# Vocational Education and Training in Poland During Economic Transition

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## Introduction

Economic transition from central planning to a market economy requires not only the introduction of legal and economic changes, but also the training of suitable staff and the entire society for new tasks. Vocational education and training (VET) of young people is, though, particularly important given the market economy conditions of the modern globalising world. Economic transition, European integration and globalisation, as well as the factors associated with the creation of a knowledgebased economy and developing information society, require radical changes in the Polish system of education. These changes predominantly concern VET due to its specific features developed during the communist centrally planned economy. Before 1989, both in Poland and in other Central and East European states, education and training was developed to meet the needs of centrally planned economies. VET was part of large state-owned companies with relatively low levels of innovation and productivity, which employed large numbers of workers (Gandini, 1999).

In the centrally planned economy, different types of basic vocational schools existed, including many company-owned ones which prepared their future employees according to the company's needs. Apart from theoretical knowledge, these schools provided training courses preparing pupils to work within a given industry, such as

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coal mining, metalworking or the textile industry. These large industrial companies supported such schools not only in terms of the curriculum; they also participated in financing the purchase of machinery and devices used at the company for pupils' training. The firms also offered apprenticeships to young people from technical vocational schools, i.e. the vocational schools which would also offer their graduates general certificates of secondary education (the *Matura* exam). Such a situation favoured vocational schools. It also permitted permanent contacts for teachers and pupils with employers on the labour market. Graduates often had an offer of employment at these companies straight after completing their vocational education.

Over the twenty-year-long period of economic transformation, companies were forced to adapt to the conditions of competitiveness characteristic of the market economy. As a result, they had to implement intensive restructuring programmes. In numerous cases they also had to face organisational and financial difficulties, and thus ceased their involvement with co-financing vocational education. Introducing costly restructuring processes, they often got rid of burdensome non-productive assets, including schools linked to companies (cf. Kwiatkowski, 2000; Zahorska and Walczak, 2005).

Consequently, there are very few vocational schools in Poland in which companies are deeply involved in the process of education. Considering the relatively high unemployment during this period of transformation, entrepreneurs carefully select applicants by introducing high entry requirements. As a result the majority of good vocational secondary education has been merged with the system of general education. This process also included institutions supervising schools in a given area (generally local authorities, since the administrative reform in 1998 *poviat* authorities, i.e. the lowest unit of administration). Of course, the changes also affected pupils themselves.

However, as is widely assumed, the development of an effective system of vocational education without strong, direct cooperation with entrepreneurs is impossible (cf. OECD, 2010; Wesselink et al., 2010; Woźniak, 2000). This is the case simply because it is the employers who know best what qualifications they require from prospective employees. Along with the fast technological progress associated with the information phase of the development of civilisation, the list of skills essential for gaining employment is constantly growing. Apart from those directly connected with a specific job, graduates of vocational schools require additional skills such as a good command of foreign languages, a driving licence and proficient use of ICT, including sophisticated computer programs.

Apart from professional skills, employers also expect graduates to have certain personality traits, including entrepreneurship, reliability and a willingness to constantly improve their qualifications. As a result, there is a need for employers to be involved in creating both school curricula and educational standards for individual professions, as well as keeping close contact with vocational schools. Moreover, strengthening the existing or creating new links between vocational schools and research institutions would seem to be important (Kwiatkowski, 2008).

Considering the above developments, it seems crucial to look at how the economic transformation and educational reform implemented in 1999 influenced the level of vocational education in Poland. Therefore, the aim of this paper is to assess to what extent the changes in VET contributed to the better preparation of pupils for the changing national labour market. The analysis considers both organisational and curriculum changes. However, as a detailed analysis of curricula changes would require wide research on several dozen programmes of vocational education, this analysis focuses on organisational and general curriculum changes, rather than school curricula for individual professions. Firstly, the position of the vocational education system in Poland is presented both before and after the reform in 1999. Secondly, the analysis concentrates on the changes in the number of VET schools and pupils and the failed experiment of specialised secondary schools. Finally, the paper ends with a SWOT analysis of VET in Poland.

