

## VOCATIONAL SCHOOLS IN PORTUGAL

An innovative project  
of social dialogue and institutional solidarity

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Communication to EC-US Conference "Schools and Industry: Partners for a Quality Education".

Noordwijk (Netherlands) 26th June 1992

## 1. Foreword

Seldom in the history of mankind one's perception of change has been so dominant.

By the same token, contemporary societies and modern nations at large share the formidable challenge of moving swiftly in adapting educational systems to new socio-economic needs and paradigms.

Large and bureaucratized public education institutions are well known to be refractory to quick change. This is the case with Portugal, a country which struggles with a longlasting tradition of centralized administration and inefficient public services.

The new Vocational Schools emerged as a calculated rebellion against that pattern of education administration. Decentralization, diversity, autonomy, local devolution, fair partnership, community involvement, were the key words of a new educational lexicon.

Soon, the trend of Vocational Schools became naturally identified with one of the most significant movements in the reshaping of the school and institutional architecture underlying educational reform in Portugal.

They were the natural corollary of an intensive social dialogue undertaken long before the production of legislation. This proved to be right methodology: allowing time and opportunity to break down the barriers of mutual suspicion, perhaps even resentment, between central government, local authorities and business community. Departing from the common perception of a structural weakness in the education and training system and working together through a network of innovative proposals based on the sharing of goals and responsibilities.

Schools have to be perceived as lasting and durable institutions. Thus, the decision to undertake the establishment of a different set of training institutions had to stem from a solid compromise between short and long-term views. This became a matter of core negotiation and concertation: the very concept of human vocation, personal fulfillment and career training.

## **2. On the philosophical foundations of Vocational Education**

Vocational Education cannot be identified with narrow training and unlimited specialization. It is a noble form of investment in people.

No one person is a bearer of a single vocation. Moreover no human being can reach happiness exclusively via a single professional activity. An engineer will surely manifest inclinations to other forms of human activity, an artist is also a member of a family, a community, he must nurture friends and companions, and share different social callings with others.

What normally distinguishes a human being is not a single vocational trait but a broad mix of diverse interests and variegated accomplishments.

Thus, the business of Vocational Education is not to single out one sole expression of the individual but to allow a rich and balanced personal development, with due regard to inclinations and natural abilities towards particular families of occupations. Maximizing personal satisfaction requires the full respect for the idiosyncrasies of the evolving self and can be combined with the goals of social utility.

Above all, vocational Education is not a minor form of education opposed to the finest breed of General Education, to the same extent that body and mind, theory and practice, knowledge and culture are not antithetical.

John Dewey writes about it with everlasting clarity: "The dominant vocation of all human beings at all times is living - intellectual and moral growth. In childhood and youth, with their relative freedom from economic stress, this fact is naked and unconcealed".

School addresses that fascinating period of prime freedom. Therefore, it must not prevent its natural expression; to the contrary Vocational Education must enhance it, through permanent discovery and the pursuit of ingenuity, through the free interplay of the infinite variety of capacities found in each and every human person.

Freedom and flexibility are key elements in the education enterprise. They are the main guarantors in order to avoid the tragic imposition of an unwanted narrow track or the plunge into an uncongenial calling.



### **3. The setting for the establishment of vocational schools**

The Portuguese economy developed satisfactorily during the second half of the eighties, following a period of austerity during 1983-84. This was due to the application of a severe adjustment programme, negotiated with the I.M.F. after which the economy only began to recover in 1985.

The growth of the Gross Domestic Product has been above that of the main industrialised countries since Portugal joined the EC in 1986. If we compare Portugal's results with the average for OECD countries, growth rates have been, respectively, 4.1 compared to 2.9% in 1986, 5.1 compared to 3.5% in 1987, 4.0 compared to 4.4% in 1988, 5.5 to 3.4% in 1989, and 4.2 to 2.8% in 1990.

