of service criteria, correct errors and extract the successful teachings necessary for the next time. All these elements imply recognizing that the training system cannot take on this transformation in an isolated manner and needs the participation of and integration with the productive system.

Converting the training centres into centres for the training of competencies will require much deeper transformations in training systems. On the one hand, it demands business opening spaces for learning competencies within workplaces and this, in turn means greater efforts than just collaboration in the realization of training practices; on the other hand, it will also necessitate the regulation of this new area of labour relations, with much more interest and a view toward the future than that shown up to now on the part of trade unions and business.

The Anglo-Saxon and Germanic systems are much more accustomed to this collaboration between the systems of training and production. While in France and Italy, for example, attempts to generalize work-linked training have had good results but still have a long way to go so that this collaboration is coordinated within a process for learning competencies which is really complementary and integrated. The Spanish experience of training in the workplace is very valuable and could serve as a reference for a closer and more valuable collaboration.

Training centres will have to change a lot to become training spaces with personalized programmes for the acquisition of competencies. The teaching

staff will also have to adapt to this new situation, playing a role much closer to that of trainer rather than that of classic teacher. In addition, companies will have to change the concepts of training, as not all professional experiences generate competencies. The fact that the aptitudes of an important segment of the workforce have become obsolete after many years of repeating the same activity is proof of this statement. A special productive context is necessary, oriented toward the development of competencies, so that individuals can be trained in the most productive manner.

The application of intelligence in work situations and the development of «knowing how to act» can only appear in a context that is rich from an organizational perspective and which facilitates the worker discovering and understanding production situations and in this way broadening his/her knowledge and abilities.

The acquisition of competencies is not only a question of «human qualities». As has been mentioned, it is a «social construction» which cannot be developed without the existence of places and times for training, and opportunities to exercise and reflect on actions. These places and times are not produced exclusively within the workplace: social life in general, also offers training spaces. Voluntary initiatives, participation in public activities or in social organizations also facilitate the acquisition of competencies which have value in the labour market. Some measures to promote employment in the United Kingdom and France in the 1990s were examples of ways to take advantage of participation in activities of a social character to train competencies recognized in the labour market.

For their part, vocational training centres will have to accept that what is to be learned is not only acquired in the training centre and then later applied as mere practice on the job, but rather that work is also a source for the learning of competencies of equal value to those acquired at a training centre.

The competency approach opens the debate about the value of degrees and diplomas to certify competencies. In a context of the generalization of certificates, degrees and diplomas with the increase in the educational level of the population and because of rapid technological evolution, these «pieces of paper» lose their value as instruments to certify the capacities of an individual to perform a determined profession.

On one hand, if the accent is placed on results, the competency model tends to establish a separation between learning outcomes and the process of their acquisition, when traditionally degrees, diplomas and certificates are the end result of the training process. Faced with this situation, training systems have tended to react with openness to the competency model but maintaining their privileged function of providing accreditation and certification. If this openness is merely formal and limited only to terminology, without assuring a real learning of competencies (the limitations that appear in the current structure of systems of training have already been mentioned), the tensions between the acquisition of competencies through educational paths or through other paths will not be resolved and the pressure to develop systems for the certification of competencies outside of the training systems will continue to exist.

On the other hand, however, it is also clear that a weakening of the function of degrees and certificates, which constitute the foundation of the current system for the institutionalization of qualifications, would be troubling because it would discourage individuals from training. This would have serious consequences on the educational level of the population and, ultimately, on the competency of the workforce.

As we will see, this is one of the key issues for the development of lifelong training systems. The institutionalization, from a global perspective, of the new competency model is still an open question.

In addition, the competency approach has generated a process of change in the field of vocational training of great interest and reach, which has enabled important innovations, such as, the push for programmes of work-linked training, the reassessment of work as a source of learning, the creation of modules and flexibility in training and the promotion of the recognition of non-formal and informal training. Possibly the most important contribution of the focus on competency is its contribution to the transformation of initial training systems into lifelong vocational training systems. This issue will be dealt with in the next chapter.

VI. Lifelong learning

Lifelong learning is one of the most repeated messages in recent decades with the aim of raising the consciousness of the population over the necessity to constantly update competencies and knowledge. The European Union designated 1996 as the European Year of Lifelong Learning.

The concept of lifelong training has a long history in education. However, in the past it was a separate subsystem of initial training; it had a complementary function and revolved around the upgrading of knowledge or retraining of capacities in the case of a change of occupation. In the countries of northern Europe, the concept also covered the training of adults. But the prominence that it has acquired as processes of innovation and technical change have accelerated have converted lifelong training into a central element in vocational education and training strategies (Descy, 2002).

Currently the intention is that participation in activities of lifelong training not be a reaction to the need to adapt to job or professional career changes, but rather be a way of maintaining learning capacities even when not directly related to professional perspectives. The reduction of working time, the advance of retirement age and the higher educational level of the population has also contributed to the development of this prospect raised throughout a person's life.

In addition, currently lifelong training is understood as a continuum, which integrates initial training from the first stages of primary education until adult training, and not as a complementary separate subsystem.

Lifelong training raises two basic challenges: training «at all times» and training «for everyone». In other words, it is not simply a question of facilitating continuing learning during the whole life of a person, but also its availability to the maximum number of persons. Training expands in time and space for

everyone and at any time. As will be explained in the next chapter, without a population that is highly trained and always up to date it is impossible for a developed knowledge society to remain cohesive.

6.1. The adaptation of systems of initial training

The transformation of systems of initial training to adapt to the growing demand for lifelong training is, together with the competencies approach, the factor which has most driven innovation and evolution in educational and training systems. And as with the case of competencies, the message has come at the hands of the European Union.

In the year 2000 the European Commission published A Memorandum on Lifelong Learning (Memorandum 2000) which was submitted to debate in subsequent months and which concluded with a Communication from the European Council in 2001 which called for the creation of a European area for lifelong learning. The Memorandum raised six key messages that summarize the European conception of the issue:

- guarantee universal and continuing access to learning for **gaining and renewing the skills** needed for sustained participation in the knowledge society;
- visibly **raise levels of investment** in human resources in order to place priority on Europe's most important asset – its people;
- develop effective **teaching and learning methods** and contexts for the continuum of lifelong and lifewide learning;
- significantly improve the ways in which learning **participation and outcomes** are **understood and appreciated**, particularly non-formal and informal learning;
- ensure that everyone can easily access good quality **information and advice** about learning opportunities throughout Europe and throughout their lives;
- **provide lifelong learning** opportunities **as close to learners as possible,** in their own communities and supported through ICT-based facilities wherever appropriate. (http://www.bologna-berlin2003.de/pdf/MemorandumEng.pdf)

The memorandum transmits the concept of a systemic vision of the overall apparatus of training open at any time to the population. This vision is still very far from reality in the majority of European countries, but it provides guidance for the evolution of these systems. In reality, the majority of systems have a subsystem of initial training, basically still oriented to the training of young people before their incorporation into the labour market but slowly opening to other collectives, together with a subsystem for continuing training, not always connected with initial training but generally connected with the productive world and a subsystem of adult training which in many cases still revolves around helping individuals finish basic education.

Aside from these three subsystems there exist a wide number of training programmes of all types, normally largely unregulated and with little recognition, and which deal with a great variety of themes, from general knowledge, in many cases directed at the senior population, to issues of personal development or skills related to leisure and culture. Although found at the periphery of any systemic approach, informal training must also be mentioned, in other words, those things we learn essentially through life experience.

Integrating all these elements in a joint system is an ambitious project which requires time, resources and a strong dose of political will at both the national and European level if the intention is that these comprehensive systems are to be connected to each other.

The evolution of the national systems

For now, the evolution that we are seeing in the national systems revolves around four focal points:

- A first focal point is making initial training more flexible and open to broader and older collectives, basically by recognizing experience in the process of obtaining initial education and vocational training certificates. France has advanced considerably in this direction, even in regards to access to university degrees.
- A second point of evolution is the access of adults to initial training certificates through training modules integrated into a general framework of lifelong training. The Scandinavian countries are pioneers in this trend, especially Denmark.

- A third more widespread focal point in almost all European countries, thanks to the European Qualifications Framework (EQF), consists in the establishment of national qualifications frameworks, fundamental for coordination between the different subsystems.
- Finally, a fourth point is the recognition of non-formal and informal training.

From a European perspective, today we see the acceleration of reform processes at both national and European levels which are advancing, though at different rhythms and with different characteristics, toward shared objectives and criteria. In the Spanish case, as was seen in previous chapters, the most recent changes are in this same direction. In this sense, three advances stand out: the development of the National Catalogue of Professional Qualifications, which has become established as the Spanish framework for qualifications; the modular flexibilisation of initial vocational training to facilitate access of persons coming directly from the labour market without the appropriate academic degrees or certification; and the integration of occupational and continuing training in a single subsystem with a vision for lifelong training. There remain three pending issues; the recognition of non-formal and informal training, dependent on the finalization of the Catalogue and the definition of a mechanism for the recognition of professional experience; the integration of the barely developed adult education into a more general plan for continuing training; and the integration of initial training and training for employment, announced many times but currently still pending (IFES, 2005).

The opening of systems of training to access at any time and to anyone means introducing criteria adapted to the possibilities and characteristics of a much wider and heterogeneous grouping of persons. Three of these criteria have to be highlighted as a result: the extended scheduling of training – based on the time adults have available for training and when; the autonomy of the adult – to define what is to be learned and to construct his/her own training trajectory; and the diversity and quality of training offered – so that it may be of interest to the broader population, recognizing the diversity of existing interests and situations.

The first two criteria can be met if the learning process is through «modules» so that learning can be acquired over an extended period of time and through a

combination of modules self-constructed by the adult, who becomes the great protagonist of the process. Both these criteria imply significant change in the current situation.

Credit systems can provide this change, and although they have a long history in educational systems (Tiana, 2002) they have never played the role that they currently do. The certification of credits and their possible accumulation makes it possible to «visualize» much learning which might otherwise end up unrecognized, requiring the re-initiation of training.

However, credit systems also raise questions that have to be dealt with. For example, the partial certification of credits could reduce motivation to obtain a complete qualification recognized by a certificate, which up to now is what has sustained professional identity and the recognition of positions in the labour market. Therefore, the system of credits based on modules which teach competencies must not be in detriment to the value of certifications, at least not until an alternative system of recognition and assessment of professional positions in the labour market has been consolidated.

In addition, the distribution over time of what is learned also raises the question of the validity of the credits. Is it acceptable that a person can obtain credits toward a particular certificate for activities done 15 or 20 years ago? Should a time limit on learning and credits be included or is it only necessary to introduce a date of acquisition on certificates and leave the market to make the assessment? Surely, an expiration date for credits would create pressure to update training, but at the same time it would also generate a lot of uncertainties and a lack of protection of the professional positions of many individuals.

Autonomy and flexibility are two of the characteristics that systems of lifelong training have to offer. However, for this to be feasible another element is necessary: ease of access to learning. This means having the conditions and time available. Promoting the universalisation of access to learning for everyone requires two premises:

- An easily identifiable offer, of quality, close to individuals and without obstacles to access.
- A population motivated to be educated and which has the resources and lives under adequate conditions to dedicate time and energy to training.

With respect to the first of these premises, in the Spanish case, although the principal sources of information about training activities are relatively known (centres for initial vocational training, the employment offices of INEM or the offices of public employment services of the autonomous regions, as well as businesses and social partners) and have extensive territorial coverage, the lack of coordination between the sources mentioned and the absence of clear references for the overall system means that there are still too many persons that do not know about the existing training mechanisms or how to access them.

The conception of a lifelong training system requires a strong system of guidance, open to everyone and of high quality, which can really give support informing and advising individuals with methodologically effective tools so that they can make adequate decisions on matters of training. This guidance system will have to be as close to the public as possible. Therefore, local governments should play a key role in providing this service or, at minimum, in its coordination.

The issue today is not so much the dispersion of guidance mechanisms, but rather their lack of coordination. This has consequences for the quality of the mechanisms, as faced with the complexity of the labour market and the diversity of offers and needs, some very costly instruments for observation, information and feedback of these same mechanisms are necessary, and no single guidance mechanism alone has the capacity to provide them. Modern information and communication technologies are still not sufficiently utilized to create easily accessible networks of information and guidance for the public. In this field, there is still a lot of ground to cover, from Internet, to cellular phones or more traditional radio and television media.

With respect to the second premise, not all the population has the same motivation, or the same conditions or resources to be educated. In Europe, and also in Spain, the existence of great differences in access to training for different groups can be verified. Although differences based on gender are being reduced and in some cases women are even more likely than men to accede to training, other groups such as older persons, those that have low educational levels, those that work in unskilled jobs, immigrants or ethnic minorities, those that live far from large urban or industrial centres, or those collectives with difficulties integrating into the labour market tend to have the

lowest levels of training. The European Union and other international bodies such as the ILO have warned of the necessity of improving effectiveness, but above all of increasing equity in the systems of lifelong training.

In 2006, the European Commission emitted a Communication about efficiency and equity in European systems of education and vocational training, in which it insisted on the need to reduce existing inequalities in access to vocational training and in its results in order to face Europe's economic and social challenges (Communicación, 2006). Low-skilled individuals are increasingly facing unemployment and social exclusion. In 2004, 75 million EU citizens were low-skilled, which is 32 percent of the workforce.

In addition, the Communication argued that education and training policies can have a very positive impact on economic and social results, as well as on sustainable development and social cohesion, above all if they address inequalities in matters of education and training, which have enormous hidden costs that are not reflected in public accounts. These policies have, without a doubt, a cost, but the price of inaction and of the high rate of student failure is even greater. In the United States, the average cost to society for a person of 18 years of age who drops out of school is estimated at 350,000 euros over the course of his/her life. This calculation includes losses on taxes on income, an increase in the demand on the health care system and public welfare, and a higher rate of crime and delinquency. In the United Kingdom, it was calculated that if 1 percent more of the active population had completed compulsory secondary education, the benefits to the country would be about 665 million pounds annually, thanks to the decrease in crime and increase in income.

