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SECONDARY EDUCATION IN EUROPE: MAIN TRENDS

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1. Introduction

The objective of this paper is to present in a condensed form the "main trends" that have affected secondary education in Europe in recent years. The main trends are those that can be observed in a number of countries and that can be considered as indicative for the development of secondary education in Europe. Because of the rich mosaic of European education systems and policies, these trends suffer "exceptions" which would be worth analysing, but they lie beyond the scope of this paper.

In this paper, secondary education refers to the education cycle between primary/lower secondary and higher education, that is upper secondary education. It is taken in a broad sense, that is it refers to all education and training opportunities, whether in school or out-of-school, available to youngsters in the age 16-18 age bracket, extending to 16-20 because of repetition, re-orientation and late achievement.

2. Three main trends

The past two decades have witnessed three major trends, namely (i) universalisation, (ii) diversification of structures and curriculum and (iii) the search for quality. They are briefly reviewed below.

2.1 "Universalisation"

It means that, in most European countries, there is now sufficient capacity to cater for the education and/or training needs of all non-active youngsters in the 16-20 age group. This global statement may coexist with significant imbalances in some geographical areas (because of migratory movements), or in some technical streams (because of the slow response of the supply to changing demands). These imbalances may take the form of gaps or unused capacity in some areas or streams.

Furthermore, if overall participation is no longer a major problem, under-achievement, that is young people dropping out of the education and training system, before getting a basic qualification corresponding roughly to a secondary-school leaving level, still is.

To a large extent, this situation is one of the legacy of the 1980-95 period which was a period of slow growth and high unemployment in Europe. During this period, education authorities were keen to offer education and training authorities to all non-employed young people. In an attempt to fight against unemployment or to take young people out of unemployment statistics, some actually offered a "guarantee", that is a place in the education/training system to all young unemployed. Investment in this area was very much supply-driven.

2.2 “Diversification”

It refers to both (i) the strengthening of school-based technical and vocational streams at the upper secondary education level, and (ii) the development of a wide range of apprenticeship schemes involving school- and company-based training in various proportions. As will be seen below, diversification refers to structures, curriculum, student assessment, and certification.

There are three underlying philosophies behind this trend. The first refers to the concern for maintaining **unique and high standards of achievement**. In other words, it is believed that it is illusory to apply the same demanding standards of achievement, that is those of traditional secondary general education, to the age group as a whole. The supply of education and training opportunities should respond to the wishes, needs and capacities of all young people. In other words, diversification was actively pursued both to avoid a deterioration of the traditionally demanding standards of the European secondary school, and to offer a range of opportunities to all.

But diversification also responds to a second concern of **relevance to the labour market**, a concern that is understandably high on the agenda of policy-makers (and also of families) in a period of high unemployment. It is admitted that it is impossible for secondary education to achieve the dual objective of preparing young people for higher education and for entry into the labour market within a single structure. Diversifying structures was seen as the way to reconcile these two objectives.

Lastly, **diversification in secondary education responds to a similar trend at the higher education level**. In most European countries higher education now consists of (at least) two sectors, the university and the non-university sector offering short, vocationally-oriented studies. There is no longer a simple one-to-one relationship between (general) secondary education and access to the university, but an array of secondary school qualifications leading to various types of higher education.

2.3 The search for quality

When capacity is no longer a problem, quality becomes a prime concern. In recent years, stress was put on the search for quality and relevance in the technical/vocational streams of secondary education, including apprenticeship. A huge amount of energy was spent on **defining new standards of quality**, in line with labour market needs and in cooperation of the supplier of training (schools, apprenticeship centres, associations of employers, local authorities.

Not only were new training schemes developed in response to emerging needs, in the field of information technology for instance, but new instruments for curriculum development, student assessment, institutional evaluation and monitoring of new programmes were actively promoted. To be sure, the struggle for quality is an endless battle, but the institutional tools to fight it have been created.