Investments and exports were the most dynamic components of this growth. Investment grew at the rate of 10.9% in 1986, 15.1% in 1987, 15.2% in 1988, 6.0% in 1989 and 6.6% in 1990. Exports grew at the rate of 7.6% in 1986, 10.7% in 1987, 7.2% in 1988, 16.5% in 1989 and 12% in 1990 (growth rates in volume, as well as the GDP). However, it should be noted that the rise in export figures does not reflect any improvement in the balance of trade in goods and services with foreign countries, since the growth in domestic product created a very swift increase in imports of goods and services: 17.8% in 1986, 23.7% in 1987, 18.1% in 1988, 8.7% in 1989 and 12.4% in 1990. These rates are by and large much higher than the growth rate of the GDP, thus creating a considerable increase in the opening of the economy to foreign markets. It can also be seen that, with the exception of the year 1989, these rates are higher than the export growth rate, resulting in a marked deterioration in the balance of goods and services.

The climate of confidence created by the political stability of the period beginning in 1987, without precedent since April 25, 1974, contributed in recent years to the positive investment trends. A high internal saving rate of approximately 29.5% of GDP in 1988, 28.5% in 1989 and 28.7% in 1990 (gross total), also played an important part along with the development of demand, in particular external demand, as shown by the high growth rates of exports in goods and services, and finally the unilateral transfers from the EC which financed public investment programmes and public support for private investment. These transfers accounted for about 1.6 to 1.7% of the GDP, in the years 1988-1990.

A strong modernising trend on management methods and productive demand was coupled with this strong investment push. The technological reconversion



of more traditional sectors of the manufacturing industry, and the increased diversification of tertiary and subsequent services also played a notable part in this trend.

The Portuguese economy has come close to a situation of almost full employment: the present rate of unemployment scarcely exceeds 4% of the total working population. According to the Bank of Portugal's estimated figures, nominal salaries in the manufacturing industry would have grown about 16% in 1990, leading to a rise in real salaries of about 2.3% continuing a tendency that has been evident for some years, as real salaries rose 4.7% in 1987, 1.3% in 1988 and 0.4% in 1989.

In this way, the work market has been under great pressure from demand dictated both by economic growth and the quantitative acceleration of employment (two hundred and fifty thousand jobs were created between 1985 and 1990), and also by a strong positive demand of rare and much sought after qualifications.

The pattern of qualifications in the working population shows, however, strong limitations (Table I). Highly-qualified labour and middle and high-ranking employees still represent a very restricted group within the working population. Levels of education are, in general, scarcely adequate for meeting the new challenges of competition in the national and international economy. During the eighties, strong social pressure was exercised on Governments to restore technical and vocational education within the educational system. In fact, since 1974, with the hasty unification of the entire general educational system from the 1st to the 12th grade of schooling, Portugal had lost its capacity to "produce" qualified technicians at the intermediate level, precisely those which the companies, managers and directors most needed.

Turning now to the question of educational philosophy, the global dimension of the school has been recognised. This has led to the rejection of both early specialisation and generalisations leading to blanket uniformity, and to a growing awareness of the need for a basic common education followed by diversification in secondary training. At the same time as social paradigms and representations were changing, owing to the democratising explosion of school enrollments, the relationship between economic development and irreversible heterogeneity of labour as a production factor was beginning to be felt. This was more evident in the diversification of individual interests and training opportunities than from the traditional imposition of narrow functional profiles.

A review of the Portuguese educational policy in 1983 by the OECD, the UNESCO recommendation, the demands and resources of the EC itself also brought pressure to bear and so made it even more difficult to postpone the setting up of a vocational training system based on the "specialisation of broad and diffuse functions".

So it was that 1983 saw the first generation push towards the redevelopment of technical training; in 1989 this was followed by the more sophisticated second generation process aimed at the conception and creating of the first vocational schools (Table II). The new technicians who have graduated in the meantime only started to enter the market place from 1986, in the first stage and from 1992 in the second.