The European Commission asks member states to take the criteria of efficiency and equity into account in reforming their educational and vocational training systems, and to apply a comprehensive vision of the whole system, from elementary to university education, passing through adult education and lifelong training. In Spain, the funds for the so-called complementary actions for continuing training, which, as has been seen in a previous chapter, suffer serious problems in their management, could be spent much more efficiently promoting equal opportunities for access to training and to finance guidance mechanisms.

Participation in training not only depends on the willingness of individuals but also on the conditions and availability of time. Therefore, participation is an issue which involves other areas of life, such as work, social and family life. Convincing companies to dedicate more effort to training and offer more time for training to their employees, getting workers to dedicate more personal time to training without waiting for the company to offer it, complementing aid programmes to vulnerable groups with training programmes or developing strategies that facilitate the compatibility of work with personal and family life constitute ways of promoting equality of opportunity in this field.(1)

Conceiving education and training in a broader way, as a right to lifelong training recognized by international bodies and spreading its real application is one of the achievements that would favour the universal extension of lifelong training. Recommendation number 195 of the ILO from 2004 moves in this direction, as it states that education and training is everyone's right and recommends that governments, in collaboration with social interlocutors, make the effort to assure everyone has access to lifelong learning.

Social and economic partners have a long road before them, incorporating training in a more decided and innovative manner into labour relations through collective bargaining. The Spanish experience from the renovation of bilateral agreements between business associations and trade unions on continuing training, which have provided such good results up until now, will have to be given a boost with new initiatives that address the efficiency and equity of the system and expand the potential of lifelong training to all areas of life.

The structuring of work time as a period for training requires innovative experimentation that should count on the support of public programmes, for example, through complementary actions or within the framework of programmes for aid to R&D, as they are ways of strengthening the intangible competitiveness of businesses. In some countries, such as Norway and Germany, programmes exist which encourage innovation on matters of human resources within companies.

(1) For more information about the characteristics of training companies in Spain see MTAS, 2008.

Centres for lifelong training

A system of lifelong training, as has been presented up until now, implies a concept of vocational training centres as open spaces, dedicated to promoting learning for a wide segment of the population with diverse interests and offering multidimensional resources for learning. However, today, in general the classic isolated centres dominate, specializing in limited offers of training or offers destined to a specific population, and following very academic guidelines in a school-based model for the transmission of learning and relations with students. These centres, in the best of cases, have antiquated material and installations. In the Spanish case, this classic type of centre only exists for initial vocational training, as in the rest of the system classrooms dominate more that training centres.

Thus, the adaptation of vocational training centres to the concept of lifelong training requires important changes in their composition, functioning and regulation. The transformation of current centres into comprehensive centres, as pointed out in previous chapters, will constitute a great advance in both the integration of the subsystems of initial and continuing training and in their future evolution toward an open system of lifelong learning. This continues being the urgent and necessary first step to overcome the current limitations of public vocational training centres and to advance in this direction.

The creation of comprehensive centres will also offer a solution to another problem that has been raised in describing the Spanish system of training: the lack of consistent and well equipped centres to impart continuing training, especially for technological specialties. Having this type of centre would permit a better response to the needs of businesses in technological fields for continuing training. Currently, this important dimension of continuing training is directly covered by the very providers of the technology, but the result is training limited to the functioning of specific machinery, and therefore, largely not transferable and not likely to result in a recognized qualification. If we add to this the low educational level of the employed population, the result is even more preoccupying, as it means workers with limited qualifications that are likely to become out of date and problems adapting to technological change.

That comprehensive centres could provide continuing training *a la carte* in accordance with the demands of businesses would contribute enormously to strengthening the relationship between training centres and businesses, improving the quality of the training offered and meeting a demand that is currently not met or only partially so. The best practices of the Instituto de Máquina-Herramienta of Elgoibar in the Basque Country (www.imh.es) or the Fundación Lacetània in Manresa in Catalonia (www.fundaciolacetania.org), to cite only two examples, demonstrate the possibilities of this idea.

The persistence of state centres with sectoral focus with ambiguous and unclear functions does not help in generating the consensus needed between autonomous communities and central state government to integrate the centres of sectoral dimension in a network, whose continuance on the state level is only justified on rare occasions and only in very specific sectors. Each autonomous community would have to have its centres for the most important sectors in its territory, which would play a role as motor for technological innovation. Connecting all of these centres of sectoral character in a network would generate a wealth of innovation much more potent than that from the bureaucratized state centres which currently exist.

In addition, the regulation of comprehensive centres has not addressed another key issue for the future of vocational training centres: their autonomy. If this is a weak point in the whole Spanish educational system, it is even more so in the area of vocational training. Currently, without the capacity to contract the experts and teaching staff necessary, it is difficult for a centre to have the agility and flexibility necessary to program the training activities they see as necessary in their productive environment or which businesses or local entities formulate. Without the autonomy necessary the centres do not have the capacity to carry out the training programming, acquire the material and facilities necessary, bill (and not only receive subsidies) and offer their services within the economic fabric in their area of influence.

In these conditions, it is difficult for public vocational training centres to complete their assigned functions effectively. The orientation and adaptation of vocational training to the needs of the labour market is compromised because of the rigidity in the functioning and management of these centres

which constitute the backbone of the whole system. The centres become mere executors of a centrally planned offer of training which, added to institutional inertia, evidently limits the necessary adaptation of training to the demands of the labour market.

As long as the vocational training centres cannot autonomously plan their training offer according to local needs and independently acquire the human resources (teaching staff) and material (investments, machinery, etc.) needed to carry out their work and act in the open training market, the evolution of the Spanish system toward lifelong training will remain blocked on this point. The evidence of the advantages of autonomy is demonstrated in the successes of the experimental and innovative formulas that have been tested in some centres, in addition to the results from the network of comprehensive centres in the Basque Country.

One of the reasons for the limitations of comprehensive centres is the clash of this conception of the autonomy of vocational training centres with many aspects of their regulation. But this is not a problem of a technical character, but rather one of the political will to confront a delicate issue with important repercussions, which can have effects on other important areas and on the dynamic of the social dialogue.

In a period in which the welfare state has formed new regulatory structures to manage interventions and public services with more agility in protected areas of the market economy, the autonomy of vocational training centres does not appear as a technical problem. Entities such as the consortiums or public foundations could resolve the most important aspects of this debate quite simply.

When the European Union insistently demands that member states take on far reaching reforms to accelerate the evolution toward systems of lifelong learning, it is referring to these difficult reforms, which are necessary to improve the effectiveness and equity of European systems of training if they want to decisively face the challenges of the future. In this commitment to reform, not only member states intervene but also the social partners who can and should play a key role in making these transformations possible. The lack of social dialogue in this field also reveals the difficulties in advancing toward an innovative conception of training that overcomes the resistance that currently exists.

To the extent that this evolution in training centres is possible, another issue appears related to the current form of secondary schools, where compulsory secondary education, the baccalaureate and vocational training cycles all come together in the same place. These types of centres, as has been seen, came into existence with the LOGSE and have had a positive effect on the prestige and modernization of vocational training. But from a future perspective, if comprehensive centres for vocational training have to be opened to a more heterogeneous public and to more heterogeneous activities, and be much more integrated into the local economy and involved in active policies to promote employment at the local level, then the coexistence of vocational training with secondary education becomes much more complex, and as a consequence, the advantages that emerged in the past will be lost.

The increase in the prestige of vocational training in Spain no longer has anything to do with its school-based character, but will come from its capacity to channel the qualifications needs of the population and of businesses to the supply of solid professional opportunities. And this can only be achieved with greater integration of vocational training with the productive environment.

With the arrival of more numerous generations to secondary education thanks to the flow of immigrants (and in the case that the number of young people that continue studying after compulsory secondary education increases), there will be a need for new schooling facilities, as after many years of declining demographics little investment has been made in this area and the secondary schools are becoming saturated. This may constitute a good opportunity to reformulate the policies for the location of secondary schools.

In this sense various options can be raised:

- The first option could be to separate the vocational training cycles from the secondary schools through the creation of strong comprehensive vocational training centres conceived, in line with lifelong training, as centres that would be open to everyone and, above all, closely related to the local economic fabric, and which would count on the participation of the social partners, who would also contribute their training capacities.

  This option, which is surely the most economical and which would provide greater prospects for the future, would permit vocational training to have greater visibility and autonomy in relation to the local economy. But the

negative side of this option is that it would offer an image of a continuum between the two cycles of vocational training that does not correspond to reality, because as has been seen, the advanced cycles of vocational training require learning capacities that are reached in the baccalaureate, which would be located in a different type of centre. But this issue could be resolved with information and coordination with the baccalaureate schools.

- The second option could be to leave the intermediate vocational training cycles in the secondary schools and only separate the advanced vocational training cycles to bring these new centres closer to the form of university education, with the aim of better coordinating advanced training with university education, as occurs in other European countries. But this option is more expensive, as facilities will be duplicated in the two types of centres and surely it will take intensity away from the evolution toward lifelong training of the intermediate training, which will be limited to a school environment when its primary objective should be to increase the qualification levels of the economically active adult population.

- The third option would consist in a greater integration of vocational training cycles with their respective levels of general education, dividing secondary school into levels: one part compulsory secondary education with the Programmes for Initial Professional Qualification (PCPI) and the intermediate cycles, and the other part the baccalaureate and advanced cycles. This option, also expensive, would make the function of vocational training as a specialization oriented to the labour market for each one of the levels of general education more visible, but it would also hinder bringing vocational training closer to the economic environment if there was not an efficient coordination between the two levels of the centres.

Problems of coordination are present in all the options and all of them imply the decentralization of the management and coordination of the centres to the local level. The decentralization of management of the centres at the level of autonomous regions has been a positive step toward the planning of local needs and demands, but it is not enough if the desire is greater integration of training with local actors and conditions. One of the formulas that has been raised consists in the creation of educational districts with the participation of local governments. These districts, which would group the centres of different

educational levels within a territory, could be, in function of the density of the population, around the size of a medium-sized city.

This formula, better for general education at primary and secondary levels, could have its correspondence in vocational training through the creation of local campuses for vocational training. These campuses could gather together, under the same management structure, the vocational training centres of a medium-sized city or for a determined territory. Thus, the functions of coordination, relationship with the local economy, guidance or other designated functions in the comprehensive centres could be managed much more efficiently, simplifying many processes and structures up to now repeated in each centre, such as for example, the coordination of workplace internships for students.

The constitution of this type of vocational training campus in cities of a certain size, for example, those of more than 60,000 inhabitants, would strengthen the visibility of vocational training and facilitate its transformation from the perspective of lifelong training, making the most of current resources.

6.2. The recognition and certification of non-formal and informal learning

If autonomy, flexibility and accessibility are three basic characteristics of any system of lifelong learning, then recognition and certification of non-formal and informal learning constitute the fourth pillar of the system. The learning that an adult does throughout life, including that of a professional character, is mostly done in an informal manner through lived experience or through the participation in a multitude of activities with educational value (for example, attending conferences, forming part of a work group, etc.), although of a non-formal character.

A system of lifelong learning has to assess this type of non-formal and informal learning and give it importance through its incorporation into a structure of qualifications which, together with formal learning helps individuals define their own educational strategy. The hope is that by placing value on experience, individuals will be motivated to join the dynamic of lifelong learning as a means to enrich and update their competencies.

The assessment and measure of non-formal and informal learning

For decades, the great development of formal educational and vocational training systems eclipsed the importance of experience as a source of learning and work as a space for learning. The trend toward the formalization of learning and the successes achieved in educational efficiency are at the foundation of the enormous progress that the application of science to production has brought over the last few centuries. Rationality, objectivity and efficiency in the organization of formal educational processes were in contrast to the subjectivity and the individual limitation of experience, undervaluing it and imposing the domination of educational processes and formal training. Only in the countries of Scandinavian and Germanic culture has the value of work as a space for learning been maintained through their dual systems of training which combine school-based education with workplace apprenticeships.

The rediscovery of the educational value of experience and work came about as a result of better knowledge of the mechanisms of adult learning and the development of the prospect of lifelong training. Integrating adults in a generalized manner into the system of training also required introducing learning acquired through alternative paths into the system. Thus, currently, we have a more balanced and interconnected conception of the relationship between formal, non-formal and informal training, which permits us to better understand the learning process.

All learning is related with context as it is fruit of the interaction of the individual with material and social conditions. Learning cannot be reduced to the passive reception of units of knowledge. The individual that learns acquires his or her capacity to act participating in an effective manner in a permanent process of learning. Thus, training or learning does not consist only in the reproduction of knowledge and abilities, but also in their reformulation and renovation. Training and experience are not two antagonistic concepts but in the modern period two paths which shape learning that combine in the life of the individual through his/her career and life trajectory.

However, learning, in addition to being contextual, is also partially tacit, and therefore its identification is not easy (Colardyn, 2005). Often, individuals mobilize competencies that they are not aware they possess or that they do

not always know how to formulate easily. The cook, mechanic and computer programmer do not always know how to explain rationally their ability to resolve the professional situations they have to face.

This ambiguity in non-formal and informal learning creates difficulties in their measurement. The procedures and instruments for the evaluation of learning have to be valid, in other words, they must measure what they want to measure and be reliable, meaning that two measurements taken of the same learning outcome give the same result. In formal training a lot of experience has been accumulated in the evaluation of what students learn. Even so, its validity and reliability continue being questioned. A fortiori, this questioning becomes critical in the evaluation processes of non-formal learning.

In addition to reliability and validity, the mechanisms for recognition of experience need to have some benchmarks and criteria for judgment which make evaluation possible; in other words, benchmarks and criteria for evaluating experience need to be established.