3. Structures

3.1 Basic education

In a majority of European countries, the 9-10 basic education cycle including traditional primary and basic secondary school has become the "norm". Historically, this norm is the outcome of the **comprehensive school movement** which was initiated by progressive social reformers in the mid-century. The central concern of this movement was to postpone the streaming of pupils among various types of schools as much a possible to provide everyone, and the 12 to 15 year olds to begin with, with the same corpus of knowledge, attitudes, motivations and values. On the societal level, its objective was to promote mutual understanding among young people and "democracy" in a broad sense.

The 9-10 year norm applies to all Scandinavian countries, France, Italy, Spain and the United Kingdom, (with the exception of the private sector in the latter). But the norm suffers also important exceptions. In Belgium and Germany for instance, the comprehensive school model never succeeded in making a clear breakthrough vis-à-vis traditional education structures and the streaming of pupils among different types of schools begins at the end of the primary school. In the Netherlands, despite some recent efforts to unify the curriculum at the basic secondary education level, streaming among various types of general schools and technical schools takes place at age 14.

Furthermore, the philosophical and political ideas that helped nurture the comprehensive school movement are now on the defensive. First, there is a renewed demand for quality in education and effective learning at school. It is fuelled by parents' fear that their children are not learning enough in comprehensive classes.

Second, in the name of economic rationality, pleas for efficiency in the use of resources and competition among schools are increasing. Indicators of performance reflecting a strong current in favour of strict standards of evaluation in public schools and assessment of pupil's performance are a direct challenge to the comprehensive school ideal.

Lastly, the modern emphasis on individual aspirations runs counter to the aspirations of social homogeneity that characterize the comprehensive school movement. Personal achievements take over egalitarian principles and positive discrimination programmes for under-achievers are less easily accepted than two decades ago. The dilemma between "elitist" attitudes and "mass" education at the basic secondary education level still pervades the political discourse.

3.2 Upper secondary education and training

Beyond the basic education level, education and training provision in Europe is structured as follows:

(i) *general education*, lasting three to four years and ending with a secondary school-leaving examination. Success to this exam is a pre-requisite for entry into higher education;

(ii) *school-based technical/vocational education*: learning takes place in the vocational high school or the technical "*lycée*" on a full-time basis. Students' progression is structured in (the same number of) years as in the general high school and ends up with a technical diploma that is distinct from the general diploma;

(iii) *alternated or "dual" training schemes* combining structured learning in a company and learning in a technical schools. The proportion of learning time spent in the company and at differ greatly among training schemes, but a fifty-fifty arrangement is not uncommon. Apprenticeship which has strong historical roots in many European countries, is the oldest form of *dual* training;

(iv) *post-school training schemes*: various types of post-school training schemes have emerged during the last two decades in an effort to ease the transition of young people between school and work during a period of high youth unemployment.

Thus, education and training opportunities available to young people within the 16-20 age bracket are offered through a **range of institutional arrangements involving many providers, public, private, non-profit, central and local**. As in most countries in the world, school-based education is under the Ministry of Education, but post-school training schemes have been set up under the auspices of the Ministry of Labour. The private sector (companies and/or employer associations), plays a major role in the management and the delivery of apprenticeship and of other dual forms of training. Non-profit organisations (churches, associations among others) are present in the delivery of post-school training schemes.

It is crucial to note that, while **some forms of training are dominant in some countries, they are never exclusive of other training structures**. Thus, although the school-based model is strongest in Scandinavian countries, Italy, Spain, France, Belgium and the Netherlands, initiatives to implement and develop dual and post-school training schemes in these countries were carried out. Conversely, in German-speaking countries where the dual system is widespread, school-based technical education remained very strong in some sectors. Lastly, all European countries, regardless of their traditions launched post-school training schemes, the biggest one being in the United Kingdom.

The policy lesson to be drawn is that **European countries have refused the single model structure** and **adopted a systemic approach,** whereby each of these various forms of training fulfils different objectives and meets the needs of different target groups. It is the consequence of the trend towards universal coverage of the age group and of the need to maintain quality while for catering for heterogeneous groups of young people.

Within this burgeoning institutional framework, **general secondary education** is only a tiny part of the picture and probably the most resistant to change. Its basic function remain to prepare students to enter the university. With the possible exception of Central/Eastern European countries, curriculum changes remained marginal, as the basic features (pupil's schedule, organisation of the school week or year) remain unchanged.