Detailed analysis focusing on the evolution of enrollments in the two subsystems of training shows their complementary relationship, there being no conflict between their differing potentials to attract clients with specific requirements who, previously, were poorly served or not served at all.



#### **4. Vocational schools a new model for training**

The training systems which follow compulsory schooling (1) tend to diversify as far as both training models and target students are concerned. On a parallel with the traditional secondary school system and technical education, various alternative routes were developed in the 70's and 80's, which had different durations, training contents, target-populations, socio-economic objectives and included other social partners.

Vocational schools emerged in Portugal in 1989. They were strategically aimed at young people having completed their basic general education and intended to widen the possibilities open to people between 16 and 18 years old. These schools combine the following main features:

(i) they are not state-owned schools, as they are formed through the local initiative of companies, local authorities, business and other associations, unions, cooperatives and foundations which freely and responsibly assume the role of promoters;

(ii) they were set up to meet local and regional needs as defined by their local promoters, and are closely linked to the social, economic and cultural activities of each catchment area;

(iii) they offer programs leading to professional certified qualifications, at Level III, in general after three years (3,600 hours), or equivalent to the 12th grade or full secondary education. They also give access to studies in polytechnics and universities;

(iv) they qualify a new generation of intermediate technicians and all courses have three training components: socio-cultural, scientific and technological; this last component normally accounts for about 50% of the total hours.

On the one hand, it is an example of an educational model which is essentially centred in the training context, while including various types of on the job training and work experience throughout the training period. In these aspects it is different from the dual system. On the other hand, we are looking at a model of private initiative, locally controlled but with a clear regulatory role of the State which also provides technical and financial support. Here it can be distinguished from the completely autonomous independent systems.

In this way vocational schools represent initially a transition stage from the



"producer-oriented schools" model to the "consumer-oriented school" model. It remains to be seen whether they will be able to convert this model into that of the "client-oriented school". This is the model that will definitively free the school system from uniformity and rote models, and will enable it to become a repository of diversity, and to meet the needs of the particular personality of each trainee.

## 5. Strengths of vocational schools

We will attempt to sum up the principal reasons for the relative success of this new approach in educational policy in some key-questions:

(i) Vocational schools have benefited from the atmosphere of reform in the educational system, and from the expectation this has created. They were created with the decisive support of local authorities (municipalities), companies and business associations, unions, cultural groups, cooperatives and other political, social and economic groups of the local area; a significant number of local leaders were directly involved in setting up the schools, lending them prestige and social recognition; the vocational schools were in this way set up in the heart of an active and characteristic social partnership (Table III).

(ii) Vocational schools did not develop because other existing schools or modes of training were suppressed, or through exclusion of the past (for example technical education and apprenticeship schemes). Instead, they incorporate positive characteristics of previous systems and find their own field of innovation.

(iii) Vocational schools are formed by the establishment of a new social contract between the State and the civil society, with a view to providing citizens with a professional qualification. Young people between 16 and 19 years of age are given priority. The schools are formally created with a detailed contract. The State has therefore abdicated its traditionally centralising bureaucratic practice of preplanning and regulating everything, and moved to providing incentive and supporting the development of autonomous projects, opening space for creativity; between the Maximum and the Minimum Intervention State we have opted for the position of Regulatory State, catalysing hopes, expectations and initiative, via subsidiarity;

(iv) The launching of vocational schools was supported by a new administrative body with a new working style (the Technological, Artistic and Vocational Educational Bureau-GETAP), which is institutionally and geographically decentralised, having head quarters in Oporto and not in Lisbon. Fostering synergy and mobilising resources, this body has been simultaneously responsible for personally following-up the schools (each school has an attached advisor responsible for its follow-up). This involves technical support and evaluation; GETAP built a model replacing the Taylor pyramidal structure with a management model based on "project networks".