In 2004 the European Union recognized the importance of the issue and elaborated a set of common principles to identify and validate non-formal and informal education, and asked member states to disseminate and apply them in their actions (European Council, 2004).

These principles, although very generic, establish that the systems for the identification and validation of non-formal and informal education have to be voluntary, guarantee equal access and treatment for all and respect for the privacy of all individuals. The principles give responsibility to certain stakeholders according to their role and competencies, for the establishment of systems of validation, which have to include guidance, counselling and quality guarantees in their functioning, in relation to the legitimate interests of each party, and ensure the balanced participation of all the actors involved in the process. In addition, the procedures for identification and validation of non-formal and informal learning must be fair, transparent and impartial, with the establishment of mechanisms to avoid conflicts of interest and guarantee the professional competency of the evaluators. In 2006, the European Council returned to the theme of the recognition of the value of non-formal and informal education, this time from the perspective of policies in favour of young people (Resolution, 2006).

In any case, designing and launching mechanisms for the recognition of experience and non-formal education and training is not a simple task, and surely currently constitutes one of the most complex challenges for the educational sciences. In what follows we will look at some of the actions taken so far to progress in this area.

Ongoing experiences

Analyzing the most modern systems for the recognition of experience some general criteria on the basic elements that such a system of validation should have can be established:

- A standard or benchmark for qualifications, degrees or competencies which permits the establishment of validation criteria.
- A modular or credit system of training that allows for the certification of learning outcomes.
- The regulation of the process of validation which defines requirements and procedures with the publicity and assurance needed to generate trust and credibility.
- A mechanism which informs and advises individuals during the process.

The majority of European countries have begun to advance along this path. Some are in experimental phase, such as Germany, others, in development phase, such as the case of Spain, and some are now in the application phase, such as France, Finland, Denmark and the United Kingdom.

Despite the peculiarities of each national system, characteristics common to the majority of countries can be observed. In all cases standards to establish the criteria for validation have been established. In some countries there is not a single standard but various ones, promoted by different institutions with different aims: some are aimed at serving as references for occupations, others are references for training and, finally, others have the objective of validating non-formal learning.

The defining of credits or training modules is also used in many cases. Spain, France, Finland, Denmark, Ireland, Holland, Sweden and the United Kingdom are among the countries that have introduced modular criteria in their training or in the procedures for the recognition of experience.

The participation of the social partners, together with sector-based professional bodies, is also a characteristic shared by many countries. The methods of validation vary from one country or one mechanism to another. The procedures can consist in the use of exams, descriptive methods based on a documented dossier, observation through tests or directly on-the-job, and the use of simulation methods or evidence-based methods. Each method presents its own difficulties and costs, which must be taken into consideration in assessing the most adequate forms for each case.

In general, existing mechanisms are oriented toward facilitating access or acquisition to the certificates or diplomas of the formal system through partial or total validation of professional experience or non-formal learning. In some countries, such as for example, Austria, Belgium, Germany and Norway, these criteria have been incorporated into their formal systems through tests for persons that have acquired their knowledge through paths distinct from formal training. However, there are also cases in which validation is separate from systems of training and has objectives which are strictly professional or sectoral.

The experience of the Association for the Certification of Professional Competencies (ACVC), promoted by the French chamber of commerce for the construction of a system based on the criteria of the ISO/IEC international quality norms, or private systems from computer and information science companies like Microsoft or Cisco, which constitute a reference for obtaining qualifications in the sector, are examples of these types of autonomous mechanisms.

There is still a long way to go to normalize the recognition of experience and non-formal training. The systems currently in place are hardly used, but in some cases they have begun to certify a significant number of persons. This trend suggests that systems of training and qualifications are increasingly open to paths other than the formal one for the acquisition of learning.

The French case is a good example. France has a long tradition of mechanisms for the recognition of professional experience of different types. But the most recent regulation of 2002 is what has had the most impact. It created a centralized system for all degrees, diplomas and certificates with a professional end, including university degrees (Validation des Acquis

de l'Expérience, VAE) but with decentralized certifying agents and with significant involvement of regions, the social partners and professionals. The whole system pivots around the National Repertory of Professional Certification and the National Committee for Professional Certification, the backbone of the system.

The candidate that wants his or her knowledge to be recognized has to have had a minimum of experience in the sector, which does not have to be as a wage-earner or self-employed, as it can also be through involvement as a volunteer or through social institutions. The procedure begins with the presentation of a proposal. If it is accepted, the candidate fills out a form or dossier in which he or she details all accumulated experience. This dossier is examined by a jury which normally solicits a personal interview.

The jury is made up of teachers and professionals. Half of the members are employees, while the other half are representatives from business firms. The jury can give partial or total recognition for a particular certification and justifies its decision with a proposal for an advisable itinerary. This mechanism is accompanied by the availability of information and counselling during the whole process. In 2006 22,284 dossiers were examined by the French ministry of education, 60 percent of which led to a full certification. In addition, the activities of other ministries and certifying entities should be added to this figure (Rapport, 2005).

In Spain we will have to wait to know the National Institute of Qualifications' (INCUAL) proposal to organize the recognition of professional experience, though some autonomous communities have already begun initiatives in that direction, basically to facilitate the recognition of experience so that individuals can obtain the certificates of the vocational training cycles. Recently the government announced the regulation of a system of recognition of experience for individuals to accede to certificates of initial vocational training.

Much hope has been placed in the initiation of a mechanism of these characteristics and in its capacity to motivate workers to access training, given the large number of workers there are in Spain with a lot of professional experience but without any type of certification or only with primary school education. The recognition of experience, whether total or partial, can be an

incentive to many workers to invest in a formal qualification, and this can have affect on their professional trajectory and on the competitiveness of companies.

The presence of many adults in initial cycles of vocational training, the University access exams for those above 25 years of age and the growing demand for access to training cycles are phenomena that reflect the evolution of a social demand for education and training that goes beyond traditional schooling.

Regarding the national system of qualifications on which INCUAL is working, some of the elements that have been presented as necessary to construct a system of lifelong learning are being developed. What remains pending is a process for the recognition of experience, around which decisions will be made about options which will affect the overall system. In particular there is a lack of clear objectives about how the current system of vocational training is to evolve toward a system of lifelong learning which can face the future challenges of the knowledge society.

Once again, there is a lack of agreement over who should be involved in the accreditation process and how it should be done. The principal actors are the same: the central government, the autonomous communities and the social partners and professionals. It will be necessary to find the right combination between overall regulation and territorial and sectoral roles, precisely the key elements that are being discussed.

VII. Training in the knowledge society

To speak of the knowledge society is to speak of the transformation that innovations in information and communication technologies (ICTs) have brought about in recent decades in the characteristics of the industrial society that had dominated during the 19th and much of the 20th century.

There is still not enough historical perspective to clearly define the characteristics of this new type of society, nor is there consensus over up to what point it is really a new type of society. For this reason, different concepts are often used to define it, such as: information society (Masuda, 1984), post industrial society (Bello, 2006), informational society (Castells, 2001) and postmodern society (Baudrillard, 2000). Surely, the concept of knowledge society (Drucker, 1969) has recently become the most frequently used because in a certain way it allows us to explain the changes we are living while at the same time it projects toward the future an attractive objective for humanity: knowledge as the motor of society.

In fact, what can be seen are two types of interconnected phenomena which have transformed the majority of political, economic, social and cultural relations of industrial society (Castell, 1999). On the one hand, the development of information and communication technologies, which have made possible an exponential growth in the human capacities to generate knowledge, process information and transmit and communicate symbols, therefore transforming the spatial and temporal coordinates of communication and human activities. And on the other hand, the globalization of human activity and the interconnection between societies, economies and cultures of the whole world. Both phenomena have generated a significant growth in productivity in many economic spheres and are transforming the power structures inherited from industrial society at local, state and global levels.

Information and communication technologies (ICTs) have not only become an important economic sector, very dynamic and in continual evolution and innovation, but above all, have transformed the ways in which goods and services are produced in all other economic sectors, just as happened with the application of new energy sources such as electricity at a certain moment in the evolution of industrial society. The speed of the expansion and the rhythm of change that have pervaded the economy are comparatively greater than the impact that prior technological applications had, and have multiplied the importance of innovation as an element of competitiveness. The application of ICT to scientific production has contributed to converting knowledge into another important factor in innovation and competitiveness. Currently, knowledge and innovation have increased their importance as criteria that aid in the competitiveness of an economy.

The globalisation of the world's economies, facilitated by ICT but also driven by other factors, has contributed to changing the relationships among economy, society, politics and culture, and has led to the formation of new poles of power in almost all those areas. ICTs and globalization have not only contributed to restructuring economies, but are also influencing the evolution of societies. Their effects on education and culture, the impact on the interrelationships between persons that the massive use of cellular telephony and Internet have had, the development of mass tourism or the new consciousness of belonging to one world, are examples of their social impact.

Thus, current transformations cannot be reduced to their technological and economic aspects only. Many other factors are interacting to generate new scenarios. Among these factors education stands out. The significant increase in educational levels that was produced in many countries during the second half of the 20th century, but particularly in the most developed countries, has generated the conditions for the development of the knowledge society. A more educated population, and as a consequence, one with greater learning capacities, has strengthened the individualization of personal and social relations, has generated conditions for dealing with situations of great complexity making use of more complex instruments, therefore accelerating the growth of knowledge to until recently unsuspected limits.

Today, thanks to ICTs, globalisation and the growing educational levels of the population, a development of knowledge beyond the frontiers of the science

of the mid-twentieth century is possible. The use of this knowledge in social and economic activities can open perspectives that were unknown up to now. At the same time, however, this situation also generates a series of challenges, risks and tensions that humanity never had to confront before.

In these new social conditions, marked by the accelerated speed of change and the increase of complexity, which make it difficult to project into the future or to isolate tendencies that permit us to understand where this type of society is heading, one must ask what role will training have and what will its impact be on human activities.(1)

7.1. The role of training in the knowledge society

In this section some of the tendencies toward change will be commented on, highlighting the competencies that acquire an important value in the information society and how these competencies imply certain future necessities for qualifications.

Toward the generalization of secondary education and training and higher education and training

As was just mentioned, an increase in the educational levels of the population can be observed, particularly in developed countries. The averages for all of Europe or the countries of the OECD give a picture of the dimension of the phenomenon, but if we look at the situation of the most advanced countries we can even better capture the potential of this evolution.

For example, in 2005 more than 25 percent of the population over 15 years of age in Finland, Estonia and Denmark had higher education. The European average (EU-27) was 19.3 percent, while in Spain this percentage was 21.7 percent. In the three most advanced countries women had higher educational levels than men (in Estonia 28 percent of women had higher education), while in Europe as a whole women had lower educational levels than men. In other words, it seems that the countries with the highest educational levels have gotten there because women invest more in their education.

(1) To go deeper into the debate on the transformations of the knowledge society see Brinkley (2006), Murnane and Levi (2004), Brown, Green and Lauder (2001), Stehr, (1994), UNESCO (2005) and CIREM-ICT(2000).

TABLE 7.1

Population above 15 years of age by educational level and participation in continuing training

Year 2005

COUNTRY AND LEVELS	**TOTAL**	MEN	WOMEN	CONTINUING TRAINING (1)
EU-27				9.5
0-2	**47.9**	50.5	45.6	
3-4	**19.3**	20.4	18.3	
5-6	**67.2**	70.9	63.9	
Czech Republic				5.6
0-2	**69.6**	73.4	66.0	
3-4	**10.4**	12.1	8.9	
5-6	**80.0**	85.6	74.8	
Denmark				27.3
0-2	**44.4**	47.9	41.1	
3-4	**25.7**	24.8	26.6	
5-6	**70.1**	72.6	67.8	
Germany				7.7
0-2	**52.9**	54.1	51.8	
3-4	**19.3**	24.1	14.7	
5-6	**72.2**	78.3	66.5	
Estonia				5.9
0-2	**46.5**	50.6	43.3	
3-4	**25.2**	21.6	28.1	
5-6	**71.8**	72.2	71.4	
Spain				10.5
0-2	**19.0**	19.4	18.6	
3-4	**21.7**	22.3	21.2	
5-6	**40.7**	41.7	39.8	
Austria				12.9
0-2	**57.1**	60.2	54.2	
3-4	**14.0**	17.1	11.2	
5-6	**71.2**	77.4	65.4	
Poland				4.8
0-2	**59.2**	62.9	55.9	
3-4	**13.0**	12.1	14.0	

5-6	**72.3**	75.0	69.8	
Finland				22.5
0-2	**39.3**	41.6	37.2	
3-4	**25.6**	23.7	27.4	
5-6	**65.0**	65.4	64.6	

Note: (1) Participation of adults between 25 and 64 years of age in education and training during a period greater than four weeks.
Source: Elaborated by author from the INE (EU LFS) and Eurostat.

In the OECD sphere in that same year, Canada, Japan and Korea, as well as Israel and Russia, had more than 50 percent of their population from 25 to 34 years of age with higher education. The OECD average was 32 percent and that of the European Union of the 19 (before the latest expansion) was 30 percent. In Spain the figure was 40 percent. Therefore, a first tendency seems to be that the most developed countries have around a third of the population and 50 percent of young people with higher education.

Regarding the percentage of the population that has, at minimum, completed secondary education, the same trend can also be seen toward high educational levels. In 2005, this percentage was more than 70 percent in the Czech Republic, Germany, Estonia, Denmark, Lithuania, Austria, Poland, Slovenia and Slovakia. Denmark, in fact, had 85 percent of the male population with this educational level. Spain, for its part, had a percentage of 40.7 percent, even below the average for the Europe of the 27, which was 67.2 percent, and with women with a lower level than men. As can be observed, in the group of countries with the highest percentages of the population with secondary studies, the countries of Germanic influence and from Eastern Europe dominate, and these are precisely the countries which have strong vocational training systems. Therefore, in this case the difference lies in vocational training: the countries with more developed vocational training systems are also those which have a higher percentage of the population having completed secondary education.