#### VET in the Education System of Poland

Until the end of the 1998/99 school year, a graduate of an eight-year primary school could choose between the following options of further education (see Fig. 1):

- 1. Four-year general secondary school (lyceum), at the end of which pupils could take the *Matura* leaving exam and be awarded a certificate of general education;
- 2. Four-year secondary schools of another type, i.e. vocational lyceum and, less often, a technical lyceum which prepared graduates to gain employment as skilled workers or workers with equivalent qualifications. They also enabled their pupils to take the *Matura* leaving exam and obtain the certificate of general education;
- 3. Five-year technical vocational school, where pupils could acquire vocational qualifications at secondary level, complete general secondary education and obtain a *Matura* certificate;
- 4. Three-year vocational school, which gave pupils vocational qualifications in a given profession.



**Figure 1** Education system in Poland before and after the 1999 reform (Source: own compilation)

The three-year vocational school also enabled people to continue education at:

5. A three-year supplementary general secondary school or three-year (alternatively two-and-a-half-year) supplementary technical vocational school, graduates of which could sit the *Matura* exam. In the latter case, having passed the vocational exams graduates received a diploma of vocational education, as did every other pupil completing five-year technical vocational school.

Thus, the types of school mentioned in points 2, 3, 4 and 5 constituted vocational education.

The education reform of 1999 moved post-gymnasium education, including VET, into the management of poviats, the newly established self-government unit of administration situated between the *gmina* (lowest) and *voivodeship* (highest) administration tiers. However, poviats were given relatively weak powers and financial resources. In accordance with the reform, vocational education should give way to general education. This was to increase the schooling rate at higher levels of education and, as a result, the percentage of the population with higher education (this indicator was then much lower than in other more economically developed countries of Europe).

Following the 1999 reform, after completing six-year primary school and threeyear gymnasium a pupil can select one of the following types of secondary schools (Fig. 1):

- 1. Three-year general secondary school, which enables pupils to take the *Matura* exam and obtain a certificate of general education;
- 2. Three-year specialised secondary school, providing education in general vocational specialisations; graduates, having passed the *Matura* exam, are awarded a certificate of specialised secondary education;
- 3. Four-year technical secondary school, where pupils can acquire vocational qualifications at secondary level and take the *Matura* exam;
- 4. Two-year or three-year basic vocational school, in preparation for further vocational training.

In addition, after completing vocational school a pupil can continue his/her education at two-year or three-year supplementary general secondary school, or threeyear or four-year supplementary technical secondary school, graduates of which can sit the *Matura* exam.

A comparative analysis of both systems indicates that apart from the changes associated with the length of education at each stage, a new kind of school was created, i.e. a three-year specialised secondary school providing general vocational education. Educational authorities assumed that young people would be moving from specialist vocational education towards lifelong learning while already pursuing a career. It turned out, however, that introducing these schools was not a good idea, and their closure is being planned. Simultaneously, as Osiecka-Chojnacka (2007) noted, lifelong learning did not become a subject of interest to reformers. As a result, the reform of VET is recognised as the least well-conceived and most controversial element of the planned changes. The analysis of vocational education facing problems of the labour market conducted by Osiecka-Chojnacka (2007) indicates that the reform was met by criticism from some scholars, who made the following observations:

- It was not based on analyses and forecasts of the labour market, and disregarded the fact that there will always be a demand for various vocational professions;
- It did not follow European standards, as EU states' secondary education is dominated by vocational education, and popularising full secondary education does not mean promoting exclusively general secondary education;
- It did not result from realistic evaluation of young people's abilities, as some simply cannot meet the requirements of secondary school education.

According to Osiecka-Chojnacka's (2007) criticism directed towards the VET reform, the government was guilty of wishful thinking. She based her conclusions on the assumption that at a local (poviat) level VET would adapt to the needs of the labour market. The Ministry of National Education (MEN) is consistently limiting its control over the situation of vocational schools. It claims that the structural adaptation of education to meet the needs of the economy predominantly depends on good cooperation between schools, local school authorities and labour market institutions. The fact that the mobility of workers will be growing and that Poles can now operate not only on a local, but also on the national and European labour market, is ignored. Moreover, Osiecka-Chojnacka pointed out that an analysis of the problem of bearing the costs of the reforms was missing. The authors of the reform did not take into consideration the long-term effects of insufficient financial support for education, and hence they did not foresee the role local authorities would have in educational policy, e.g. by taking decisions regarding school closures.

