

2. SUMMARY

The following report entitled "Functioning of Vocational Education System in Poland" was commissioned by the Ministry of National Education. It summarizes the findings of a research project conducted between August 2010 and February 2011 among representatives of district offices¹, entrepreneurs, students and headmasters of public vocational schools for youth as well as managers of practical training centres.

The project consisted of both qualitative and quantitative research. Quantitative measurements were conducted on the following samples:

- headmasters of public vocational schools, incl. special schools (n=3868) and managers of practical training centres (n=141),
- students of vocational schools, stratified random sample (n=14057),
- national, representative sample of entrepreneurs (n=1075),
- representatives of district offices administering vocational schools (n=378).

The qualitative research was conducted by way of in-depth interviews, including 32 with representatives of district offices and 64 with representatives of employers collaborating with vocational schools.

The final phase of the research consisted of expert groups, which brought together representatives of province and district public employment offices, school headmasters, employers and administering bodies. A total of 16 expert groups were interviewed, one in each province.

The research resulted in an evaluation of the current state of public vocational schools and training centres. It further enabled the identification of areas that require improvement (including school-employer cooperation).

¹ Poland is currently divided into 16 provinces - (*województwo*), 379 districts (*powiat*), and communes or municipalities 2,478 (*gmina*). To facilitate understanding, the document uses the English terms.

Public vocational schools for youth in Poland

Each type of vocational school (basic, secondary, supplementary or post-secondary non-tertiary) provides education consisting of:

- general education (subjects such as Polish, mathematics, physics, history);
- theoretical vocational education (such as professional or technical drawing, gastronomy, mechanics, etc.);
- practical training (in the form of workshops and/or traineeship).

The extend to which a school-leaver is ready to perform professional tasks is determined through occupational qualification examinations organised outside the school. In recent years students of basic vocational schools have performed better in these examinations than students of secondary and post-secondary schools.

In the academic year 2009-2010, there were 4,829 vocational schools in Poland, including:

- 1411 basic vocational schools (excluding special schools), with 204,974 students in total;
- 3173 secondary vocational schools, supplementary secondary vocational schools and general art schools, with 612,500 students in total (including 1907 secondary vocational schools with 517,124 students and 89 supplementary schools with 3,375 students);
- 245 public post-secondary non-tertiary schools, with 33,3 thousand students.

In years 2005-2008 there has been observed an increase in the number of basic vocational schools coupled with a gradual decline in the number of secondary and post-secondary vocational schools.

Financing vocational schools and vocational training centres

The administration of basic, secondary (including supplementary education) and post-secondary vocational schools lies with district authorities. The district authorities provide the highest share of funding for vocational education of various managing bodies. These outlays, however, are far from sufficient. In most districts, state subsidy does not cover all costs of the provision of vocational education, which leads the administrative bodies to contribute to outlays in this sector from their own budget or from structural funds. Districts tend to



allocate their own resources and structural funding for vocational rather than general education.

Own budgets and structural funds are also used to finance investment in infrastructure. In the coming year (2011), the majority of districts plan to invest predominantly in classroom hardware and equipment.

Headmasters admit that few schools and practical training centres manage to cover their costs from funds received from administering bodies. Practical training centres have the potential to provide services on commercial terms, thus generating additional income. Most practical training centres take advantage of this opportunity.

Representatives of territorial self-government usually conduct up-to-date analyses of outlays on vocational education. The most frequent measures are: assessment of total costs per vocational education institution and analysis of all costs incurred over a period of time. The analyses serve as rationale for adapting the range of educational opportunities to labour market demand.

Representatives of administering bodies agree that the cost of educating one vocational school student is significantly higher than the corresponding cost of providing general education. The majority are of the opinion that expenditure on vocational education is relatively low when measured against the effectiveness of this type of education.

Organisation and effectiveness of vocational education

Campaigns promoting vocational education were organized nearly in all districts in 2009. Nevertheless, schools themselves are more active in this area, although supported by district offices in terms of coordination and financing. The most popular forms of promotion are open days for potential students, informational meetings for candidates and parents, distribution of leaflets and bulletins among lower-secondary school youth. Districts also engaged independently in promoting vocational education, by holding educational fairs.

Vocational education provided in Polish schools follows formal curricula based on core curricula issued by the minister of education. Adapting the education process to address the needs of the labour market, particularly locally, occurs in a small number of schools and



practical training centres. Importantly enough, although curricula are criticized by some employers as overly theoretical, failing to incorporate modern technologies and solutions. However feedback from students is highly positive.

The vocational curriculum is carried out in collaboration with employers only by one in three schools and practical training centres. Schools are usually the initiating party and partners mostly work together developing practical training courses. If the cooperation covers also theoretical vocational education, curricula for professional subjects are aligned with practical training programmes.