If only the potentially economically active population of 25 to 65 years of age is taken into account, in the year 2007, in the European Union of 27 countries, 70.8 percent of the population had, at minimum, completed secondary education. In countries such as Estonia, Lithuania, Poland and Slovakia this percentage was above 85 percent and in the Czech Republic it was 90.5 percent.

In Spain, in contrast, only 50.4 percent of the potentially active population had completed secondary education. In other words, a second tendency is that the most advanced countries are evolving toward a situation in which almost everyone obtains, at minimum, a complete secondary education.

In comparison with these countries, as has been seen, Spain has a high percentage of the population with higher education but overall has a very important deficit in persons with intermediate level qualifications. This is a result of the lack of development of vocational training, due to an excess of population with low educational levels. Although the situation has improved a lot in recent decades there still continue being too many young persons who leave the educational system with very low levels of education.

If we look at the population in lifelong training, in 2005 Finland, Sweden, the United Kingdom and Denmark all had more than 20 percent of their adult population of 25 to 64 years of age in training. In concrete, Denmark had more than 27 percent. In Spain, this percentage was 10.5 percent, while the European average was 9.5 percent. In other words, a third tendency that can be seen is that one of every four or five active persons will follow a training activity each year. Said in another way, if the distribution among the population were equitable, every four or five years the whole active population would become up-to-date through training. Spain has achieved acceptable levels for the updating of the employed population within the European sphere, but is still far from the most advanced countries.

These three tendencies allow us to provide an initial answer to the question of the role of education and training in the knowledge society. The educational and training systems have to be capable of getting, at minimum, between 30 and 50 percent of young people to obtain a higher degree, diploma or certificate and practically all young people to successfully complete secondary education, either through the completion of the baccalaureate or through vocational specializations. In other words, if industrial societies are those which saw the universalisation of primary school education, the knowledge society is that which must generalize secondary school education. This relationship between educational levels and the knowledge society is not only quantitative, but also qualitative. The learning capacities that are obtained through secondary education are those that seem to correspond to the minimal learning needs of individuals so that a knowledge-based society can develop.

This relationship must be taken into account when promoting this type of society, especially in countries on the path to development. Without broad levels of secondary school education the functioning of a society based on knowledge will not be possible, however much technological investment is carried out.

The relationship that will be necessary between higher and secondary education is still not clear, as there are countries with low percentages of persons with higher degrees or diplomas that base their qualifications on the spread of secondary education and others, like Spain, that present a reverse schema. Spain is the only country in Europe that has a lower proportion of the population with intermediate level certifications than with higher degrees.

It remains to be seen if the growth of the population with higher education will tend to stagnate at a certain level, and if the population with secondary education will continue to grow. The tendencies can vary among countries. But what does seem clear is that in the coming years educational systems must be prepared to and have to be capable of schooling practically all young people through the baccalaureate or an advanced level cycle of vocational training and to retrain the adult population that did not achieve this level in the past.

The National Reform Agenda that the Spanish state has developed and presented in the European Union with the aim of achieving the Lisbon objectives heads in this direction. Conscious of the challenge of broadening secondary education, the authors of the Agenda proposed modest objectives and established that for 2008 74 percent of 20 to 24 years olds would have completed secondary education. The intention is to get to 80 percent in 2010. It should be remembered that in 2001 this figure was 65 percent and in 2006 61.6 percent, in other words, far from the objective of 2008 and with a downward trend instead of a growing one.

But to even achieve these modest objectives, which are still far from the more advanced countries (in 2006 the European average for the 27 was 77.8 percent), a restructuring of the educational and training system will be necessary and, therefore, the allocation of more resources. The stagnation of public spending on education in relation to GDP in recent years, with the percentage of spending even going down, is not a good sign of the importance that is given

to this issue. In 2000, public spending on education was 4.35 percent of GDP, while in 2005 it was 4.29 percent (Ministry of Education, 2008).

However, the role of training in the knowledge society cannot be reduced to a question of sheer numbers; in addition, questions regarding what type of training should be offered to the population and what professional competencies have to be learned also have to be raised.

The debate about the training to be offered cannot be carried out without taking into account the role that new technologies have acquired in the production of knowledge. The ICTs today constitute the basic tool; therefore, the degree of use of these technologies by educational and training systems is a good indicator of the adaptation of these systems to the new educational requirements of the knowledge society.

During the 2005-2006 course, 98.3 percent of Spanish schools had connections to the Internet. However, while in the year 2006 95 percent of Spanish students of 16 years of age or more used Internet, in the last three months the percentage of those that connected from school went down to 59 percent. In contrast, the European average (27 countries) was 92 percent of students with access to the Internet and 65 percent with access from school. In countries such as Denmark these percentages are respectively 98 percent overall and 95 percent in school. This is the difference. In other words, in Spain the level of connection to the Internet among students is good, but access to the Internet from school is low and is below the European average and far from that found in the most advanced countries.

In 2007, in the majority of countries of the OECD more than 25 percent of companies use *e-learning* programmes to train their employees. In Spain this percentage is around 30 percent. Greece and Slovakia are above 40 percent.

Although schools provide access to the new communications technologies, the speed of the connection is not very good and the number of students per computer is still too high. We are still far from the massive use of ICTs in the schools, and even farther from the restructuring of the learning process so that the majority of information that the schools transmit is available in open form and at any time on the Internet.

Competencies required in the knowledge society

Trying to respond to the question about what are the competency requirements of the knowledge society and, therefore, what is the educational and training content that will have to be provided is a complex task (UNESCO, 2005). It is difficult to offer an answer given that the evolution of the economic activities of the knowledge society is in full development and, as a consequence, it is not clear what the overall trends will be. Above all, what the territorial distribution of the current trends will look like on a world scale is not known. The knowledge society can only be understood on that global level. With the information currently available it is still not possible to provide a detailed analysis of the skills and competencies needed on a world scale.

Two recent examples reveal the need to be very prudent in making projections about rising trends. One of these examples is the bubble from the «new economy» of the 1990s and its subsequent bursting, which made it necessary to revise many projections about the need for technicians and specialists in ICTs or about the spread of the competencies required in these type of economic activities in the overall economy. The second, more recent example, refers to the forecast that low value added world production would be concentrated in emerging countries, while high value added production and innovation would be reserved for the developed countries. Contrary to this forecast, we are seeing how some emerging countries have been capable of rapidly incorporating high value production and competing in this area with the most advanced countries.

Faced with this degree of uncertainty one can only narrow forecasts down to the short or medium term, opening capacities for flexibility to the maximum so that adaptation to changes is as rapid as possible while committing to providing the skills directly related with the requirements of the strategic options of each region, following their evolution closely.

Nevertheless, some data on the current situation (OECD, 2008) does provide information about the potential and limits of the range of action in the coming years. For example, specialists in ICTs in Spain in 2007 represented 2.9 percent of the employed, while in the EU-15 this percentage was 3.1 percent. In Canada and Switzerland it is above 5 percent and in Sweden, Finland and Denmark over 4 percent. But if we take into account a broader definition of

ICT workers that includes not only specialists but also intensive users of these technologies, the percentages for Spain were 18.6 percent, in the EU-15 22 percent and in Canada, Luxembourg, the United Kingdom and Denmark over 27 percent.

The ICT economic sector represented 3.9 percent of total jobs in the private sector in 2006. In the EU-14 this percentage was 5.6 percent, and in Finland, Sweden, Ireland and Denmark it was over 7 percent. In the countries of the OECD in 2004, manufacturing firms that use medium or advanced level technologies were responsible for 7 percent of gross value added, while in Spain they contributed a little bit under 5 percent, with a tendency toward a decline in their weight because of the effects of the offshoring of business to emerging countries. For its part, the service sector in knowledge intensive markets represented 21 percent of gross value added in the OECD, while in Spain less than 15 percent. This indicates the importance of economic activity based on knowledge and innovation in developed countries, particularly in services, although important economic activity based on other factors continues.

The data available now points to aspects such as:

- A rapid and wide extension of new information and communication technologies (ICTs), broadly used by the population.
- The consolidation and importance of ICT as an economic sector although its size may not be very great. It is a sector which requires a limited number of specialists, although an important proportion of workers use ICTs intensively in their professional tasks in all economic sectors.
- Activities based on knowledge and innovation have an important weight in the economies of the developed countries. Spain does not stand out in this area but neither is it far from European or OECD averages.

Forecast for qualifications

What are the foreseeable consequences of the impact of ICTs in the labour market and on the skills and competencies demanded by the economy? The studies available are not very conclusive on this theme, particularly with respect to their impact on employment, as the destruction of some jobs is compensated

for by the creation of others. The latest studies of the OECD, however, point toward a negative effect on the stability and quality of employment in the most developed countries. The least skilled and those with the lowest educational levels are particularly vulnerable.

One of the most solid attempts to forecast the evolution of employment in the coming years (CEDEFOP, 2008), sponsored by the European Centre for the Development of Vocational Training (CEDEFOP) before the crisis of 2007, concludes that from 2006 until 2015 13 million jobs will be created in the 25 countries of the European Union. In addition, along with this forecast, an important sectoral change will take place. Jobs in manufacturing industries will decline slightly and hence, the primary sector will see its weight in overall employment reduced. In contrast, jobs in services, in both distribution and transport as well as in non-market services and above all services to business, will significantly increase. With respect to the construction sector light growth is expected.

The different sectoral dynamics will provoke important population movements across sectors that will require major retraining. It is interesting to see that even in the areas in which a decline in employment is foreseen there will be a lack of labour to replace existing labour due to the progressive aging of the economically active population. Thus, it is probable that it will be difficult to find labour for those sectors which are less attractive because of the lack of positive future expectations, as has occurred in Spain in the last decade.

Although with strong variations among countries, the jobs with the highest expectations for growth are found at the extremes of the qualifications scale: on the one hand, the most skilled non-manual labour jobs and, on the other hand, the simplest jobs. In contrast, the intermediate level jobs will decline. According to these forecasts, more and more jobs will demand high level and intermediate level qualifications, hence reducing the weight of jobs for individuals with low skill levels. The jobs which demand high level qualifications will represent practically 30 percent of total employment, while those of mid-level qualifications will be 50 percent. The mix between the characteristics of jobs and the qualifications required generates an expectation of rising underemployment in some areas and an increase in qualifications in others.

In short, the current forecast about the medium term evolution of employment, although subject to a necessary revision for the possible impact of the current crisis, sees an expected sustained demand for workers with high level and intermediate level qualifications in the labour market, which would continue supporting the efforts of countries and individuals to achieve higher levels of initial training, as is now occurring in the most developed countries.

In addition, it is also clear that in the coming years important changes will continue in different economic sectors as well as in different occupations and that therefore, the capacity to retrain and upgrade the competencies of significant numbers of persons will have to be even more developed, even in the case of those jobs with little expectation for growth. Finally, a problematic, detected after some years, continues and will be accentuated in the coming years. This is the existence of a growing number of low-skilled jobs. In other words, the knowledge society will not eliminate, despite the development of new technologies, a significant number of simple jobs that do not require high skills. Many of these jobs correspond to social functions which are vital or important to the well-being of the population, such as for example, the dependent care sector.

This, in combination with the growing demand for qualifications, will lead to a possible increase in underemployment among persons with higher degrees and intermediate level diplomas and certificates. The evolution of underemployment can vary in function of the dynamics of the labour market and the measures that are adopted.

These trends, contradictory in some cases, mean that in many situations, even in the case of individuals with low skill levels, a mobilization of professional competencies will be necessary. The level of demand for workers to mobilize their competencies will increase in all occupations, and it will not be easy to teach some competencies in training processes, as for example those related with the quality of dependent care.

At the same time, these changes are happening in a context of greater flexibility in working conditions. This situation creates a growing insecurity among the working population and generates a high level of precarious work among certain collectives and in certain sectors. The degree of permanence of this situation remains to be seen; It could correspond to a period, more or less

long, of adaptation to the new re-equilibrium among world economies. Once this stage is passed the conditions of stability, security and well-being ought to improve (at least in the developed countries) due to accumulation from high productivity. The alternative is that insecurity consolidates as an intrinsic characteristic of knowledge societies.

Flexible conditions offer opportunities, but also evident dangers for those in the labour market. For example, the sociologist Manuel Castells (Castells, 2001), specialist in the analysis of the knowledge society (which he refers to as the informational society), distinguishes between self programmable labour, with a high capacity for adaptation to new situations, and generic labour, which is interchangeable and will remain trapped in low-skilled jobs. What stands out in this distinction is that the skills and work that individuals develop today, whether «certified» or not, in a situation of such rapid and profound transformations as those currently taking place, are as important as the capacity for adaptation constructed through learning ability and acquired through education.

The flexible worker (ANECA, 2007) is the new figure in the workplace and is spreading throughout the labour market without regard for qualifications, sectors or occupations, although women, young people, immigrants and the low-skilled are more subject to flexible labour conditions. Today, at minimum, between 30 and 40 percent of employment is considered to be atypical, in other words, not full time employment with a stable contract. Flexibility does not directly correspond with bad, poorly paid or low-skill jobs, but rather refers to the opportunity that individuals have to construct professional trajectories and obtain solid situations regarding work, wages or income. Although it is also true that for some persons flexibility affects them negatively, with the sudden destruction of their skills and reduction in their income.

In this way, preparing individuals so that they can better adapt to the changes that they will have to face during their working lives is another of the demands that the labour market places on systems of vocational training and one which necessitates the development of the capacity to resolve complex problems. In addition, growth in the quantity of information to manage thanks to the new information technologies has had a clear effect, increasing the complexity of decision making in both professional and personal life. The result is that at all levels of skill and social activity an increase in the difficulty of management and organization can be observed due to greater complexity. The effects on

individuals are also perceptible, with an increase in feelings of anxiety, disorder and stress.