By contrast, considerable reforms in **school-based technical/vocational secondary education** were carried out. Their main features can be summarized as follows:

- progression routes from one level to the next were organized to enable students to reach a qualification level more or less similar to general secondary education qualifications.

In almost all countries, these new diploma give access to non-university higher education;

- important curriculum reforms aimed at preparing students for entry into the labour market were carried out (see below);

- considerable investment in those streams took place in the form of equipment, buildings;

- a strong trend towards school autonomy and decentralisation is noticeable.

Alternated or dual training schemes were also actively promoted in an attempt to involve the private sector, i.e. employers in training. In Germany (and indeed in other German-speaking countries, Austria and Switzerland), the dual system of apprenticeship is the most important form of technical training at the post-basic education level. It is a "mass" system where the private sector plays a decisive role in terms of delivery, assessment, control and financing. Public vocational schools complement company-based training.

Many European countries were tempted to emulate the German system which was credited with high effectiveness in terms of transition from school to work. Government programmes to develop apprenticeship were implemented in France, Belgium, Denmark and the Netherlands, to mention only a few.

Underlying these initiatives was the belief that the young people who failed at school should be provided with another form of training more suited to their taste, might succeed with a different curriculum, teaching methods, and learning environment.

Post-school training schemes have emerged in almost all European countries during the last twenty years in an effort to ease the transition between full-time school and work. They should be seen as the European answer to high youth unemployment. The target groups aimed at are the school-leavers without diploma, the first job-seekers and, more generally, all those facing difficulties in getting accesss to a stable job.

In those school-to work training programmes, training takes place essentially on the job, but there is room in the job contract for a fixed number of hours of formal training in formal education institutions, unusually not exceeding 20% of total time. It is customary for companies which accept to take young people on their payroll to receive a state subsidy covering part of the expenses. When at its peak, the Youth training Scheme in the United Kingdom provided two-year training of this type to almost 400,000 people, that is about 25% of the 16-17-year olds.

The objectives of these programmes fall in three categories (i) vocational guidance (through work experience and help in identifying an individual's interests and abilities), (ii) practical training (that is qualifications that were not acquired during compulsory schooling and know-how related to the real world), and (iii) employment (by enabling young people to get acquainted with the world of work through of a succession of short-term jobs and to get known by their employers).

This rather complicated array of institutional arrangements that characterise upper secondary education and training provision in Europe stands in sharp contrast with the situation that prevails in Japan or the United States where the most of the 16-19 age group in enrolled in general high

schools, following the gradual postponement of the vocational track at this level to post-secondary institutions like community colleges.

4. Curriculum

The curriculum is at the heart of the educational enterprise and no policy, no reform can succeed if it does not put the curriculum at its centre. The most significant changes that can be observed on the European scene care briefly summarized below.

In general secondary education, curriculum reform tried to maintain a delicate balance between strict demands related to individual disciplines and new themes and concerns such as environment, information technology, interculturalism, civic education, health and the like. The former which found its expression in a "return to basics" movement, found much support among parents, employers and the polity in general. It was strengthened by the move towards a "national curriculum" made in several countries (the United Kingdom among others) known for their support for school autonomy regarding curriculum change.

The great innovation potential of the new themes is gradually being recognised. It is widely agreed that they should not become new subjects, but be integrated in those that exist within the framework of an interdisciplinary approach to modern "problems". They call for breaking through the "compartimentalisation" of knowledge into disciplines that has traditionally been essential to the organisation of the curriculum.

National and core curricula represent the most significant new elements in today's curriculum policy in Europe. They are the national counterpart to decentralisation and to school autonomy. This explains why they found support in the traditionally decentralised countries. There is now a consensus in Europe about the obligation of the state to give guidance in curriculum matters in order to prevent schools from neglecting "core" subjects. Secondary school-leaving examinations and admission requirements to higher education are other ways to maintain curriculum coherence among schools.