(v) The small schools will always have a place in the vocational schools project. Schools started out with 1, 2 and 3 classes in the first year, and in the second continued these three classes in the 1st and 2nd grades, although some opened one or two further courses, and in the third year continued with all of these classes. In other words, there is no provision for the State to authorise the schools growth beyond more than 400 students in day courses. However, there are some which will grow by the internal division, spinning-off into new and more specialised units.

(vi) Vocational schools have gained the political support - difficult with some ideological groups - from all political and social sectors, and all economic partners. Therefore, the main employers associations and trade unions are themselves active school promoters.

(vii) Vocational schools have appeared at a time in which there was a latent social demand waiting to be tapped. In fact, this was called for both by the work market and the economic course, and also by a growing demand for education beyond the compulsory stage; in addition, the demand reacted against uniformity and rigid curricula, and the formal organisation of the general education system.

(viii) Vocational schools offer several standards of achievement-equivalence, access to higher education, certification and community recognition of the same. These have without doubt contributed to stimulating previously reticent demand.

(ix) In the professional qualification - traditionally technical, reproductive and specialised - vocational schools have joined technological areas with other scientific humanistic and social areas and so artistically-oriented vocational schools have been created. At the same time, service, industrial and other schools have also been set up. The concept of professional qualification has been enriched, and the curriculum has gained in breadth, with areas of integrated studies which provide social and professional learning in the working context.

(x) Vocational schools have had their own source of finance, with the support of the National Budget and with the decisive contribution from the European Social Fund through a specific programme, PRODEP. This relative autonomy created a "nest" for development which wasn't vulnerable to sudden changes in the technical and financial support. The local promoters themselves have invested considerable sums in infrastructure and equipment, reaching a calculated 2 million contos in 1991 alone, which is equivalent to 80% of the



total sum invested by PRODEP in the same year.

(xi) Vocational schools have been opened throughout the country, covering all the regions and the various areas of training (Tables IV and V).

## 6. Weaknesses of vocational schools

Notwithstanding the positive aspects of the development of the vocational schools project, it is also important to note various critical points:

(i) the normal development of vocational schools requires the academic, social and professional recognition of this type of training as it's essential that they should not be relegated to a minor position, in this regard. Recognition of the diplomas of vocational schools is a critical issue in the job market; it is perhaps realistic, despite positive response and improved employability, to foresee problems in coordination between the qualifications of graduates and the immediate demands of employers;

(ii) the learning of self-reliance and responsibility, outside the narrow control of the State, can bring not only a certain lack of supervision and control but also lead to a trend to develop training projects dominated by the immediate interests of employers or by the outdated Taylor system of management.

(iii) the mobility and adaptability between sub-systems of training is another critical point that deserves close attention from educational administration;

(iv) it will be essential to avoid an excessively narrow curriculum, rigid and poorly adapted to promote learning, capable of accomodating new contents, to introduce innovative methodology; integrated into an education sub-system but outside the logic of standard education, vocational schools still take the risk of being socially recognised as a training which is primarily aimed at those who are not successful in standard education;

(v) the lack of security of tenure for teaching staff may have negative repercussions, as shown by some dissociation from the prevailing "academic culture" and the "cohesion of the school community";

(vi) continuing excessively high cost per student, which cannot be divorced from the high initial investment in buildings and equipment and which requires time to be paid-off.

## 7. Present and future challenges

The consolidation of the educational project of vocational schools and their reaching a stage of institutional maturity will require that permanent attention be given to a group of problem areas, which are as follows:

(i) the vocational schools should concern themselves with satisfying social demand, stressing particularly the individual credibility of the training projects and establishing greater local control to improve their quality; adequate training for the new requirements of economy and employment is a particularly sensitive area for the future; a greater level of personal satisfaction in the social integration of the new technicians is decisive for maintaining high social demand;

(ii) it will be essential to improve the quality of training; this will become feasible specifically through the training of trainers, the improvement of curriculum development, an increase in opportunities to alternate between the training centre and local activities, the definition of mechanisms and of transfer between training systems;