In the end, the education reform of 1999, together with the major administrative reform introducing the three-tier system in the same year, brought VET under the control of local authorities. This considerably influenced a change in the number of schools and pupils within the vocational education system.

#### **Changes in the Number of VET Schools and Pupils**

The processes of restructuring and liquidation of many companies which supported vocational schools and employed VET graduates took place during the last decades of the twentieth century. This reduced interest in education of this type amongst young people and brought a reduction in the number of basic vocational schools in Poland (Fig. 2).

At the same time, the number of general secondary schools and, until 2000, of other vocational schools offering the *Matura* exam (mainly technical schools) increased. The effect of the 1999 reform, the main purpose of which was popularising general secondary schools, was that since 2002 a significant fall in the numbers of technical schools and specialised secondary schools has been observed.

School closures (also including organisational changes by combining two or three schools into one) also result from a fall in the number of young people of school age. This change is associated with a decline in population, which started affecting secondary education in the first decade of the twenty-first century.

However, the structural analysis indicates that the rate of technical and specialised secondary schools in the total number of secondary schools decreased within five years. At the same time, however, a rise in the percentage of basic vocational schools took place (Fig. 3).



**Figure 2** Changes in the number of post-gymnasium schools in the years 1990/91–2008/09 (Source: own compilation based on GUS data)



**Figure 3** Changes in the structure of post-gymnasium schools in the years 1990/91–2008/09 (Source: own compilation based on GUS data)



**Figure 4** Vocational schools in relation to general secondary schools in the years 1990/91–2008/09 (%) (Source: own compilation based on GUS data)

Generally, however, economic transformation meant vocational schools reduced their share in the structure of secondary education in favour of general secondary schools. The drop went from over 85% in 1990/91 to under 70% in the 2008/09 school year (see Fig. 4).

One should emphasize, however, that vocational schools still constitute the majority, i.e. 70% of post-gymnasium schools. Technical schools and specialised secondary schools constitute 43%, while basic vocational schools make up 22% of postgymnasium schools (see Fig. 5).

It is worth noting that the relative fall in the number of vocational schools was smaller than that of the number of pupils at these schools. An analysis of the changes in the number of pupils by school types reveals a greater fall in the number of pupils attending basic vocational schools (Fig. 6) than in the number of these schools mentioned earlier (Fig. 2). Consequently, the decrease in the proportion of pupils at basic vocational schools in the total number of pupils of secondary schools was also more significant. It fell from over 40% down to 11% in 2003/04 (Fig. 7).

From the school year 2004/05, however, a slight increase in the proportion of pupils of basic vocational schools in the total number of pupils was recorded. This



**Figure 5** Structure of post-gymnasium schools by types in the 2008/2009 school year (Source: own compilation based on GUS data)



**Figure 6** Changes in the number of pupils at post-gymnasium schools by types in the years 1990/91–2008/09 (Source: own compilation based on GUS data)

is a consequence of action undertaken in order to stop and even reverse marginalisation of vocational education triggered off by the 1999 education reform. This growing interest in VET was a direct consequence of shortages in the labour force in various specialisms, particularly felt after Poland joined the EU in 2004. The



**Figure 7** Changes in the structure of pupils of post-gymnasium schools in the years 1990/91–2008/09 (Source: own compilation based on GUS data)



**Figure 8** Pupils of vocational schools in relation to pupils of general secondary schools in the years 1990/91–2008/09 (%) (Source: own compilation based on GUS data)



**Figure 9** Structure of pupils at post-gymnasium schools by school types in the 2008/2009 school year (Source: own compilation based on GUS data)

economic prosperity of the post-accession years and the migration of many specialists (mainly to those EU states which opened their labour markets for the new EU countries), left Polish employers with shortages of qualified workers.

This problem concerned not only professions in high-tech industry or ICT services (such as computer specialists or electronics technicians); it also referred to other professions, such as drivers or representatives of the construction industry. This increased the interest of pupils in VET and made the educational authorities aware of the need to take action to raise the attractiveness of this type of education.

Generally, however, the entire period of economic transformation reduced VET's share in the structure of general secondary education, in terms both of the number of schools (Fig. 4), and of the number of pupils (Fig. 8).