Traditionally, a higher capacity for problem solving is acquired with experience and with higher skill levels. However, with the speed of the changes taking place in the knowledge society, experience is, by definition, lacking; there is no time to acquire it. The reaction in the working world is the increased demand for qualifications. As has been seen, today to carry out certain jobs competencies are required that are normally associated with intermediate or advanced degrees or certificates. But the results are not satisfactory because the problem is not one of more education, but rather of greater complexity. This occurs for the construction worker as well as for the secretary, for a manager of a commercial establishment or for an executive.

Educational level is no sufficient guarantee, as experience is lacking due to the novelty of situations. A «well ordered mind» is required, a certain dose of creativity, a determined attitude, a capacity for work, a strong personality and a specific methodology for managing complexity. All these elements are not, in general, present in the academic practice of training programmes. Educating and training individuals in these competencies demands redesigning the content of vocational training with a search for a new balance between the development of individuals' learning capacities and problem solving capacities.

Therefore, it can be concluded that systems of training must be capable of providing individuals with the capacities necessary to integrate successfully in a very turbulent labour market and, at the same time, also contribute to boosting innovation and creativity in a context of high technological and scientific sophistication. This means helping individuals develop learning capacities built over structures of solid scientific knowledge and a range of skills which include, among others, the capacity to work with and interpret large quantities of information, work in a team, take initiative, deal with unexpected situations and communicate messages in the context of a multiplicity of transmitters and receivers of information.

One of the most important challenges of the coming decades will be negotiations to determine the conditions in which individuals will be willing to mobilize the competencies they have acquired, whether through educational processes or through experience, and surely through a combination of both elements.

7.2. Impacts on vocational training and in society

How will the changes that are being produced and those that can be expected in the short term as the knowledge society develops affect systems of vocational training and what social repercussions will these changes have?

European objectives

Systems of vocational training everywhere are evolving to adapt to new social demands. In the European area the «Education & Training 2010» programme was adopted by the European Union in 2002 to aid in the adaptation of the systems of training of member states to the challenges set by the Lisbon objectives. These objectives are intended to promote the well-being and competiveness of the European economy so that it can exceed other powers such as the United States and Japan and face the challenges that the emerging countries present.

This programme defines five very specific benchmarks to be achieved by 2010. They are:

- By 2010, all Member States should have at least halved the rate of early school leavers compared with the rate in 2000, to achieve a European Union (EU) average rate of 10% or less.
- By 2010, all Member States should have at least halved the level of gender imbalance among graduates in mathematics, science and technology, while securing a significant overall increase in the total number of graduates compared to the year 2000.
- Member States should ensure that, by 2010, the average proportion of 25-64 year olds in the EU with at least upper secondary education is 80% or more.
- By 2010, the percentage of low-achieving 15-year-olds in reading, mathematics and science should be at least halved in each Member State compared with the rate in 2000.
- By 2010, the EU average level of participation in lifelong learning should be at least 15% of the adult working age population (25-64 age group) and in no country should it be lower than 10%. [http://europa.eu/scadplus/leg/en/cha/c11064.htm]

The second monitoring report done in 2006 to evaluate the degree to which these objectives were being achieved, detected unequal advances among member countries. All have initiated reforms, although they are far from assuring the attainment of the established benchmarks. If the reforms are not speeded up they will not achieve the looked for reduction in differences with the United States and Japan. The investments of these countries in education and human resources continue being well above that of almost all other countries, and in addition, the differences are widening in private sector investment, in higher education and continuing training.

On the global level, countries on the path to development, despite advances in recent decades, still have not achieved the objectives that the developed countries achieved during the industrial era. Because of this the Dakar Forum, celebrated in April 2000 under the slogan «Education for All», insisted on the commitment of the international community to the achievement of universal and obligatory primary school education for all by the year 2015. In addition, the Millennium Summit established among its objectives for the year 2015 that all children would at minimum have to finish primary school.

In previous chapters the adaptation underway in the Spanish system of vocational training was described. Now this evolution has been placed in the context of the development of the knowledge society and the major trends currently observed have been described. In the next few years the reforms underway will have to be quickly consolidated as they are still too affected by Spain's historical delays on matters of training to firmly address future challenges.

Future challenges for training

The consolidation of reforms in the most advanced countries and the trends detected in the evolution of knowledge societies will lead to new issues that today begin to be seen on the vocational training horizon. There are seven specific issues which will be discussed in what follows.

The first issue, and surely the most problematic, is the role of vocational training in its dual **relationship with general education and the labour market.**

In a context of rapid technological innovation and the development of knowledge as a factor in competitiveness, the conception of vocational training as a process of specialization upon finishing the different levels of general education, and

not as a specific training for particular collectives and for certain skill levels for workers, will be subject to diverse tensions which will shape its long-term evolution.

Vocational training will have to incorporate new «whys» in the preparation of competencies for those emerging occupations which call for innovative processes. In addition, it will have to be taken into account that there will not be enough experience in the labour market to systematize the training of the «hows». As the completion of the baccalaureate becomes a necessity for a whole generation, it will have to incorporate more scientific and technological content in all of its branches. Such a change in the baccalaureate would be to not only provide students with a more solid foundation to face the innovations in the economy but also to motivate a generation with very diverse interests specifically in the early years of their transition to adulthood and when they must begin to consider their professional futures.

However, the training of competencies should be conducted in closer interaction with the productive world and in a way that is closer to real working situations, from a perspective of lifelong training and constantly being updated. Therefore, vocational training will undergo a dual centralizing tension: on the one hand a tendency will exist toward the integration of basic content of a vocational character in general education and, on the other hand, there will be a tendency toward a closer approximation to a continuing training for employment.

The form that each system employs to find a balance between these two tensions (the teaching of generic competencies to address innovation and the teaching of competencies directly related to the workplace) will shape the physiognomy of the vocational training system. In fact, currently, for many occupations, above all in the service sector, qualifications are generated from general education through the level of advanced secondary education plus a specific vocational training.

The second issue that will introduce changes in the systems is the **conception of vocational training centres**. The practical development of the concept of lifelong training will bring a new form to the centres and to training activity. From spaces where, in a more or less rigid form, specialized courses are offered for different age groups and where students receive theoretical or practical teaching, they will have to become open spaces, closer to the specific

population where they are based and offering a very flexible training in which each participant constructs his/her training itinerary from a combination of training resources of all type that are offered in the centre.

The centre will be conceived as a space of training resources. A large part of these resources will not even be physically present in each centre, but will be a part of a digital network and will consist in guidance and support for organizing and consolidating learning processes. When most of the information necessary for learning is found online, the interest of individuals for on-site training will be centred on content that cannot be found online.

In these new centres individuals will have to find, among other things, spaces for the training of competencies, monitored guidance and aid in learning. These centres, in addition to providing learning resources should also provide the means for students to diagnose the state of their competencies, opportunities to connect with companies where students can learn on-site and the possibility to participate in international exchange programmes.

Obviously, a centre of these characteristics involves new needs and innovations: a new form of management, new tasks for the teaching staff (which must be properly trained), the transformation of the physical and spatial characteristics of the centre, greater ability to connect with internal and external training resources and greater visibility within the local environment, which strengthens the relationship of the centre with local businesses.

In other words, centres known and recognized by the local population will be necessary, which people will use with the same normality and ease with which they, for example, use the local library. Participating in training has to be as simple as going to the theatre or a shopping mall to buy something. In fact, individuals will surely have to visit training centres more often than an automobile dealership or an electrical appliance shop. The degree of knowledge and awareness that the population will have about the characteristics of the training offered by the centre will have to be similar to that which they now have of other types of services and products.

The third issue which has to be raised is related to the **recognition of competencies**. If the idea is for all the adult population to regularly participate in training activities, the systems for recognition, validation and accreditation of learning, whether done in centres or in any other way,

have to be simple, agile, reliable and recognized as legitimate. As seen in previous chapters, advances have been made in this direction, but there is still much to be done if the existing processes are to be effective. Without a mechanism of these characteristics it will be difficult to reach the majority of the population.

The fourth issue is related to **equity in access to training**. The question must be asked, what will happen to the population that does not attain a socially established minimum level of education and training, or to those that are not motivated enough or cannot constantly upgrade their capacities. As has been seen, these groups can have a place in the knowledge society in all those low-skill jobs, but they will be deprived of all possibilities for promotion and economic and social mobility. In this way inequalities become chronic and can put in danger the cohesion of the European social model. Training can be a factor in discrimination, and cultural exclusion and exclusion from knowledge can be harder than economic exclusion.

Societies that aspire to high levels of social cohesion will have to look for imaginative and new formulas to keep low-skilled jobs from becoming a source of social exclusion. The transitory nature of these jobs is a factor in a plausible future strategy to address that social exclusion, as individuals in low-skilled jobs could access training which would provide them with higher qualifications which favour social mobility, but this will require important transformations in many social areas.

The fifth issue that has to be raised and related to the previous one, is the possible **distance between the aspirations of individuals after making significant investments in education and the reality of the work available in the labour market**. The persistence of low-skilled jobs in the knowledge society and the increase in the demands for qualifications from a greater proportion of the population will provoke underemployment and frustrations that will reduce the attraction of additional vocational training.

This means that it will be difficult to achieve substantial growth in the participation in training, above all in countries that already have a population with high levels of qualifications, without considering how, in knowledge societies, to organize mechanisms for the distribution and allocation of individuals into simple and low-skilled jobs that do not carry social stigma.

Access of the immigrant population to training raises a sixth issue, also related to the previous issues. The great danger posed by knowledge societies, as they are understood today, is that the immigrant population will be trapped in the most unfavourable social positions and that training will be a factor in discrimination. Such a scenario could be even more conflictive if factors related to ethnic inequalities are added, as can be seen in many European countries and cities. The access of immigrants to training is a condition for preserving high levels of social cohesion. For this reason, it is not enough to offer places to everyone, rather it is necessary to eliminate cultural barriers that make the massive incorporation of immigrants into training programmes difficult.

The seventh and last issue is related to the role of business in training. The idea that real work is a factor in the acquisition and learning of competencies necessitates a change in how training has to be organized in companies, until now still dominated by the tradition of a classroom-based organization. If the training of competencies requires space in real work places, companies become a key part of the system of training in the future knowledge society. The search for formulas to motivate and provide incentives for businesses to take their training function more seriously and for them to have more involvement in systems of training constitutes a task that will provide great scope for action.

These issues, which, as we have seen, are inherent in the training systems themselves and in some cases affect broader social organization, particularly in relation to the labour market, will continue to arise as the adaptations of the systems of training to the new necessities of the knowledge society are consolidated.

The concept of lifelong training constitutes the model which guides the evolution of systems of training. Its consolidation creates new challenges for the future in achieving quality lifelong training for everyone adapted to the new needs of individuals and businesses. If training, in the framework of the knowledge society, is to continue being one of the principal motors for social mobility and one of the most important paths for the distribution of positions in society, its integration into the labour market and in systems of labour relations will be necessary.

Conclusions

Throughout this study the elements which form the Spanish system of vocational training have been looked at and the principal issues which affect the functioning of the system and the challenges for its future evolution have been analyzed. In addition, an historical vision of the development over time of the principal concepts of vocational training and qualification has been provided so that their current meanings can be better understood.

Now, in this final chapter, a synthesis of the principal conclusions to be extracted from all the information presented and analysis carried out will be offered. Based on these conclusions a series of proposals, some already made in previous chapters, can be put forward which aim to improve the performance of the system and, above all, guide its evolution toward overcoming the challenges to be faced in the future.

Thus, and without the intention of being comprehensive, based on the arguments put forward in previous chapters a series of positive characteristics as well as some weaknesses and aspects that need improvement can be identified in the system of vocational training.

Among the **strong points** of the system we find the following:

- The basic architecture of the system of vocational training is well established and presents a high degree of internal coherence, although some of its most concrete elements are developed in an unequal manner.
- Initial vocational training is a subsystem with a simple structure, based on a modern conception. This conception is based on an understanding of vocational training as a path to professional specialization for young people before leaving the educational system and incorporating into the labour market. As a result of the modernizing impulse of the LOGSE

the system of vocational training managed to overcome the traditional conception of training as a secondary path for the working class. This was achieved as a result of:

  − Access to vocational training requiring the prior completion of compulsory secondary education, which meant a minimum educational level upon entering.

  − Vocational training including internships in businesses as part of obligatory content (representing about 25 percent of the total time). This has contributed to improving the relationship between training centres and companies, and has facilitated the insertion of young people with vocational training certificates into the labour market.

• Initial vocational training, structured in training cycles of intermediate and advanced levels, had approximately 450,00 students in 2006. This figure is very low and makes clear the effort that remains to be made to increase the number of young people with qualifications that integrate into the labour market at this educational level.

• A significant number of young people, in addition, access the advanced cycles of vocational training, a part of them subsequently continuing on to university. In the 2004-2005 course, 8.3 percent of students registered in universities came from these advanced vocational training cycles.

• In recent years there has been an increased incorporation of women into initial vocational training. If in 2000-2001 46 percent of the students registered were women, this percentage increased to 49 percent in the 2006-2007 course. The presence of women is even higher at advanced levels. In the 2007-2008 course there was a higher percentage of women in the advanced training cycles (with 51 percent there were even more women than men) than in the intermediate training cycles (46 percent).

• The subsystem of training for employment – although it came into existence later and very much tied to the entrance of Spain into the European Economic Community and to access to its funds – has evolved very rapidly and is today comparable to European models. In this time the value of training has spread among businesses and workers, both the employed and the unemployed.

- Training for employment reaches a very significant number of individuals. Based on data from 2006, at least 3,250,000 individuals were trained in employment training programmes – which includes what before was called occupational training (for unemployed workers) and continuing training (for employed workers). What particularly stands out is the number of employed workers that have taken training courses; this number reached almost 3 million in 2006.