(iii) to train and specialise civil servants in performing new social roles, reinforcing particularly the social contracts between the State and the civil society in the field of training. The administration has the overall important role of showing the advantage of local support, the linking of concrete activities, the strong association of different interests but with aspects of negotiable convergence;

(iv) the integration of excessively segmented subjects is a challenge that will have its effect on vocational schools. The "Area of Integration" is only a beginning which must be pursued. The same can be said for the technological areas, where it will perhaps be interesting to develop other integrating projects with the potential for establishing general understanding;

(v) encouragement of an atmosphere leading to structural and pedagogical innovation, including the development of a systematic research on the phenomenon of vocational schools and also the development and enlargement of an exchange network between schools, regions and social partners involved in this movement.



TABLE I

Structure of Labour Force by Qualification Levels and Sex

| PERIODS | QUALIFICATION LEVELS |     |     |     |      |      |      |      |      | TOTAL |
|---------|----------------------|-----|-----|-----|------|------|------|------|------|-------|
|         | 1                    | 2   | 3   | 4   | 5    | 6    | 7    | 8    | 9    |       |
| 1983 MW | 2.1                  | 1.8 | 4.0 | 3.5 | 37.8 | 19.0 | 11.4 | 8.9  | 11.4 | 100.0 |
| MEN     | 2.8                  | 2.1 | 5.1 | 3.8 | 41.0 | 14.3 | 11.1 | 8.5  | 11.2 | 100.0 |
| WOMEN   | 0.8                  | 1.1 | 1.6 | 2.9 | 30.5 | 29.6 | 11.9 | 9.8  | 11.7 | 100.0 |
| 1985 MW | 2.4                  | 2.1 | 3.9 | 3.6 | 37.7 | 18.6 | 10.6 | 9.3  | 11.9 | 100.0 |
| MEN     | 3.1                  | 2.5 | 5.1 | 3.8 | 40.8 | 14.3 | 10.1 | 8.2  | 12.0 | 100.0 |
| WOMEN   | 0.9                  | 1.3 | 1.5 | 2.9 | 31.3 | 27.3 | 11.6 | 11.5 | 11.6 | 100.0 |
| 1987 MW | 2.3                  | 1.9 | 3.7 | 3.7 | 36.9 | 18.3 | 10.7 | 10.7 | 11.8 | 100.0 |
| MEN     | 3.0                  | 2.4 | 4.8 | 3.9 | 39.9 | 14.0 | 10.3 | 9.1  | 12.7 | 100.0 |
| WOMEN   | 1.0                  | 1.0 | 1.7 | 3.2 | 31.1 | 26.6 | 11.6 | 13.7 | 10.1 | 100.0 |
| 1989 MW | 2.1                  | 2.0 | 3.7 | 3.6 | 36.5 | 17.8 | 11.2 | 11.4 | 11.6 | 100.0 |
| MEN     | 2.7                  | 2.5 | 4.9 | 3.8 | 39.7 | 13.8 | 10.5 | 9.2  | 13.0 | 100.0 |
| WOMEN   | 1.0                  | 1.3 | 1.7 | 3.5 | 30.6 | 25.0 | 12.5 | 15.2 | 9.3  | 100.0 |

- Key: 1. High-ranking employees  
 2. Middle-ranking employees  
 3. Foreman, Overseers and Team Heads  
 4. Highly Qualified Workers  
 5. Qualified Workers  
 6. Semi-qualified Workers  
 7. Non-qualified Workers  
 8. Apprentices  
 9. Other