One in ten vocational schools follow modular education schemes, which translates roughly into one-third of all schools with appropriate teaching equipment and facilities for the provision of this type of education.

A significant number of administrators representing institutions in charge of vocational schools spoke about the difficulties in securing and retaining expert teaching personnel (in particular practical training teachers) and the prevalence of older teachers. The staffing problem is perceived as a growing threat to proper development of this type of education and a recipe for reversing this trend lies in developing incentive systems to attract young and highly qualified teachers.

Such actions should be implemented along with the introduction of teacher training schemes for pedagogic and psychological skills improvement (particularly among the teachers of occupational subjects and practical training courses). All interviewed school headmasters and directors of practical training centres declared providing teacher training assistance to at least some of their personnel. Schemes for improving qualifications for the delivery of practical training were mentioned less often (one in five schools and one-third of all training centres). Cooperation with employers to provide opportunities for professional skills training is relatively uncommon.

Students generally express positive opinions about their schools' and centres' teaching equipment and facilities. Among the highest rated categories are libraries, media libraries and computer equipment. School buildings were named as the only element of infrastructure that requires renovation, modernisation or conversion.

Two major challenges faced by the schools are the necessity to adapt teaching equipment and facilities to the changing requirements of employers and the fact that rapidly changing technologies make new equipment obsolete relatively quickly.

Nearly all schools have their own websites, access to internet resources and provide their students with free access to the internet. Nearly all of them have the potential for applying computer technology in the processes of the delivery and organization of teaching. Nevertheless, fewer than one in three headmasters declare using ICT (e-learning, digital registers).

Most vocational schools do not cooperate internationally. The few that do usually participate in international educational programmes or projects (the exchange of experiences in the organization of teaching processes and school management is highly valued).

Liaising with foreign partners is communicated to students quite effectively (one in three students is aware of that). The most popular international education programmes are Leonardo da Vinci and partnerships with vocational schools abroad.

Vocational examination in its present formula is by far one of the key weaknesses of the current vocational education system. Most notably, students fail to find it useful on the labour market.

Nearly all institutions administering vocational schools and practical training centres regularly monitor school' performance. The most popular monitoring measures are keeping track of how the schools perform in vocational or *matura*² examinations, assessment of teaching equipment and facilities, as well as teachers' qualifications. Only slightly under half of all district offices analyse the careers of school-leavers, while one in three check the students' knowledge / competences prior to examination.

² *Matura* is a school-leaving exam taken at the end of secondary education, a form of assessment of the level of a student's general knowledge. It checks the knowledge and skills defined in the examination requirements standards and consists of a written and oral part.

Choosing an education path and students' educational and welfare needs

Most young people choose a school with future career, employment and earning opportunities in mind.

Making conscious educational choices requires relevant information delivered in the form of career guidance (already in lower-secondary school). Yet vocational schools are not involved in the process of career counselling delivered at earlier stages of education.

Half of interviewed school headmasters declared cooperating with relevant institutions in the provision of career guidance (psychological and educational counselling centres, Voluntary Labour Corps, labour market institutions). Those schools that supply their students with in-house career guidance, employ a career counsellor for this purpose or delegate the task to the school pedagogue.

Even at that, a great many students are unaware of the access to career guidance at their school and only one in five declared having consulted a career counsellor about job search advice. It is more common for students to seek advice regarding further education options. Schools, however, provide only limited support in this area and students often have to depend on their parents, friends or siblings.

There is little doubt that the provision of career guidance should begin already in lower-secondary schools (educational options, employers' expectations, mapping natural predispositions with effective diagnostics etc.).

The essential instruments for stimulating high performance among students include:

- proprietary curricula, innovations and experimental educational schemes (increasing motivation and commitment);
- contests, tournaments and competitions, participation in educational projects (activation);
- award systems (recognizing achievement).

On the opposite end of the spectrum lie the measures undertaken to support SEN (special educational needs) students and those performing below average. Here, the choice of

instruments is practically limited to compensatory classes and tailoring requirements to students' individual needs and abilities.

The provision of extracurricular schemes is the most popular type of supplementary services for students. Moreover, nearly three-quarters of vocational schools adapt their curriculum requirements to students' individual needs and abilities and conduct compensatory classes.

One in five schools and practical training centres implement proprietary curricula. This number is more than twice higher among schools introducing innovations or experimental teaching programmes and following modular teaching curricula. Proprietary curricula are constructed in cooperation with relevant industry specialists and almost invariably involve the application of new technologies currently introduced by a school's partner enterprise. As a result, their application has a positive impact on the quality of education.

A vast majority of vocational schools employ school pedagogues and cooperate with psychological and educational counselling centres (only one in three schools have a resident psychologist). Three-quarters of interviewed headmasters declared that their schools train teachers in diagnosing students' needs, have their school educator or psychologist deliver individual assistance to SEN students, provide support to parents and organize other extracurricular activities. Over two-thirds of vocational schools have special interest clubs.