A tendency towards evening out the proportion is noticeable. In the 1990/91 academic year pupils of vocational schools constituted circa 75% of the total number of pupils, and in 2008/09 only circa 56% (see Fig. 9). Pupils of basic vocational schools constituted mere 15% of the total number of pupils that year. Similar tendencies are observed at schools for adults (see Figs. 10 and 19.11), where a fall in the number of basic vocational schools and since 2003/04 of technical and specialised secondary schools was recorded. A decrease in the number of students at these schools followed.

As was mentioned earlier, the change in the number of vocational schools and their pupils is also a consequence of demographic transformations, i.e. the period of demographic low reaching secondary schools. Since 2000 a fall in the number of



**Figure 10** Changes in the number of post-gymnasium schools for adults by school types in the years 1990/91–2008/09 (Source: own compilation based on GUS data)

people aged 16–18 was observed (see Fig. 12). Nevertheless, the calculated dynamic indexes indicate that the fall in the number of this population group in the years 1990–2008 was down to 91%, and the number of pupils of vocational schools was reduced by over one third (down to 61.2%), while the number of pupils of general secondary school increased by over half (up to 154.6%).

There is no doubt that the processes associated with the transformation of the economic system in Poland, as well as the reform of the educational system introduced in 1999, decreased the position of vocational schools<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> Note: the irregular fall in the number of pupils in the year 2001 resulted from introduction of a reform – one generation after eight years of primary education did not go to secondary school, but was moved to the third class of gymnasium, whereas earlier pupils had entered secondary school after eight, not nine years of education.



**Figure 11** Changes in the number of students of post-gymnasium schools for adults by school types in the years 1990/91–2008/09 (Source: own compilation based on GUS data)

#### Specialised Secondary Schools – A failed Experiment

As mentioned above, the reform of the education system in Poland in 1999 introduced a new type of school. This was the specialised secondary school, a peculiar merger of a general vocational school with a general secondary school which would enable pupils to receive general vocational education as well as take the *Matura* exam and move on to higher education institutions. Such an integration of general and professional education was also observed in other EU countries (Brockmann et al., 2008; Kwiatkowski, 2000). In those schools a gymnasium graduate can choose one of fifteen profiles of general vocational education according to his/her interests and talents or plans concerning further education or career. The profiles include environmental management, economy and administration, electronics, electronic and technical specialisation, clothes design, landscape architecture, forestry and wood technology, mechanic production techniques, mechatronics, food and agriculture, social science, transport and logistics, services and economy, information management, artistic and applied crafts in metal.



**Figure 12** Changes in the number of pupils of post-gymnasium schools in relation to people aged 16–18 in the years 1990–2008 (Source: own compilation based on GUS data)

Unfortunately, the attempt to combine general education (i.e. with good preparation to the *Matura* and higher education) and vocational education failed in the case of these schools. Specialised secondary schools are generally perceived as being at a low level and thus as neither giving the chance to pass the Matura nor that of taking up a job. Simultaneously, they show exceptionally low rates of progression to the next class. Moreover, in recent years a sudden decrease of interest in these schools was observed on the part of gymnasium graduates. For example in the 2002/03 school year, specialised secondary schools were chosen by 16% of gymnasium graduates, while in the 2008/09 school year only a little over 3% chose this route. An analysis of the way these schools function shows that the majority of candidates for specialised secondary schools have poor results in the gymnasium leaving exam. Katarzyna Hall, the Minister of National Education (MEN), suggests, however, that 'only integration of both courses of education - general and vocational - meeting the needs of learners, will make it possible to equip pupils with crucial competences and will give them a reliable vocational education, moving vocational education close to the needs of the labour market' (MEN, 2010, p. 5). This means that vocational education will try to combine these two courses, vocational and general. After completing gymnasium education, pupils will be able to continue their education at a general secondary school or move to general education integrated with vocational education at a technical vocational school (preparing for the *Matura*) or to a basic vocational school. So only two main types of vocational schools are being planned, although the closure of specialised secondary schools has not yet been decided on.