- Characteristic of Spain is the important role played by the social partners – business associations and trade unions – in the programmes of training for employment for employed workers. These agents participate and are directly involved in the management, provision and organization of the training offered. This has opened up a space for dialogue and agreement around the issue of training which has also been extended to collaboration on other issues.

In addition, this study has also highlighted some **weak points** and aspects that need to be improved, among them those that stand out are the following:

- Some of the characteristics of education and the labour market in Spain provide particularly difficult challenges for vocational training. These characteristics make it difficult to have an initial vocational training of a size capable of producing a sufficient number of workers with the skill levels required by the labour market. Among these characteristics are the following:

  - Spain has one of the worst rates for early school leavers. In 2007, 31 percent of young people between 18 and 24 years of age had not finished compulsory secondary education or continued studying, when the overall figure for the European Union was only 14.8 percent. This deprives initial vocational training of a significant contingent of possible candidates and also implies that for years thousands of young people have been abandoning the educational system (many after more than ten years of schooling) without any skills or preparation for entering the labour market.

  - In Spain, in comparison to other countries of the European Union and the OECD, young people are still choosing the baccalaureate more often than vocational training. Based on data from 2006, while in Spain 57.5 percent of young people chose to study for the baccalaureate in comparison with 42.5 percent that chose training cycles, in the European Union these percentages were 46.7 percent and 47.6 percent respectively.

– The labour market in Spain is characterized by historically high rates of unemployment, brusque changes in economic cycles and certain shortcomings with regard to the formal qualifications of workers. In concrete, while in Europe 49 percent of the employed population has intermediate level qualifications, in Spain this percentage only reaches 23.1 percent. In contrast, workers with low qualification levels are much more numerous in Spain (42.4 percent) than in Europe (23.2 percent), as are, though only slightly so, those with the highest qualifications (34.5 percent vs. 27.8 percent).

– The underemployment of skilled labour, as many highly skilled workers are in positions below their level of qualification, or are even inactive or unemployed. The percentage of individuals in these situations (what could be called the «rate of talent loss» is 22.7 percent in Catalonia (and more than 28 percent among women).

– The low number of skilled persons in the labour market also corresponds to a weak demand for skilled workers on the part of businesses, which is the product of the historical process of mutual adaptation between the system of training and the productive system. Traditionally businesses have been accustomed to not demanding a high level of specialization for the workers they hire, but instead a particular capacity for learning. Specialization is carried out within the workplace itself, and often it is very specific and not very generalizable, which harms the mobility of workers in the labour market.

• The integration and coordination between the subsystem of initial training and training for employment can be improved, in part due to the following factors:

– Vocational training has a dual dependency: while initial vocational training depends on the Ministry of Education, Social Policy and Sport, training for Employment is under the Ministry of Labour and Immigration. This dichotomy is reproduced in the autonomous communities, where the ministries of education and labour divide the system of vocational training. This dual dependency does not help to develop training from a comprehensive perspective, where it is seen as a lifelong process.

– This lack of coordination between initial training and training for employment is also reflected in the training centres, where, far from being open and integrated, they constitute specialized centres for each type of formation or student profile and often isolated from the local social and economic environment. Training for employment, in addition, often takes place in classrooms rather than proper training centres.

• A framework for coordination and an agreed upon strategic programme is missing, a framework that would provide clear objectives and would assess their achievement. The foundation of this shortcoming is the difficulty of integrating a central system compatible with the decentralization that the transference of powers on this matter to the autonomous communities entails and the lack of consensus between both administrative terrains (central and autonomous) on certain key issues, which is blocking the reform of the system. This decentralization has very positive implications, among which stand out greater adaptability to local labour markets and circumstances, but if there is no coordination a certain dispersion of the system come to exist (which runs the danger of converting into 17 different systems – one for each of the 17 different autonomous regions) and there is a duplication of institutions and functions.

• The functions of innovation, observation and evaluation of the system of vocational training, keys for assuring the quality of the system, have not been completely developed in practice, despite being explicit in the regulatory texts. The difficulties involved in this development play an important role in the difficulties of coordination between the central and autonomous levels just mentioned.

• A certain tendency orienting training toward the transmission of knowledge (often theoretical) and not as much a training of skills and attitudes can be seen. This characteristic makes the establishment of training based on competencies difficult.

• Spain has little weight in the elaboration of the training guidelines in the European Union. In this sense, the question of how the autonomous communities (which really have the majority of the practical powers in vocational training) will participate in European affairs is also not resolved.

• The inclusion of initial vocational training in secondary schools has some negative consequences. Among them should be mentioned a certain dissolution and lose of identity for these studies in the midst of training centres in which the educational dynamic of general education (not specialized) has dominated, with its more rigid management not well adapted to the local environment and the needs of the local labour market. In addition, in many of these centres, the material resources, although acceptable, are not the most modern and the teaching staff have important shortcomings regarding experience and knowledge of the subjects they teach.

• Although workplace internships are a part of the curriculum of the intermediate and advanced training cycle, the quality of these internships and their integration into the rest of the curriculum of the cycle, particularly when they are done in small firms or in productive sectors that are not very developed, are still below what is desirable.

• Although the presence of women in initial vocational training is growing, much of it is concentrated in concrete professional families. Three of these families (health, administration and image) are responsible for 74 percent of the female students in intermediate training cycles. This differentiation in training by gender is greater than that seen in the labour market.

• The establishment of initial vocational training as an attractive option after secondary education presents too many differences among the different autonomous communities.

• The training programmes for employed workers, although reaching many workplaces, do so in an uneven manner. While in companies with less than 10 workers the rate of access to these programmes is under 8 percent, among companies with more than 500 workers the rate is over 75 percent.

• Companies tend to not spend all the subsidies they have available for training activities. Mid-sized firms generally spend around 50 percent of what they have available, while large firms spend 66 percent. This implies that, despite growth in recent years, there is still much to do regarding promoting investment in training on the part of business.

• The option of using work as a training element, very common in neighbouring countries and the foundation of work-linked training programmes, has not caught on in Spain. Existing programmes of this type (workshop schools,

craft centres, employment workshops and training contracts) are rare and in the year 2006 reached no more than 60 to 70 thousand persons.

In short, these weak points can be synthesized into three major issues that need to be improved on:

- The mutual adaptation, with negative results, to a low demand for skills on the part of the productive system and little specialization in the offer of training.
- The small size of initial training, which does not cover the needs of the productive system, and is basically a consequence of the poor performance of the compulsory secondary education system.
- The articulation between the central state and autonomous state levels, which weakens the mechanisms for the coordination and governance of the whole system. The solution involves introducing changes in some of its elements.

The system is in a transitional situation with a dual dynamic. On the one hand, the transition reveals an evolution toward the constitution of territorial systems at the level of autonomous communities, which tend to formulate their own systems, and on the other hand, it is evolving toward an open system of lifelong learning.

The rapidness of the transformations of the system, which did not consolidate its current form until just a few years ago, means that some structural elements which are still being formed obey a logic based on responding to problems from the past, which takes energy away from focusing on surmounting the challenges of the future. This problem can also be considered as an opportunity to address the pending reforms from a perspective focused on the future, introducing the most advanced elements that are adapted to the new situation.

The advance toward a knowledge society implies rapid changes that demand concentrating all efforts on the significant adaptations that the systems of training have to make in order to generalize access to lifelong training. An access that permits individuals to acquire the quality learning that corresponds to their needs.

At this point some proposals will be commented on which, in the light of arguments detailed in the text, can contribute to improving the system of

vocational training in this context of change, taking advantage of its strong points and trying to respond to or address the weak points which have been identified. The proposals have been grouped into four large blocks; those directed at improving the skills levels in the labour market, those focusing on strengthening training in the knowledge society, those related to the improvement of the governance of the system and, finally, those that are focused on a new comprehensive agreement for training and qualifications.

For higher qualifications in the labour market

In the relationship between the training system and the productive world different initiatives can be considered that aim to bring them closer.

From this study the conclusion is made that there exists a negative dynamic between the low demand for skilled workers on the part of businesses and a limited offer of training, above all in initial training, which mutually feed off each other.

From the perspective of the knowledge society the expectation is that a greater demand for a skilled workforce will be produced, without the disappearance of the need for low-skilled workers. In this context, it seems advisable that the vicious circle be broken by both parties, with a boost in the demand for more highly qualified personnel on the part of businesses and the creation of a wider training offer.

There are diverse initiatives which would facilitate a closer relationship between the system of training and businesses, with the expansion of the training offer and the increase in the skills level of the workers:

a) A prior condition would be to achieve better results from compulsory secondary education, so that a larger number of young people can accede to the intermediate cycle of vocational training. Until this is achieved the current regulations of the Programmes of Initial Professional Qualification (PCPI) offer a second opportunity for young people that do not complete compulsory secondary education. The integration of the different social guarantee programmes and work-linked training programmes in the field of active employment policies such as workshop schools, craft centres and employment workshops into a single PCPI, sufficiently flexible so that all types of young people can fit within its programmes, would be a great advance.

b) The promotion of training in school in alternation with work as training strategy would facilitate the relationship between training and the working world. The lengthening of the period of workplace internships and their extension to training for employment, or the implementation at the state level of the Basque experience of contracts between companies and students of initial training are two possible measures that have to be carefully considered.

c) Opening and bringing the centres closer to businesses is a necessary condition so that the previous measures will have a real day to day impact. To achieve this objective, it is necessary to reflect on the situation of vocational training within secondary schools. In this text[1] the need to offer a stronger identity and greater autonomy to vocational training centres has been argued for, and diverse options have been presented to achieve this, whether through levels of secondary education or through the creation of centres specifically for vocational training. A reform of these characteristics would facilitate the adaptation of centres to their local environment with a more comprehensive conception of the total training offer, both initial and continuing. The creation of local training campuses with an active participation on the part of local governments would facilitate the necessary coordination of all the training available within a specific territory, now very dispersed.

d) A greater commitment of the social partners to promoting training within the workplace and in different sectors with the objective of increasing the volume of training and subsidies placed at the disposition of businesses would have an immediate effect on the skills level of the active population. On the other hand, this commitment would have to be broadened to promote the improvement of access to training of the sectors with the lowest qualifications within the companies. The immigrant population would also have to be included among the collectives to be given priority.

e) The definitive development of a system for the recognition of professional experience would facilitate access to training to those groups that had not followed a formal training process, in that way permitting them to complete their qualifications.

(1) See page 54 and following.

For a new drive to strengthen training in the knowledge society

In this text it has been argued that the advance toward the knowledge society demands that a greater number of persons obtain the highest levels of qualification. To achieve this objective, it is necessary that training systems adapt to new social demands. It is not only a question of more training for more people, but also of qualitative changes in the training imparted, both in respect to the content and the form.

The renovation of the training system requires clear and quantifiable commitments regarding the levels of qualification needed by the adult population, and an improvement in access to training for certain groups and in regions where the system of training is less developed.

To achieve the goals set out, it will be necessary to make the whole system more flexible in order to facilitate access and circulation within the system, between subsystems and levels. Fiscal policy could be an instrument to facilitate and provide incentive for the population to invest in training.

The access of the population to training would be easier if the training centres were better connected to their local environments, with strong guidance programmes directed at both youth and adults, and with offers coordinated across the territory and integrated among the different subsystems. These centres will have to have up to date and specialized equipment for the diverse professional families, and an offer of modular training that recognizes competencies acquired through other means.

A renovation of teaching, which is involved less in the transmission of knowledge and more in guidance and the training of learning capacities for a broad public, would be a step forward in the conception of lifelong training. The training and retraining of teachers so that their knowledge is up to date and adapted to the new training dimension becomes a priority.

The strengthening of the use of the new information and communication technologies and the development of *e-learning* are necessary requisites for establishing the new training concepts.

For better governance of the training system

At the most generic level of governance of the system there are diverse elements that need to be considered:

a) First, there is a lack of definition of evaluable and operative objectives that orient the actions of different actors involved in the governance of the system, at the level of the central state as well as that of autonomous community and local government. If the autonomous communities are establishing autonomous training plans, it seems reasonable that an instrument of such characteristics also be established at the central state level. In this sense, there is need for the formulation of a third national plan for vocational training that would give continuity to the work carried out up to now by the General Council for Vocational Training.

In the same direction, strengthening the functions of the General Council, not only as a consultative body of the government but also as a real area for coordination and consensus among all the parties involved, could help in compensating for the lack of global entities for the management of the whole system. The Council could act as a «senate» for vocational training, as the highest governing body of the system, leading its transformation in the evolution toward the knowledge society.

b) Second, the coordination between the state level and the autonomous level and the relationship of both with the social and economic partners (businesses and workers) surely constitute the most critical elements in the current situation in the system. The lack of consensus among these key actors is blocking and delaying the system's capacity to adapt to new demands. It is necessary and urgent to arrive at an agreement that will overcome this current blockage and that, based on shared objectives, will define the structure and functioning of the system, and especially the role of each of these actors. This consensus could take the form of a major agreement on vocational training among these four key actors.

In addition to an agreement of this type, instruments will also have to be developed which will regulate the relationship between the central administration and the autonomous administrations on matters of training in a more stable manner, relieving the sectoral conferences of this function. For

example, the use of instruments similar to contract programmes would permit the streamlining and simplifying of the current mechanisms of coordination, monitoring and control among the different levels of government administration. These contracts could cover commitments for action, results and financing in relation to objectives set by the central state and each one of the autonomous governments in their respective plans for training.

c) Third, and related with the previous point, there is duplication and overlapping among bodies which play a coordinating and managing role for parts of the system at the central state and autonomous levels. The current integration of the subsystems of continuing training and of occupational training into a single subsystem of training for employment requires rethinking the functions that the Tripartite Foundation and INEM were carrying out and adapting them to the new situation. Either INEM absorbs the Tripartite Foundation and becomes a quadripartite body or the Tripartite Foundation is reinforced as a quadripartite agency which will manage all training for employment at the state level.