But the greatest challenge for curriculum policies comes the structural differentiation of the upper secondary education and training system. Efficient **institutional mechanisms** for modernizing curricula in technical and vocational education have been established in most European countries. They take the form of Commissions or bodies whose mandate is to examine trends in work organisation, content and competence-based requirements in each major occupation. These Commissions usually include representatives of training institutions, social partners (employers and unions), Chambers of Commerce, local authorities and authorized specialists in each occupational area. They are responsible for modernizing the content of training in existing occupations, merging old occupations in new ones, incorporating new labour market demands in technical/vocational curricula.

In Germany, the Federal Institute for Vocational Training is responsible for this task. It issues the training regulations governing the dual system of apprenticeship, the content of training in each recognised occupation, the assessment and certification procedures of training. In the United Kingdom, the validating bodies (London City of Guilds, Royal society of Arts (RSA), Business Education and Training Council (BTEC) are expected to maintain standards of quality throughout the country in a highly decentralised system. In France, consultative commissions establish the

requirement of each technical/vocational diploma in term of competences and abilities to be attained by students.

It is important to note that, in contrast with other regions of the world, there has been little attempt at taking into account the so-called "local/regional needs" in curriculum development. Most, if not all, the curriculum agencies mentioned above are "national" with a country-wide mandate, keeping an eye on the European scene to make sure that national qualifications are compatible with those in other European Union countries. In other words, **the essential task of designing curricula has not been decentralised in any way**, rather the contrary since traditionally decentralised countries have adopted "national" curricula. What has happened is that **curricula ceased to be the preserve of education ministries**, especially at the secondary education level. Employer associations, worker and teacher unions, local representatives, public and private training providers, non-profit associations doing social work in under-privileged areas have been invited at the curriculum table.

These curriculum bodies play an essential role of **feedback mechanisms** ensuring that changes in the labour market are taken into account by training providers. In the best cases they have the technical capacity to review qualifications and curricula of each occupational family every five years. Clearly, the extent of their authority, their composition and the balance between public and private sector influence vary greatly among countries, but they reflect the willingness of European governments to regulate the upper secondary education and training system in co-operation with the private sector in order to achieve the double goal of relevance and effectiveness on the one hand and social cohesion on the other.

In the technical/vocational education, the most noticeable curriculum trends can be summarized as follows:

(i) **Broadly-based rather than job-specific training**: most systems have shown a strong interest in "de-specialisation", meaning reformulating training programmes on the basis of broad occupational families, rather than specific occupations. The emphasis is on "horizontal" skills that can be used in different occupational contexts, especially in service occupations. As a result, the number of courses has decreased steadily over the past fifteen years in most countries. Thus, in Germany, the training courses in metal-working were reduced from 42 to 6 with 16 different specialisms. In France, the curriculum at the upper secondary technical education level, is divided into about 20 occupational lines covering all the needs of the French economy. The process of reformulating training curricula and qualifications is inevitably slow because the users often stick to a conservative attitude, preferring old-style training that they are used to.

(ii) **Communication skills**: These are crucial in new working arrangements involving interdisciplinary teams, information processing, closer links between production, marketing and sales. The content of most office jobs have a high communication content. These communications skills are often held in disregard by trainers accustomed to stress "technical" skills exclusively. Translating these new requirements into curricula is no easy matter. It is not enough to teach people how to communicate, they must learn to think in terms of transmitting and receiving information. Trainbing must develop new behavioural patterns that are not learned easily in a classroom environment.

(iii) **Learning by doing**: Work experience and learning on the job have been an essential part of many vocational training programmes for the last two decades. How long this

practical experience should last depends on the occupation and the form of training. It ranges from 80% in the British Youth Training Programme, 50 to 80% in the German dual system and indeed in all apprenticeship systems, to about 10% in school-based training programmes. In addition to the peculiar skills linked to a specific work environment, most observers agree that what is learnt on the job relates to general behaviour and motivation. Whereas school stress deductive learning methods starting from given premises and moving to logical conclusions, learning on the job is more inductive learning and observation.