# **SWOT Analysis of VET in Poland**

This necessary modernisation of vocational education in Poland needs to be preceded by an analysis of its current situation, with special stress put on both strong and weak points as well as opportunities and threats. This can be done through a SWOT analysis. Interviews conducted by the authors with teachers, heads of vocational schools and employers, as well as other research (Tajer, 2010) and specialist literature (Osiecka-Chojnacka, 2007) indicate the following strong features of VET in Poland:

- Graduation means getting qualifications and enables starting a job without the need for further education;
- With vocational education (i.e. the so-called trade in the hand) it is easier to plan further education (particularly after technical vocational school which ends with the *Matura* and a career);
- Pupils combine learning and a career, as in the course of learning they get experience at work, which can be essential for a future employer;
- Schools teach effective teamwork and entrepreneurship relatively well, and equip pupils quite well with basic theoretical knowledge in subjects such as mathematics, physics or chemistry, although the fact mentioned earlier that weaker pupils get to these schools poses a certain barrier;
- Growing, although still insufficient, cooperation between schools and entrepreneurs in recent years has helped with finding a job;
- Although this is still not very common, cooperation with international corporations which have branches in Poland means pupils can more and more often get work experience and apprenticeships abroad and thus experience the world and international labour market.

The socio-economic and technological transformation which takes place in the modern world as well the development of a knowledge-based economy does not lead to a marginalisation of VET. On the contrary, it means creating a new role for the vocational school. It should be underlined, however, that the modern system of

vocational education and training brings, according to Berger and Pilz (2009), not only a variety of individual benefits for participants of VET; there are also benefits for companies, as well as benefits in terms of economic, social and public development. However, to take up such a new role and prepare schools for contemporary educational challenges, one should be aware of the following weak points of vocational education in Poland (cf. Tajer, 2010; Osiecka-Chojnacka, 2010):

- The education on offer generally does not correspond to the requirements of the labour market;
- There is a lack of schools offering education for the most desirable professions in the labour market are missing (e.g. computer specialists, electronics, mechatronics, construction technicians);
- Education in the trades offered by schools is more theoretical than practical; this is a consequence of loosening relationships with companies in the period of transformation as well as underinvestment of schools in modern machinery and tools for practical apprenticeship (generally a weak technical and teaching base);
- Teachers are generally well-educated theoreticians, but many have a low knowledge of new technologies; this problem can be solved through a more intensive involvement of companies in the educational process; the problem of limited practical experience of teachers is also typical of other OECD countries (OECD, 2010, pp. 92 et seq.);
- The lack of a modern technical and teaching base in schools means a rapid change to the educational profile is impossible; as a result adaptation to labour market needs is delayed;
- Classification of school trades does not correspond with the classification of trades existing in the economy; this is to be changed soon as a result of the creation of a National Qualifications Framework following the recommendation of the European Parliament and Council of 23 April 2008 on establishing the European Qualifications Framework for lifelong learning (EQF); 'school' trades will be divided into vocational qualifications on the basis of so-called economic classification, i.e. classification of the trades and specialties concordant with the needs of the labour market. Establishing equivalence between qualifications is at the top of the European Union's agenda and forms part of the Lisbon Strategy aimed at enhancing European competitiveness and creating 'more and better jobs' (Brockmann et al., 2008, p. 227 et seq.).
- The core curriculum for VET is prepared by the Ministry of National Education without broad consultation with the representatives of the economic practice,

so greater involvement of entrepreneurs is necessary in creating both core and school curricula;

- Problems in the educational and vocational mobility of pupils and VET graduates due to large differences in school curricula; introducing modular education is supposed to counteract this situation, as certain blocks of subjects will be identical in all sorts of schools and specialties;
- A system of careers guidance should be an important instrument in propagating vocational schools. Presently information about educational opportunities and the labour market situation is not getting through to gymnasium pupils. Weak careers guidance stems from the inadequate preparation of the personnel involved, often not being properly trained for supporting students with personal problems. This issue was also addressed in the OECD Report (OECD, 2010, pp. 78 et seq.);
- During economic transformation a negative opinion of vocational education was formed in society, and thus many gymnasium graduates do not consider choosing this path of education; according to Gerlach (2004) this is also the consequence of the lower status of teachers working at vocational schools;
- Vocational schools are characterised by a low level of foreign-language teaching (particularly English), while employers expect graduates to know at least one foreign language, and in many trades associated with modern technologies this is English.

EU funds are a great opportunity for schools (cf. Zygierewicz, 2009) to improve their educational offering. Such funds are more and more frequently used for modernisation of the school's assets, such as the machines and tools used for apprenticeships as well as other teaching equipment.