In any case maintaining the division between the state management of the old occupational training and that of continuing training no longer makes sense after the Royal Decree for their integration. This division will put a brake on consolidating the integration between the two old subsystems, in addition to maintaining a whole series of bureaucratic tics and inefficiencies that need to be overcome.

This same approach is applicable to the autonomous communities, which have formed separate bodies for managing the old subsystems. In this area the need to merge the different management instruments which exist is even clearer.

d) Fourth, in the context of the reformulation of the managing bodies of the subsystem of training for employment, it will be necessary to debate over the new function that state bodies should play in relation to those which exist in each autonomous community. The inheritance from the past of a deconcentrated system will have to be overcome to get to a more up to date decentralized system. Therefore, the function of monitoring and control by state bodies should be placed under the leadership of autonomous bodies, but with shared objectives under a framework of clear legislated powers and functions accepted by all parties.

Institutions such as INEM, the Tripartite Foundation, the General Council for Vocational Training and INCUAL will have to be reformed to establish a new type of relationship with the employment services of the autonomous communities, the autonomous councils for vocational training, the consortiums for continuing training and other similar bodies or with the autonomous communities' institutes of qualifications.

e) Fifth, there has been little development of important complementary functions in the system that are necessary to face the challenges of the future, such as, the functions of guidance, innovation, quality assurance, evaluation and observation.

The clarification of who must organize the function of observation within the system and how it should be done is urgent. Whether it's INEM or INCUAL coordinating this work through a network with autonomous observatories, the capacity to supply all the actors in the system, regardless of their place, with the information needed to make decisions based on solid data will have to be strengthened.

The functions of quality assurance and innovation should either be left in the hands of the autonomous communities based on an agreement over the coordination of their development, or a body should be created which will take on these functions with the participation of the autonomous communities and the other actors involved. The capacity to advance toward an improvement in quality and the fostering of innovation cannot depend on the self regulation of the system itself. Both functions require a plan, a driving force and active supervision.

It is not necessary to create new bodies for each one of these complementary functions of the system, but it is necessary that each one of them is clearly defined and organized. The function of evaluation could be assumed by bodies which are also occupied with other functions, such as quality assurance and innovation or that of observation, or it could be included in an action plan within broader institutions for evaluation, whether a part of the educational system or public policy. However, what is necessary is that there is a systematic plan for evaluation of the whole system, and this is still pending development.

Lastly, and not because it is a less important function, providing guidance will have to be developed with the aim of improving the transparency of the whole system. The complexity of the system and the multiplicity of actors do not lend themselves to one single mechanism for guidance, but it will be necessary to ensure that guidance is provided and assured throughout the different areas and levels of the system.

f) Sixth, the European programmes and activities will have to be relocated to achieve greater integration in the overall system, at both the level of the central state and that of autonomous communities, and to take better advantage of their potential to complement the resources of the system. In addition, under the new financial perspective of a positive net contribution from Spain to the European Union, Spain will have to have a more active and proactive presence in the field of training and in the European vocational training institutions.

All these elements referring to the general governance of the system point toward the same fact: the structure that the system of vocational training in Spain has acquired necessitates the redesigning of its general governing institutions, both at the central state level and at the level of autonomous communities, and in the relationship between both these levels. The strengthening of the institutions of the system would contribute to greater fluidity in its functioning, but above all would place it in a better position to face the transformations that will have to be carried out in order for it to adapt to the new demands of the knowledge society.

The volume and complexity that the system is acquiring places an initiative on the table, which up to now has only been raised among experts (De Asis and Rueda, 2003). This is the idea of creating a unified governing and administrative body for the whole system, such as a ministry for training or a similar body. An initiative of these characteristics would demonstrate the importance of training and its key role on the path to the knowledge society. It would also facilitate the coordination and governance of the whole system. In theory, the fact that many of the management responsibilities for the system of vocational training are not the responsibility of central government ought to facilitate the creation of a ministry for training or a similar body that would unify all powers over training under one authority, today distributed among diverse ministries, and which would work in close

collaboration with the ministries of education and labour to take on the regulation of the system of training as a whole.

At the level of the autonomous communities the proposal for the creation of a single agency to assume the management of all training would be justified, above all taking into account the complementarity of the resources of each one of the two departments normally involved. The departments of education have the equipment and the material resources that are intended for initial training while the departments of labour have those resources intended for training for employment. In addition, the departments of labour have those financial resources intended for training for employment to distribute, which would permit the reutilization of the equipment assigned to the departments of education for the benefit of the whole system.

For a new agreement on training and qualifications

Within this study the absence of sufficient consensus among social partners and public administration at all levels to complete the architecture of a modern decentralized system of vocational training has been insisted upon on various occasions.

This study urges the adoption of a coherent agreement that will lead to a new stage in the evolution of the system of vocational training to meet the challenges training faces in the knowledge society, as the current model has achieved all that it can. This agreement should address the improvement of the organization of the system as well as its capacity to provide a skilled workforce and generate a greater demand for qualifications on the part of the world of work, both private and public.

The involvement of the four central actors of the Spanish system (trade unions, business organizations, central state government and autonomous governments) is a necessary condition to assure that the impact of such an agreement will be effective. It will be necessary to mobilize the whole society and the rest of the actors involved in the system of vocational training around a new agreement or pact of this type. To overcome the difficulties of the system and guide it toward the future is a task that requires the participation and commitment of the whole society, which will be its principal beneficiary.

Both the society and the Spanish economy have much to gain with a reform of the system of training of these characteristics, intended to generate a more competitive economy and one that is capable of offering skilled and quality jobs to the great majority of the population. The current structure of the system of formation is solid and constitutes a starting point for making training a priority in the social and economic transformations taking place. It is in the hands of the key actors to take the initiative.

Bibliography

ALTMANN, N.; BINKELMANN, P.; DÜLL K. and STÜK, H. (1982): *Grenzen neuer Arbeitsformen*. Frankfurt-New York.

ANECA (2007): *Encuesta REFLEX. El profesional flexible en la sociedad del conocimiento*. ANECA, Madrid.

ARGYRIS, C. (1992): *On organizational Learning. Blackwell business.* Cambridge, Massachussets.

BAUDRILLARD, J.; HABERMANS, J.; SAID, E. *et al.* (2000): *La postmodernidad*. Kairós, Barcelona.

BÉDUWÉ, C. and PLANAS, J. (2003): *Expansión educativa y mercado de trabajo*. Instituto Nacional de Cualificaciones, Madrid.

BELL, D. (2006): *El advenimiento de la sociedad post-industrial*. Alianza, Madrid.

BJORNAVOLD, J. (2000): *Making learning visible: identification, assessment and recognition of non-formal learning in Europe.* Office for Official Publications of the European Communities, Luxembourg.

BOYER, R. and DURAND, J. P. (1998): *L'après-fordisme*. 2ª edición, Syros, Paris.

BRAVERMANN H. (1974): *Labour and Monopoly Capital: The Degradation of Work in the Twentieth Century*. Monthly Review Press, New York.

BRINKLEY, I. (2006): *Defining the knowledge economy*. The Work Foundation, London.

BROWN, P.; GREEN, A. and LAUDER, H. (2001): *High Skills: globalisation, competitiveness and skill formation*. OUP.

BRUNO, S. (1991): «Nuevas estrategias educativas para moldear nuestro futuro». *Revista de Formación Profesional,* no. 2, TeSalonica, CEDEFOP.

CASTELLS, M. (1999): *La sociedad red*. Alianza Editorial, Madrid.

— (2001): *La era de la información*. 3 vol, Siglo XXI, México.

CEDEFOP (2008): *Future Skill needs in Europe. Medium term forecast, synthesis report*. Office for Official Publications of the European Communities, Luxembourg.

CEREQ (2001): «Compétences et enjeux sociaux dans les pays européens». *Formatino et emploi,* no. 74.

CES (2005): *El papel de la juventud en el sistema productivo español*. Consejo Económico y Social, Madrid.

CÍRCULO DE EMPRESARIOS (2007): *Formación profesional: una necesidad para la empres*a. Círculo de Empresarios, Madrid.

CIREM (2007): *Estudi sobre el desaprofitament de les competències de les dones en el mercat de treball*. Cirem, Barcelona.

CIREM-ICT (2000): *Economía y trabajo en la sociedad del conocimient*o. CIREM-ICT, Barcelona.

COLARDYN, D. and BJORNAVOL, J. (2005): *The learning continuity: European inventory on validating non-fomral and informal learning. National policies and practices in validating non-formal and informal learning*. CEDEFOP Panorama series, 117. Office for Oficial Publications of the European Communities, Luxembourg.

COLL, C. (1986): *Marc curricular per a l'ensenyament obligatori*. Departament d'Ensenyament. Secretaría General, Barcelona.

— (1991): *Psicología y currículum: una aproximación psicosocial a la elaboración del currículum escolar.* Paidós, Barcelona.

CONSEJO EUROPEO (2004): *Conclusiones del Consejo sobre principios europeos para la determinación y convalidación de la educación no formal e informal.* 9175/04 EDUC 101 SOC 220.

— (2008): *Informe conjunto de situación de 2008 al Consejo y de la Comisión sobre la ejecución del Programa de trabajo «Educación y Formación 2010»*. Brussels.

CONSEJO SUPERIOR DE EVALUACIÓN DEL SISTEMA EDUCATIVO (2008): *L'avaluació de la formació professional reglada, 2008-2009*. Quaderns d'avaluació, no. 10, Barcelona.

COPENHAGEN (2002): *Declaration of the european ministres of vocation education and training and the European Comission, convened in Copehangen on 29 and 30 november 2002.*

CROUCH, C.; FINEGOLD, D. and SAKO, M. (2001): *Are skills the Answer? The political economy of skill creation in advanced industrial countries*. Oxford University Press, New York.

CUADRADO, J. R. and IGLESIAS, C. (2002): *Cambio sectorial y desempleo en España*. Fundación BBVA, Madrid.

D'IRIBARNE, A. and SILVESTRE, J. J. (1987): «Formation des actifs et compétitivité des entreprises: recherche d'une trajectoire de sortie de crise», *Formation Emploi*, no. 17.

D'IRIBARNE, Ph. (2nd ed. 1993): *La logique de l'honneur, Gestion des entreprises et traditions nationales*. Seuil, col. «Points/Essais» (first edition 1989), Paris.

DE ASÍS, F. and RUEDA, A. (2003): *La formación profesional en España*. Document 2/2003. Fundación Alternativas, Madrid.

DECISIÓN (1999): *Decisión 1999/382/CE del Consejo Europeo de 26 de abril, por la cual se establece la segunda fase del programa de acción comunitario en materia de formación profesional.*

— (2006): *Decisión 1720/2006/CE del Parlamento Europeo y del Consejo de 15 de noviembre de 2006, por la cual se establece un programa de acción en el ámbito del aprendizaje permanente.*

DECRETO (2003): *Real Decreto de 1 de agosto 1046/03 por el cual se regula el subsistema de formación profesional continua.* Published in BOE, no. 219 September 12, 2003.

— (2007): *Real Decreto de 23 de marzo 395/07 por el cual se regula el subsistema de formación profesional para la ocupación.* Published in BOE, no. 87 April 11, 2007.

DESCY, P. (2002): *Formar y aprender para la competencia profesional. Segundo Informe de la Investigación sobre formación profesional en Europa.* CEDEFOP Reference series; 12. The Office for Official Publications of the European Communities. Luxembourg.

DRUKER, P. (1969): *The Age of Discontinuity, Gidelines to our Changing Society.* Harper and Row, New York.

ETEFIL (2005): *Encuesta de Transición Educativo-Formativa e inserción Laboral.* INE, Madrid.

ETF (2005): *La réforme de l'enseignement et de la formation tehniques et professionnel au Moyen-Orient et en Afrique du Nord*. ETF et Banque Mondiale, Turin.

FINA, L. and TOHARIA, L. (1987): *Las causas del paro en España. Un punto de vista estructural*. Fundación IESA, Madrid.

FINA, L.; TOHARIA, L.; GARCÍA SERRANO, C. and MAÑÉ, F. (2002): «Cambio ocupacional y necesidades educativas de la economía española». In F. Sáez (coord.), *Formación y empleo*. Fundación Argentaria, 2000, p. 47-154, Madrid.

FRIEDMANN, G. (1964): *Le travail en miettes*. Gallimard, col. «Idées», Paris.

FORCEM (1992): *Acuerdo Tripartito en materia de formación continua de los trabajadores ocupados*. www.fundacióntripartita.org. Madrid.

— (1996): *Acuerdo Tripartito sobre Formación Continua*. Published in BOE, no. 117 May 16, 1997.

— (2001): *Acuerdo Tripartito sobre Formación Continua*. Published in BOE, no. 40 February 15, 2001.

GARCÍA SERRANO, C.; JIMENO, J. F. and TOHARIA, L. (1995): «La naturaleza del cambio técnico y la evolución del empleo en España, 1977-1993», *Información Comercial Española*, no. 743, July 1995, p. 23-44.

GARRIDO, L. and TOHARIA, L. (1991): «Cambio ocupacional y necesidades de formación en España, 1985-1995», *Economía industrial*, no. 277, January-February 1991, p. 159-179.

GREINERT, W-D. (2004): «Los sistemas europeos de formación profesional: algunas reflexiones sobre el contexto teórico de su evolución histórica». *Revista de Formación Profesional,* no. 32, August 2004, TeSalonica, CEDEFOP.

GUERRERO SERÓN, A. (2005): «La oportunidad del enfoque de competencias y la desigual competencia por las oportunidades laborales y escolares». In VV.AA. (2005): *Competencias, igualdad de oportunidades y eficacia de la formación continua*. Fundación Tripartita para la Formación en el Empleo.