(iv) **Modular delivery**: In practice this means breaking down the traditional courses based on years into shorter, self-contained sequences leading to a final qualification. Modular programmes are expected (i) to reduce drop-outs since students can stop before finishing a course, yet have reached a clearly-defined level which allow them to pick up again later on; (ii) to arrange more flexible courses, better adapted to students' needs and preferences; (iii) to encourage rigour and discipline in the construction of courses with targets for each module clear for both teachers/instructors and students; and (iv) to encourage self-learning when modules are accompanied by suitable teaching materials. Some European countries, Scotland among others, have succeeded in modularising the whole upper secondary education curriculum. In other, modular instruction is widespread in the technical/vocational education and in apprenticeship.

(v) **New qualifications**: They have emerged gradually in the last two decades in information technology, health care, tourism, bio-chemistry and pharmacy and in many other sectors.

5. Assessment and certification

In almost all European countries, upper secondary education lead to a **final examination and a diploma**. Holding this diploma is a condition for access to higher education…and success on the labour market. The procedures for assessing students' knowledge and granting diplomas at the end of secondary level may vary across countries, but they are rooted in strong sociological and pedagogical traditions that run deep into the political fabric of European societies.

Final certification is considered as a mechanisms for quality control in upper secondary education. It is accepted by teachers, parents, students and employers who are keen to maintain "quality" at a time of "massification" and to make sure that secondary education leads to qualifications that are recognised on the labour market. There is a long tradition of student assessment in school-based general and technical education, and the trend is towards procedures that enable comparisons of results among schools. Individual results are the first proof of students' achievement. Aggregate results, once they meet the criteria of validity and reliability, can be used to evaluate schools, systems and teachers, although this is a sensitive issue. Most educators and policy-makers are opposed to direct use of attainment data for resource allocation, for stimulating competition among schools or for teacher remuneration and promotion.

Apprenticeship schemes also end up with assessment procedures leading to a diploma. School-type examinations are inappropriate in this case, as the objective is to prove that various skills have been mastered, including behavioural skills. Furthermore, the assessment process takes place at the end of each module. It is, therefore, continuous and the importance of on the job training gives greater weight to internal assessment made by company instructors responsible for tutoring

apprentices in the company. In Germany for instance, the assessment jurys set up for the final examination in the dual system are appointed by the Chambers of Commerce and Industry, not by the Ministry of Education. They consist of three members, a representative of employers' associations, a trade union representative and a technical education teacher. Thus, the majority in those jurys is firmly in the hands of the social partners which are in control of quality and want to maintain the labour market value of diplomas.

Over the last twenty years changes in curricula have created problems for traditional certification procedures. The importance given to competence-based training, to communication and behavioural skills, to "know how" skills acquired on the job during practice periods in companies challenged the weight of final, anonymous examinations in the certification process. Continuous assessment of student performance, internal evaluation by teachers and instructors in daily contact with students are increasingly recognized in the framework of multi-phased and multi-partners certification procedures.

This concern for student assessment and certification in upper secondary education is, to a large extent, a specific feature of European policies. In most other countries, procedures are much less formal. When they exist, they are school-specific, rather than system-wide, paying scant consideration to comparisons among schools. Unlike in Europe, they are not part of a concerted effort to maintain quality standards and to manage student flows throughout the system.

6. Student flows

As was said before, most European countries are in a position to provide places in the various streams of upper secondary education and training to all young people in the relevant age group. In other words, full coverage has been (or is about to be) attained. The challenge, therefore, is no longer a matter of enlarging capacity, but of managing student flows among the various structures of the system.

An important caveat should be made on this statement, however, to the extent that, in all countries, there is still a "hard core" of low achievers, drop outs or "problem" youth who are either not enrolled, or keep enrolling and dropping out on a recurrent basis, or fail to gain even a basic qualification. The size of the group "outside the system" is difficult to assess with accuracy, but it ranges from 5 to 15% across countries. These youth are found in large numbers in short, post-school training schemes geared to employment.