Over a half of all vocational schools and nearly every second practical training centre declared providing education to students with diagnosed developmental disorders or physical disabilities (more to the former group). Only slightly under one-quarter of vocational schools and two in five practical training centres have architectural solutions enabling access for people with physical disabilities. The most popular forms of working with SEN students applied by the majority of vocational schools and training centres are: individualised teaching programmes, extracurricular activities and corrective-compensative classes.

Most students declare the intention to acquire new qualifications and skills. Less than half, however, currently participate (or have done so in the past) in additional activities organised in school or outside.

Vocational education and the labour market

The highest share of vocational schools and practical training centres educate the workforce for the following industries: catering and food production, mechanics, electrical installations, electronics and IT. Meanwhile, the highest demand for workforce, as declared by employers, was observed in: economics, finance, administration, construction, civil engineering and building installations, as well as transport and inventory. Supply considerably exceeds demand in the following areas:

- mechanics;
- catering and food production;
- electrical installations, electronics and IT;
- economics, finance administration;
- construction, civil engineering and building installations,
- hairdressing and beauty;
- agriculture and animal husbandry;
- tourism and hospitality.

Conversely, occupations in transport and inventory are in far greater demand from potential employers than any other professions taught by vocational schools.

The choice of specializations offered by the schools is largely determined by the equipment and facilities at their disposal as well as the availability of qualified teaching personnel. School headmasters far less frequently base such decisions on the labour market demand or on the analyses of the range of educational opportunities available in the region. One important factor is the lack of comprehensive up-to-date reports on the labour market situation and reliable forecasts, as well as failure on the part of local government units to develop coherent strategies for local vocational education systems. The situation is further complicated by the headmasters' individual programming strategies – often driven by their desire to attract the highest possible number of students while preserving teaching posts for currently employed teachers.

Secondary data analysis indicates that, along with professional knowledge and occupational qualifications (such as experience, industry knowledge etc.) employers also value employees' dedication and social skills.

Entrepreneurs generally express positive opinions about vocational school graduates. What emerges as a key challenge, however, is designing curricula to meet the needs of potential employers. Although most students are satisfied with the quality of general as well as vocational education they receive, entrepreneurs believe the content of teaching programmes to be overly theoretical.

A similar pattern can be observed in terms of vocational schools addressing the needs of local labour markets. While students believe that the education they have received largely meets the needs of local employers, the latter rarely share this view.

Over a half of interviewed vocational school students attend practical training organized at their schools, while a similar number receive training outside their school (at a cooperating company or farm). Traineeship usually takes place outside the school (at a cooperating company or farm), less often at school, and even less often at a practical training centre. The organization of practical training by schools is positively evaluated by students.

Collaboration between key stakeholders in vocational education

More than four in five schools and three-quarters of all practical training centres currently collaborate with employers and / or employer associations. On the part of entrepreneurs this type of cooperation is declared by nearly one in four companies. Employers collaborating with schools are often medium-sized businesses, less frequently microenterprises. It is highly probable that the actual share of enterprises collaborating with vocational schools in total number of businesses is lower than recorded in the research.

Employers usually cooperate with schools under partnership agreements or sign individual contracts with students. In most cases, collaboration takes the form of practical occupational training (placements or practical training). Cooperation with practical training centres may come in a wider variety of forms.

The school or practical training centre was the initiating party in over two-thirds of school-employer collaboration projects. When searching for potential partners, schools rely on teachers' and headmasters' personal contacts and on reaching out directly to the representatives of a prospective partner.

Most enterprises collaborating with schools and practical training centres spoke well of their cooperation. From an employer's perspective, the main benefits (both at present and prospective) are training future staff for specific occupations, for the enterprise and the entire labour market in general. Employers also welcome the opportunity for cherry-picking the best school-leavers and promoting their brand.

Along with the lack of incentives mentioned earlier, enterprises currently not collaborating with vocational schools or practical training centres attribute this fact to inertia on the part of the teaching institutions that fail to reach out to potential partners, and to lack of knowledge that such collaboration is possible.

One in five schools and one-third of practical training centres organize professional development courses for practical training teachers. A similar share of respondents in charge of vocational schools / practical training centres declared providing teachers with placements for professional training.

Practical training centres are more active in improving qualifications of employers representatives involved in vocational training process. They also provide training in more areas. They usually organise courses in the methodology of teaching vocational subjects and in the vocational examination standards.

Collaboration with higher education and research institutions was declared by a slightly under two-thirds of schools and less than a half of all practical training centres. Vocational schools usually cooperate with higher education institutions while practical training centres with research and development institutes.

Amongst the labour market institutions vocational schools and practical training centres most often cooperate with district employment offices (in the area of career counselling). Slightly less often schools send students to career fairs and use information about labour market needs to determine school offer.