HOMS, O. (1979): *Tres años de nueva Formación Profesional*. Instituto de Ciencias de la Educación. Universitat Politècnica de Barcelona, Barcelona.

— (1993): «Categorías laborales y cambios en la organización industrial productiva». *Economía y sociología del trabajo*, no. 21/22.

— (2001): *Structures and mechanisms for information and needs forecast on training, qualifications and employment (the observatory' function)*. European Training Fundation, Turin.

— (2002): *De la cualificación a la competencia: cambio de época y de paradigma*. Universidad Complutense de Madrid, Madrid.

HOMS, O.; KRUSE, W.; ORDOVÁS, R. and PRIES, L. (1987): *Cambios de cualificación en las empresas españolas*. Fundación IESA, Madrid.

HOMS, O. and MARSAL, F. (1988): *Informe sobre los perfiles profesionales y las necesidades de formación del nivel 3 en el sector textil-confección en España*. CEDEFOP, Berlin.

HOMS, O.; ROMANÍ, C. and INGLA, A. (1989): *Structure de l'emploi et des qualifications dans les industries de la chimie en Espagne*. CEDEFOP/CIREM, Barcelona.

IFES (2005): *Situación del aprendizaje a lo largo de la vida en España*. Ministerio de Trabajo y Asuntos Sociales, Madrid.

INCUAL (2008): *Catálogo Nacional de Cualificaciones Profesionales*. INCUAL, Madrid.

KERN, H. and SCHUMANN, M. (1988): *El fin de la división del trabajo. Racionalización en la producción industrial.* Ministerio de Trabajo y de la Seguridad Social, col. «Economía del trabajo» (first edition 1984), Madrid.

KRUSE, W.; PAUL KOHL-HOFF, A. and ARGIMÓN, G. (1990): *La política sindical en la transición de los jóvenes de la escuela al trabajo*. Fundación H. Böckler/SFS-CIREM, Barcelona.

LEY (1986): *Ley 1/1986 of January 7th through which was created the General Council for Vocational Training, modified by the law 19/1997 of June 7.*

LEY GENERAL DE EDUCACIÓN (1970): *General Act on Education* 14/1970 approved on August 4, 1970. BOE August 6, 1970.

LEY ORGÁNICA (2002): *Ley Orgánica 5/2002 de les Cualificaciones y de la Formación Profesional de 19 de junio.* Published in BOE, no. 147 June 20, 2002.

LIPINSKA, P.; SCHMID, E. and TESSARING, M. (2007): *Zooming in on 2010. Reassessing vocational education and training*. Office for Official Publications of the European Communities, Luxembourg.

LOE (2006): *Act on education*, Ley orgánica 2/2006, approved May 3, 2006. BOE, no. 106 May 4, 2006.

LOGSE (1990): *General Law on the Education System*, Ley orgánica 1/1990, approved October 3, 1990. BOE, no. 238 October 4, 1990.

MASUDA, Y. (1984): *La sociedad informatizada como sociedad post-industrial*. Fundesco-Tecnos, Madrid.

MARTÍN ARTILES, A. (2005): «Cambios en la organización del trabajo, formación, cualificación y competencias». In VV.AA. (2005): *Competencias, igualdad de oportunidades y eficacia de la formación continua*. Fundación Tripartita para la Formación en el Empleo, Madrid.

MAZERAN, J. *et al.* (2007): *La enseñanza superior profesional corta. Un desafío educativo mundial. Hachette*, CIEP, The World Banc, *Paris*.

MARTÍNEZ USARRALDE, M-J. (2002): *Historia de la Formación Profesional en España. De la Ley de 1955 a los Programas Nacionales de Formación Profesional*. Universitat de Valencia, Valencia.

MEC (1969): *La Educación en España. Bases para una política educativa*. Ministerio de Educación y Ciencia, Madrid.

MEMORANDUM (2000): *Memorandum de la Comisión de 30 de octubre de 2000 sobre educación y aprendizaje permanente.* SEC (2000) 1832 final.

MERINO, R. (2005): «Apuntes de historia de la Formación Profesional reglada en España: algunas reflexiones para la situación actual». *Témpora. Revista de historia y sociología de la educación*, no. 8.

— (2006): «¿Dos o tres itinerarios de formación profesional? Balance y situación actual en España». In *Revista Europea de Formación Profesional*, 37, Salonica, CEDEFOP, p. 55-69.

MAURICE, M.; SELLIER, F. and SILVESTRE, J-J. (1982): *Politiques d'éducation et organisation industrielle en France et en Allemagne*. P:U:F:, col. «Sociologies», Paris.

MINISTERIO DE EDUCACIÓN (2008): *Datos y Cifras. Curso Escolar 2008/09*. Madrid.

MINISTERIO DE TRABAJO Y ASUNTOS SOCIALES (2008): *Encuesta de Formación Continua. Año 2005*. Ministerio de Trabajo y Asuntos Sociales, Madrid.

MURNANE, R. and LEVI, F. (2004): *The New Division of Labor: How Computers Are Changing the Way We Work*. Princeton University Press and Russell Sage Foundation.

OCDE (2001): *Definition and selection of Competencies: Theoretical and Conceptual Foundations*, DeSeCo Background Paper.

— (2008): *The future ot the Internet economy*. A statistical profile. OCDE, Paris.

— (2008a): *Education at a glance 2008: OECD Indicators.* OCDE, Paris.

OLIVER, J. and RAYMOND, J. L. (2003): *Educación formal y demanda de cualificación de la mano de obra en España: una visión a largo plazo*. Documento de Economía Industrial, no. 14, Centre d'Economia Industrial, Universitat Autònoma de Barcelona.

ORDEN (2007): *Orden Tas/2307/2003 de 27 de julio de regulación de la formación de demanda.*

— (2008): *Orden Tas/718/2008 de 7 de marzo de regulación de la formación de oferta,* published in BOE, no. 67 March 18, 2008.

PARADEISE, C. (1987): «Des savoirs aux compétences : qualification et régulation des marchés de travail», *Sociologie du travail*, no. 25.

PLANAS, J. and TATJER, J. M. (1982): *Implicacions i problemes de la reforma de l'ensenyament mitjà.* Institut de Ciències de l'Educació. Universitat Autònoma de Barcelona, Bellaterra.

PLANAS, J. and CASAL, J. (2003): «Sistema de enseñanza y trabajo: educación y mercado de trabajo en la globalización, la transición de la escuela al trabajo». In Francisco Fernández Palomares (coord.) *Sociología de la educación.* Madrid.

PLANAS, J. (2005): «El papel de la empresa en la formación de los trabajadores en España». In *Revista de Educación*, 338. MEC, p. 125-143, Madrid.

PÉREZ DÍAZ, V. and RODRÍGUEZ, J. C. (2002): *La educación profesional en España*. Santillana, Madrid.

PRATS, J. and RAVENTÓS, F. (editors) (2005): *Els sistemes educatius europeus ¿Crisi o transformació?* Obra Social Fundación "la Caixa", Barcelona.

PRIETO, C. (1988): «Políticas de mano de obra en las empresas españolas», *Sociología del trabajo*, no. 2.

— (1999): *La crisis del empleo en Europa*. Germanía, Valencia.

PIGEASSON, J. and VIMONT, D. (2005): *La validation des acquis de l'expérience à l'Education nationale*. Rapport núm. 2005-111, noviembre. Inspection générale de l'éducation nationale, Paris.

REAL DECRETO (2003): *Real Decreto 1046/2003 de 1 de agosto, por el cual se regula el subsistema de formación continua*. BOE, no. 219 September 12.

— (2005): *Real Decreto 1558/2005 de 23 de diciembre sobre los requisitos básicos de los centros integrales de formación profesional*, published in BOE, no. 312 December 30, 2005.

— (2006): *Real Decreto 1538/2006 de 15 diciembre sobre la ordenación general de la formación profesional del sistema educativo*, published in BOE, no. 182 January 3, 2007.

— (2007): *Real Decreto 395/2007 de 23 de marzo por el cual se regula el subsistema de formación profesional para la ocupación*, published in BOE, April 11, 2007.

RESOLUCIÓN (2006): *Resolución sobre el reconocimiento del valor de la educación no formal e informal en el ámbito de la juventud europea.* Diario Oficial C 168 July 20.

REFERNET (2007): *Thematic Overviews*, Tesalónica, CEDEFOP www.trainingvillage.gr.

ROPE, F. and TANGUY, L. (dir., 1994): *Savoirs et compétences. De l'usage de ces notions dans l'école et dans l'entreprise*. L'Harmattan, col. «Logiques Sociales», Paris.

SÁEZ, F. and HERRARTE, A. (2004): *Evaluación de la estrategia europea de empleo en las Comunidades Autónomas españolas*. Universidad Autónoma de Madrid, INEMSPEE, Madrid.

SÁNCHEZ, J-E. (1976): *Formación profesional y sistema productivo. Aspectos generales*. Institut de Ciències de l'Educació, Universitat Politècnica de Barcelona, Barcelona.

— (1979): *Empresa, cualificación y formación.* Institut de Ciències de l'Educació, Universitat Politècnica de Barcelona, Barcelona.

STEHR, N. (1994): *Knowledge Societies: The transformation of labour, Prosperity and Knowledge in Contemporany Society.* Sage, London.

STROOBANTS, M. (1993): *Savoir-faire et compétence au travail.* Éditions de l'Université de Bruxelles, Brussels.

TIANA, A. *et al.: Historia de la educación (edad contemporánea)*. UNED, Madrid.

TISSOT, P. (2004): *Terminology of vocational training policy. A multilingual glossary for an enlarged Europe.* Office for Official Publications of the European Communities, Luxembourg.

TOHARIA, L. (2004): «Necesidades formativas y de cualificación en la economía española». In VV.A.A. (2004): *Formación Continua. Competitividad y Cohesión Social*. Fundación Tripartita para la Formación en el Empleo, p. 49-47, Madrid.

TOURAINE, A. (1955): *L'évolution du travail ouvrier aux usines Renault*. Ed. du CNRS, Paris.

TRIBUNAL CONSTITUCIONAL (2002): *Sentencia 95/2002 de 25 de abril promovida por la Generalitat de Cataluña contra la Orden del Ministerio de Trabajo y Seguridad Social de 30 de octubre de 2001, sobre subvenciones en materia de formación y ocupación. Y sentencia 190/2002 de 17 de octubre promovida por la Junta de Galicia, contra la disposición adicional segunda de la ley 41/1994 de 20 de diciembre de los presupuestos generales del estado para 1995 sobre financiamiento de acciones de formación continua.*

UNESCO (2005): *Informe mundial de la Unesco. Hacia las sociedades del conocimiento*. Unesco, Paris.

WSF (2007): *Análisis de la repercusión de los proyectos de movilidad Leonardo da Vinci sobre los jóvenes en formación y los jóvenes en el mercado laboral e influencia de los factores socioeconómicos*. Kerpen, WSF.

WYNNE, B. and STRINGER, D. (1997): *A competency Based Approach to Training and Development*. Financial Times, London.

ZARIFIAN, P. (1999): *Objectif compétence. Pour une nouvelle logique*. Éditions Liaisons, col·l. «Entreprise et carrières», Paris.

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Glossary of acronyms

ACVC: Association for the Certification of Professional Competencies.

BUP: Bachillerato Unificado Polivalente (General Unified Baccalaureate).

CEDEFOP: European Centre for the Development of Vocational Training.

EEC: European Economic Community.

CEREQ: Centre d'Études et de Recherches sur les Qualifications (Center for Studies and Research on Qualifications)

ECTS: European Credit Transfer System for Higher Education.

ECVET: European Credit Transfer System for Vocational Education and Training.

EGB: Educación General Básica (Basic General Education).

EQF: European Qualifications Framework.

ESO: Educación Secundaria Obligatoria (Compulsory Secondary Education).

EU-19-25-27: European Union according to the number of member countries.

FCT: Formación en Centros de Trabajo (Training in the Workplace).

FIP: Plan de Formación e Inserción Profesional (Employment Training and Integration Plan).

FORCEM: Fundación para la Formación Continua (Foundation for Continuing Training).

FP: Formación Profesional (Vocational Training).

FPI: Vocational Training level I.

FPII: Vocational Training level II.

FPIII: Vocational Training level III.

IES: Institutos de Educación Secundaria (Secondary Education Institutes).

INEM: Instituto Nacional de Empleo (National Employment Institute).

KSC: Knowledge, skills, competencies.

LOE: Ley Orgánica de Educación (Act on Education).

LOGSE: Ley de Ordenamiento General del Sistema Educativa de 1990 (General Law on the Education System (1990)).

NVQ: National Vocational Qualifications.

OECD: Organisation for Economic Cooperation and Development.

OPEAS: Orientación Profesional para el Empleo y Asistencia para el Autoempleo (Vocational Guidance Services for Employment and Assistance for Self-Employment).

PCPI: Programas de Cualificación Profesional Inicial (Programmes for Initial Professional Qualification).

SPEE: Servicio Público de Empleo Estatal (State Public Employment Service).

ICT: Information and Communication Technology.

TVET: Technical and Vocational Education Training.

VAE: Validation des Acquis de l'Expérience (validation of knowledge acquired through experience).

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The objective of the present study is to provide an analysis of the Spanish vocational training system, identifying its principal characteristics as well as the challenges it will face in the near future.

The author examines the transition process toward a modern system of vocational training, conceived as a path toward specialized training for young people before their integration into the labour market (initial vocational training) as well as for employed and unemployed workers that need to upgrade their knowledge and skills (vocational training for employment). This analysis is particularly timely today, as the emergence of the so-called «knowledge society», the integration of global markets and the transformation of productive models have created new challenges. As a result, the vocational training system will have to address issues such as adaptation to the teaching of competencies or the integration of lifelong training.

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