The relative importance of school-based education, "dual" training schemes and post-school training in overall upper secondary education provision varies widely among countries. In France, school-based upper secondary education, whether general or technical/professional, account for 75% of total enrolments at this level, as against 15-20% in apprenticeships schemes. The opposite holds true in Germany where two-third of the age cohort get access to the dual system of apprenticeship after 9 or 10 years of basic education, whereas no more than 30% are enrolled in school-based upper secondary education. Outside Germany, apprenticeship has been strengthened and overhauled in Belgium, France, Italy and the Netherlands, catering for the training needs of a significant proportion (15-20%) of the age group. Overall, public authorities have encouraged the development of apprenticeship though financial incentives (mostly tax breaks) aimed at encouraging companies to create apprenticeship places. This policy has resulted in a revival of apprenticeship in several European countries.

Within school-based education, full-time technical/vocational schools tend to develop faster than general high schools, both in terms of enrolments and diplomas awarded. This tendency towards the "vocationalisation" of upper secondary education, which stands in sharp contrast with the opposite trend observed in Japan and the United states, is very strong in France, Italy, the Netherlands and Sweden, but less so in the United Kingdom.

Post-school training schemes account for about 5 to 10% of the age group in France, Italy and the Netherlands, but the share of this form of training has been decreasing in recent years as the employment prospects for young people improved. The United Kingdom has gone farthest in this direction by launching the YTS (Youth Training Scheme) in the mid-eighties, which was by far the most important scheme of this kind in Western Europe. In 1986-87, after four years of existence, about 400,000 young people, that is close to 20 of the 16-17 year olds, received YTS training.

7 Education management

New trends in upper secondary education management respond to a double concern for (i) responsiveness of training to changing labour market needs, and (ii) internal efficiency of education/training institutions.

7.1 Responsiveness

The concern for **responsiveness to demand** is particularly acute in technical/vocational education and training. In Europe it is reflected in a range of institutional arrangements that operate at key points of the system:

- **Curriculum development**: The existence of already-mentioned commissions where providers and users of training get together to design new curricula and/or improve existing ones is a guarantee that the content of education will not be exclusively supply-driven, as it often happens when schools function without outside reference to the world of work. The effectiveness of these feedback mechanisms vary widely among countries, and within a single country, among professions. Active involvement of the business community in crucial to the smooth functioning of these commissions. But employers are not always organised efficiently and their willingness to be involved in training matters vary enormously. In Central/Eastern Europe for instance, employers show a lack of interest in human resources development in general and in education and training in particular. The general tendency is to leave ministries decide on everything. In sharp contrast, most Western European countries are used to continuous social dialogue on training matters. But even there, some sectors like industrial engineering or construction fare much better than many service occupations (wholesale trade for instance).

- **Delivery of training**: The private sector is the single major actor in apprenticeship schemes, which is a guarantee of relevance. But even in school-based structures, practice periods in companies have been introduced in the curriculum in an effort to acquaint young people with the world of work. Specialists from the private sector are occasionally invited to participate in the teaching process.

- **Employment-training networks**: Schools and other training institutions are encouraged to develop relationships with their neighbouring business community which are invited to contribute practice places, equipment and other consumable items for laboratories and

workshops. Prospects for post-school employment of students are developed through those networks.

- **Developing continuing training:** Increasing numbers of schools and training institutions have set up a continuing education department that is in a position to deliver courses to returning adults who wish to acquire further qualifications, or to organise short courses at the request of companies. In information technology, many companies had to undertake massive programmes of training for their employees. In other words, training institutions have begun to look less like "schools", and more like "training centers" covering a broad range of services for young and adult users. The practice of continuing training, which requires almost day-to-day contact between trainers and users, has also contributed to raise the awareness of the school staff (directors and teachers) towards the outside world at large and to give them a taste for negotiating training packages.

7.2 Internal efficiency

In many countries of continental Europe where school-based upper secondary education prevailed, the influence of the state in school management was very strong. In all these countries a trend towards decentralisation and strengthening of school autonomy has been initiated. It took two forms:

- In Southern European countries, the decentralisation process took the form of a devolution of management attributions from the central to the regional level. In Spain for instance, elected regional authorities are fully in charge of education. In Italy, school-based education is still under the central Ministry, but vocational training and apprenticeship have been transferred to the regions. In France, elected regional bodies are responsible for the construction and equipment of schools and apprenticeship centres, as well as post-school training schemes.