*Leonardo da Vinci* is the EU programme directed towards the development of VET. It gives support to various actions associated with this type of education, some at the level of individual states, and some at the EU level. In the first period of its implementation in Poland a sequence of the positive effects of *Leonardo da Vinci* was observed (Zygierewicz, 2009).

Schools can apply for the resources of the European Regional Development Fund (ERDF), which co-finances educational investment projects, including those aimed at raising the quality and attractiveness of VET. In Poland ERDF is implemented through a series of operating programmes:

• 16 Regional Operating Programmes, implemented by the self-government bodies of individual *voivodeships* (provinces);

- The 'Infrastructure and Environment' Operating Programme, also co-financed from the EU Social Fund;
- The 'Innovative Economy' Operating Programme;
- The 'Development of Eastern Poland' Operating Programme.

As part of the investment, the infrastructure of educational bases is being modernised, including institutions of VET. It is assumed that such projects will be developed within all sixteen Regional Operating Programmes on a similar scale. As part of these projects new schools can be built or existing ones modernised. Moreover, the majority of Regional Operating Programmes enable schools to purchase equipment, including VET equipment. In addition, the resources from the European Social Fund – 'Human Capital' Operating Programme for the years 2007– 2013 can be used for educating and training VET teachers. The support directed towards vocational schools is available as part of 9.2 action 'Increasing the quality and attraction of vocational education'. The objective of the 9.2 action is improving the attractiveness and raising the quality of the education offered by VET schools and educational institutions in order to raise pupils' employability. Additionally, Poland's expected economic boom will create opportunities for the development of VET, as this would increase the demand for specialists in many occupations within the labour market.

The two largest barriers to transforming vocational education are not only the lack of financial resources for modernisation (on the local, regional and central level), but also the lack of a clear concept for the reform of VET. This situation changed in 2010, when the Ministry of National Education started intensive work on such a concept. Its first outcome is a cohesive publication entitled 'Vocational and lifelong learning. The assumptions of planned changes. A guideline.' From the perspective of the government, cooperation between the ministries of education, economy, labour and regional development is essential for creating and implementing such a reform programme. This is due to the fact that the issue of vocational education and training is so extensive. This reform cannot be prepared solely by the Department of Education without the cooperation of the economic environment and the involvement of entrepreneurs (e.g. from the associations of employers) and trade unions. It also means there is a need to settle the matter of closures of specialised secondary schools, the development of an efficient system of careers guidance, as well as undertaking promotional action in favour of VET. Additionally, continuous work on improving school curricula and teacher training as well as a change to the negative image of VET is necessary in society.

However, demographic changes pose a barrier, as a period of population decline is at present afflicting secondary schools, leading to school closures; on the other hand, such demographic regression can be an opportunity to reduce the number of pupils per class. It requires, however, that additional financial resources be found in the state budget and self-government units, which is not a simple task during the recovery period from an economic crisis.

### Conclusions

To sum up, the position of vocational education and training in Poland is not satisfactory. This is due to the 1999 reform favouring general secondary education as well as the lack of a concept of changes in VET, lack of financial support for schools, and lack of cooperation between schools and enterprises.

Thus, it is necessary to take action in order to counteract the weak points described above, as well as to improve the quality of VET by increasing the number of lessons devoted to workplace learning, where students can learn about the day-to-day reality of an occupation; the significant role of workplace learning was underlined in Chapter 5 of the OECD Report (OECD, 2010) and improving or creating school curricula for individual occupations, adapted for the new classification of trades in accordance with the EQF. In addition, it is crucial to implement new, innovative forms of teaching and assessment characterised by greater effectiveness than the traditional ones as well as enhancing the education process in ways including basing its aims in terms of how things look in practice, using modern teaching centres (including multimedia materials), and implementing elements of distance learning (cf. Kwiatkowski, 2008).

It seems that improving teacher training for vocational education and adapting the base and teaching equipment of schools to meet the standards of the economic reality is essential to raising the quality of VET. Broader inclusion of practitioners of economic life in creating school curricula and classes, according to Zahorska and Walczak (2005), is crucial to expanding the system of incentives for employers who undertake cooperation with schools and organise vocational training at an appropriate level (p. 8). This could be achieved through the development of existing centres for practical education, which could cooperate with schools as part of vocational education and become centres of vocational lifelong learning, preparing for work in all sorts of professions, in different non-school forms.

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