Table II

Enrollments in Technical and Vocational Education

| ACADEMIC YEARS | TECHNICAL SCHOOLS | VOCATIONAL SCHOOLS | TOTAL      |
|----------------|-------------------|--------------------|------------|
| 83/84          | 709               | —                  | 709        |
| 84/85          | 2 328             | —                  | 2 328      |
| 85/86          | 6 823             | —                  | 6 823      |
| 86/87          | 12 152            | —                  | 12 152     |
| 87/88          | 16 775            | —                  | 16 775     |
| 88/89          | 19 974            | —                  | 19 974     |
| 89/90          | 23 714            | 2 088              | 25 802     |
| 90/91          | 26 483            | 6 439              | 32 922     |
| 91/92          | 30 104            | 11 116             | 41 220 * * |
| 92/93 *        | 34 000            | 19 000             | 53 000     |

\* Estimation

\* These 41,220 young people in technical and vocational training correspond to 16% of the total enrollment in post-compulsory education (9 years of schooling).

**TABLE III**

**Vocational Schools Promoters**

| PROMOTERS                | CUMULATIVE<br>TOTAL | %   | P'ERS<br>1989 | %   | P'ERS<br>1990 | %   | P'ERS<br>1991 | %   |
|--------------------------|---------------------|-----|---------------|-----|---------------|-----|---------------|-----|
| MUNICIPAL COUNCILS       | 51                  | 21  | 14            | 15  | 18            | 21  | 19            | 31  |
| PUBLIC BODIES            | 24                  | 10  | 6             | 6   | 10            | 12  | 8             | 13  |
| PRIVATE COMPANIES        | 50                  | 21  | 23            | 24  | 21            | 25  | 6             | 10  |
| ASSOCIATIONS             | 69                  | 28  | 33            | 35  | 19            | 22  | 17            | 28  |
| CO. ASSOCIATIONS         | 29                  | 12  | 11            | 12  | 8             | 9   | 10            | 16  |
| UNIONS & UNION ASSOCIAT. | 12                  | 5   | 4             | 4   | 8             | 9   | 0             | 0   |
| OTHERS                   | 7                   | 3   | 4             | 4   | 2             | 2   | 1             | 2   |
| TOTAL                    | 242                 | 100 | 95            | 100 | 86            | 100 | 61            | 100 |



**TABLE IV**  
**Enrollments in Vocational Schools**  
**by NUT (Regions)**

| REGIONS                  | ACADEMIC YEARS |       |        |
|--------------------------|----------------|-------|--------|
|                          | 89/90          | 90/91 | 91/92  |
| North                    | 875            | 2 461 | 3 972  |
| Centre                   | 415            | 1 254 | 2 277  |
| Lisbon &<br>Tagus Valley | 721            | 2 046 | 3 431  |
| Alentejo                 | 77             | 570   | 1 179  |
| Algarve                  | —              | 108   | 257    |
| TOTAL                    | 2 088          | 6 439 | 11 116 |

**TABLE V****Distribution of Students by Training Areas in 1991/92**

| TRAINING AREAS                                   | No. of Students |
|--|-----------------|
| Performing Arts                                  | 355             |
| Artistic Production                              | 498             |
| Design and technical drawing                     | 361             |
| Graphic Arts                                     | 210             |
| Graphic Production                               | 47              |
| Building   | 441             |
| Computer Science                                 | 1 691           |
| Textiles, clothing and footwear                  | 258             |
| Electricity and electronics                      | 617             |
| Chemistry  | 77              |
| Metalworks                                       | 155             |
| Agriculture and food production                  | 830             |
| Hotel Trade, tourism and other personal services | 1 036           |
| Environment and natural resources                | 147             |
| Social Work                                      | 304             |
| Information/communication and documentation      | 825             |
| Administration, services and business            | 3 182           |
| Others   | 82              |
| TOTAL  | 11 116          |

**Cost Breakdown of Vocational Schools**  
**(1991)**

OVERALL COSTS

| RECURRENT | INVESTMENT |
|-----------|------------|
| 7 182     | 2 083      |

(millions portuguese escudos)

SOURCES OF RECURRENT FINANCE

| ESF   | NATIONAL<br>BUDGET | PRIVATE |
|-------|--------------------|---------|
| 4 497 | 2 394              | 340     |

(millions portuguese escudos)