- In Northern countries, the decentralisation process was reflected in the increasing autonomy of schools and other training institutions. In the United kingdom, Denmark, the Netherlands and Belgium, a policy of concentration of existing schools and training centres into a smaller number of colleges of significant size (between 3,000 to 5,000 students) was carried out. These colleges which supply a wide range of training services to all categories of population, enjoy a large administrative and budgetary autonomy. Although most of their funding still comes from public sources, they receive it in the form of a **global subsidy** computed on the basis of the number of students attended and the type of training provided.

- But global and multi-annual budgeting is not enough. To encourage colleges to retain students and take them up to the diploma, **state subsidies are sometimes tied to their pedagogical performance**. In Denmark and to some extent in the Netherlands and the United Kingdom, state subsidies are granted on the basis of a formula that includes indicators of performance. Part of the per capita subsidy is given to the college at the time of registration, the second part at mid training (provides the student is still enrolled) and the last part upon graduation.

7.3 The new functions of ministries

Ministries and central government agencies involved in upper secondary education and training are faced with the difficult tasks of coordinating and monitoring the operations of a wide array of education and training providers of different size, objectives and status, and enjoying an increasing degree of administrative autonomy. It is also crucial for them to establish working relationships with elected local authorities, employers and unions, the so-called "social partners" to use European terminology, not to mention other entities with a direct interest in education (parents, teachers and students).

Traditional, top-down administrative approaches are no longer suitable for this task and ministries have to adjust to new roles and functions in accordance with the devolution of operational tasks to other local authorities and training providers. In this context, **participatory management by objectives**, rather than by top-down rules conceived at the top, is a must.

European evidence show some education ministries have begun to reorganize around the following key strategic, regulatory and monitoring functions, as follows:

- Elaborating long-term visions and strategies through a consultative process involving all interested parties and gaining support for education from all sectors in society,
- setting education and training objectives to be implemented by providers,
- initiating and carrying out legislative work,
- setting transparent and equitable rules for allocating public resources for education and training among local authorities and/ providers of education and training,
- developing curricula in cooperation with appropriate consultative bodies,
- ensuring the quality of education via appropriate policies for student assessment, examinations and certification,
- evaluating education and training providers,
- initiating and managing development programmes aimed at implementing specific innovations,
- developing an information and knowledge base to be used as a tool to steer and monitor the system.

In many ministries, some of the functions listed above are performed in *ad hoc* ministerial departments. In some of them, these functions have been entrusted to separate entities such as:

- a funding council responsible for resource allocation among colleges (the Further Education Funding Council, FEFC, in the Britain is a case in point),

- an independent Inspectorate responsible for school evaluation and inspection (the Office for Standards in Education, OFSTED in Britain or the Dutch Inspectorate in the Netherlands),

- a curriculum development agency responsible for designing training curricula (the Federal Institute for Vocational Training, BIBB in Germany)), or advising the ministry on them (the Consultative Council on the Curriculum in Scotland or the *Conseil national des programmes* in France),

- an information agency responsible for providing education statistics, such as HESA (Higher Education Statistics Agency) in the United kingdom,

- a centre responsible for providing support to student assessment and the certification process, (the examination …

- a Council responsible for strategic policies in student assessment and system evaluation, such as the *Haut Conseil de l'évaluation de l'école* in France,

- an agency responsible for impulsing and implementing system-wide innovations in education, e.g. the Scottish Council for Educational technology (SCET).

These are only a few examples of "buffer bodies", as they are sometimes called in Europe, or "support services" that were set up to provide ministries with appropriate technical expertise in key areas of education management.

This process of overhauling the central administration of education is far from over, however Indeed, it has hardly started in some countries with strong centralisation traditions. What may be of relevance to Latin American countries is that these changes in the central administration of education were seldom reflected in trends towards "decentralisation" in the traditional sense, that is the devolution of some power to regional authorities. Instead, they took the form of **new specialised agencies** aimed at supporting strategic policy choices taken at the central level.

8. Conclusions

to be written

Bibliography